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Book of Abstracts

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CONSERVATIVE MANAGEMENT OF CIN2 in a Large Teaching Hospital in the UK

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Proffered Papers Session 1, April 15, 2021, 16:00 - 17:00

Introduction / Background

CIN2 has been reported to regress in 50% of cases. Conservative management in selected women may hence be justified. We have assessed the outcome of women under active surveillance.
Leeds Teaching Hospitals have two Colposcopy Units offering 30 Colposcopy sessions per week accommodating 2500 New Colposcopy Referrals per annum.

Aims / Methodology

A guideline for conservative management of CIN2 was introduced in our department in 2018. Suitability was determined based on strict selection criteria of histologically confirmed CIN2 (No CIN3 or CGIN);

- Women who have not yet completed their family
- Likelihood of compliance is high
- Satisfactory Colposcopy (TZ 1-2)
- Lesion max ¾ quarters of the TZ
- Not immunocompromised

Cases would be identified by Colposcopists and discussed at the colposcopy MDT and follow up (without adjunctive colposcopy technologies) would be offered every 6 months (with colposcopy, cytology +/- biopsy) up to two years, until progression or woman's request for definite treatment.
We evaluated age, smoking status, follow up rates and cytology results.

Results

From January 2018 until December 2019 a cohort of 97 patients were offered conservative management and 75% of women have taken up active surveillance.
Mean age was 28 years. 82/97 women were referred with abnormal cytology results and 15/97 with clinical indications. Smoking status is positive, negative and unknown in 30, 37 and 30 cases respectively. To date 63/97 women were followed up, 7 had follow up deferred or did not attend, two fell pregnant and one was lost to follow up. 16/63 had a definite management (LLETZ). Cytology at the first follow up at six months is as follows: 17/38 negative, 3/38 borderline, 4/38 low grade dyskariosis, 3/38 moderate dyskariosis and 2/38 severe dyskariosis with 9/38 results pending.
Further prospective evaluation is ongoing.

Disclosure of Audit and Duty of Candour

Freeman-Wang T, Pearmain P[1], **Freeman-Wang T[2]**, Stubbs R[1]
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Proffered Papers Session 2, April 16, 2021, 10:15 - 10:45

GUIDANCE FOR THE ENGLISH CERVICAL SCREENING PROGRAMME ON THE DISCLOSURE OF INVASIVE CANCER AUDIT RESULTS

Introduction / Background

Individuals who develop cervical cancer have been offered the results of their invasive cervical cancer audit since 2001 following the outcome of a local audit of cases in Leicester. Subsequently, official screening programme guidance was published in 2007. More recently, Public Health England (PHE) published overarching guidance for all English screening programmes in 2016 on how to apply Duty of Candour (DoC) legislation in the context of screening. Following the publication of the general guidance, feedback received from services was that more detailed information on the application of this challenging area was required for the cervical screening programme.

Aims / Methodology

PHE set up a multi-disciplinary and multi-professional task and finish group, including professional body, academic, charity and patient representation, to develop the detailed guidance. The work was based on guidance implemented within the breast screening programme to ensure consistency where appropriate. A series of meetings were held and a full consultation undertaken of the proposed guidance. Individuals identified through Jo's Cervical Cancer Trust were consulted on the patient materials.

Results

The group developed a suite of documents and resources:

- Overall guidance document for services
- Advice on classification of cytology, histology and colposcopy reviews
- E-learning package and educational film for all clinicians undertaking disclosure interviews with patients
- Supporting patient materials

Conclusion

Clear guidance on applying DoC in the context of the cervical screening programme is now available.

Gaps in the Guidance - How to avoid your patients slipping through the net with incorrect NTDD recall.

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Plenary Session 6: New Technologies, followed by Proffered Papers Session 3, April 16, 2021, 14:15 - 15:00

Background
Following an administrative incident, which occurred *after* the introduction of Primary HPV-Triage locally, we reviewed the clinical/administrative management of potentially-affected patients.
This investigation provided valuable insights into practice. We present our results so that lessons can be learned and teething problems with patient-pathways avoided.

Method
702 patients were identified. Each case-review was cross-checked using Medway, HPVICE, Dendrite and Open-Exeter IT-systems. Data analysed included referral screening-test results, Colposcopic Opinion, Histology, MDT summaries, subsequent screening-test results and re-referral outcomes.
In particular, the documented Clinically-advised Next-Test-Due-Date(NTDD) was compared to the Open-Exeter NTDD inputted by CSAS.

Results
The 702 patients' e-records were analysed. Data not presented in abstract.

Significant Learning Points

- Lost-to-follow-up -26/702(4%) patients were almost lost to Colposcopy follow-up as a result of new Admin staff unfamiliarity with ITsystems. No patients came to harm 0/26.
    a. Resolution - Introduction of Admin staff training and MASEY IT-system

2) NTDD discrepancies- 49/702 (7%) patients had a different outstanding Open-Exeter NTDD than Clinically-advised NTDD.
    a. Resolution - Formalising weekly cross-check "CSAS discharge-update lists"
    b. Resolution- CSAS formalised feedback of NTDD discrepancies.
    c.

Gaps in the Guidance
These NTDD discrepancies arose due to a lack of familiarity with the new guidelines in Colposcopy, Laboratory, CSAS and GP-practices. E.g.

1) Lack of recall *at 1 year for non-direct referral*s with CIN1 (n=7)
2) Lack of recall post-Negative TOC smears *at 3 years for all ages* (n=4)
3) Lack of recall post-hysterectomy smears (n=2)
4) Lack of recall post CIN-1 *at 4-years for all ages* (if 1y test Negative) (n=1)

Conclusions
Human Factors and IT systems led to our administrative incident. We recommend national training for Screening Administrators.
We learnt that unresolved discrepancies with NTDDs can be pursued by SQAS, (e.g. (1)).
We ask BSCCP to advocate for alignment of PHE and Clinical guidelines to overcome teething issues in community recall.

HPV SCREENING BELOW AGE 30 CAN REDUCE THE INCIDENCE OF CERVICAL CANCER: DATA FROM THE ENGLISH HPV PILOT

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Proffered Papers Session 2, April 16, 2021, 10:15 - 10:45

Introduction / Background
Some guidelines recommend delaying HR-HPV primary cervical screening until age 30 because of poor specificity. The English pilot incorporated HR-HPV testing from age 24.5 to achieve high sensitivity.

Aims / Methodology
To analyse pilot data to determine the effectiveness of HR-HPV primary screening amongst women aged 24.5-29 years, in terms of colposcopy rates per CIN2+ diagnosis, as well as cancer incidence amongst cytology-negative women following the initial screening round.

Results
In 2013-2016, 403,928 women aged 25-64 were screened with primary HR-HPV testing, with results available for contemporaneous comparison in 935,238 women screened with cytology. At 24.5-29, 16.4% were referred for colposcopy at baseline or after two early recalls, while 6.2% had CIN2+. At 30-44, these proportions were 6.2% and 2.0%; at 45-59, they were 3.0% and 0.6%; and at 60-64 they were 2.3% and 0.4%, respectively. Per CIN2+ diagnosis, 2.6 colposcopy referrals were made at 24.5-29 (2.3 with cytology as the screening test), 3.0 at 30-44, 5.4 at 45-59, and 5.9 at 60-64. Approximately half of all cytology-negative cancers (15/34) and CIN3 (660/1270) detected during early recall after a positive HR-HPV test were diagnosed at 24.5-29. Likewise, preliminary data from the second round of cytology screening show that 26/59 of cancers and 752/1364 of CIN3 were diagnosed in women aged 24.5-29 who were cytology-negative at the initial screen. No cancers were detected in the second round of screening with HR-HPV testing, while the detection of CIN3 was substantially lower than with cytology at any age.

Conclusions
HR-HPV screening below age 30 requires a similar number of colposcopies per CIN2+ diagnosis as does cytology, and far fewer than required in older women. HR-HPV testing also detects CIN3+ which is missed by cytology, thus preventing some cancers. The incorporation of this policy into the English CSP should save lives.

Influence of Smoking Cessation and Excision Margins in the Treatment of High Grade Pre Cancer of the Cervix

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Proffered Papers Session 1, April 15, 2021, 16:00 - 17:00

Background
Each year approximately 24,800 patients require treatment for CIN 3, most commonly large loop excision of the transformation zone (LLETZ). The BSCCP has guidelines regarding excision margins, the minimum depth of excision and a six-month follow up test of cure. The aim of this study was to compare the treatment outcomes in relation to BSCCP recommendations. We hypothesised that incomplete excision margins during LLETZ does not affect treatment outcome. We also hypothesised that smokers, who we know to have a higher risk of cervical cancer, have a higher risk of treatment failure than non-smokers that improves if they stop smoking.

Methodology
A retrospective cohort study was performed at Darent Valley Hospital from January 2014 to December 2018. Data was collected from patients who presented with severe dyskaryosis and were treated with LLETZ. The follow-up test of cure data was collected 6 months after treatment.

Results
Data was obtained from 256 women, of which 128 were smokers and 128 were non-smokers. After excluding patients who had cancer and those who had incomplete data, 240 cases remained. It was found that in 105 women the margins were clear and in 120 cases margins were involved. There was no statistical difference between the two groups in terms of test of cure. When we compared the outcomes based on patients smoking status, we established that 13% of smokers had high grade dyskaryosis on their test of cure compared to only 3% of non-smokers. No smokers who stopped smoking after treatment had high grade dyskaryosis, compared to 14% who continued to smoke.

Conclusion
This study challenges the guidance on margin involvement post LLETZ treatment, in terms of treatment success. It also emphasises the importance of smoking cessation in improving treatment outcome in women who give up smoking even for a short period of time.

Outcome of CIN 2 Treatment over a 10 year period in a District General Hospital

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Proffered Papers Session 1, April 15, 2021, 16:00 - 17:00

AIM

A comparative study evaluating outcomes over a 10-year period of three modalities of management of CIN2 including observation, cold coagulation or cervical excisions mainly assessing recurrence rate of pre-malignant lesion, time interval following treatment and associated risk factors. Additional parameters assessed were HPV persistence and correlation with outcome.

Method

A retrospective study of 1000 women diagnosed with CIN2 on histology between 2010-2019 was done. Data was collected from electronic records.

Result

Preliminary data analysis shows mean age of 31years with index smears<low grade in 62%,high grade-38%,other indication-1%; size of lesion -1/2 quadrants in 51%;3/4 quadrants in 11%.Cold coagulation was undertaken in 20%,LLETZ in 76% and conservative management in 4%.

Followup smear	Negative	Low grade/HRHPV	High grade	Time interval For abnormal smear
Cold coagulation	69%	28%	3%	6mth-4 yr
LLETZ	73%	14%	3%	6mth-9 yr

In conservative management group, followup smear at 6months was negative in 60% ;<=low grade in 40%.Subsequent followup smear showed high grade in 20% with time interval from treatment ranging from 6months to 4years.Additional excisional treatment was required in 20%.

Conclusion

Majority of patients underwent excisional treatment as opposed to ablation and conservative management.Although recurrence rate with excisional treatment was comparatively lower than cold coagulation or conservative management,risk of relapse of pre-malignant disease may occur after time interval upto 8years,hence vigilance regarding previous abnormal smear and/or treatment is essential.Excisional treatment especially depth>=15mm is associated with significant risk of preterm birth contributing to obstetric morbidity burden.Patient should have informed choice and be offer conservative/surgical options based on current evidence.P16-negative/index smear/nulliparity should trigger conservative option as first choice.

PRESSURES ON COLPOSCOPY CAPACITY: THE IMPACT OF INCREASING NUMBERS OF CLINICAL INDICATION REFERRALS, CLINICIANS VIEWS AND POTENTIAL MODELS OF CARE

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Proffered Papers Session 1, April 15, 2021, 16:00 - 17:00

Introduction / Background
KC65 data highlights the increase in clinical indication referrals to colposcopy units. This together with the implementation of HR-HPV primary screening is stretching the capacity within colposcopy and impacting the ability to see patients within the expected 2 and 6 week timeframes of the NHS cervical screening programme (CSP). Lack of evidence about the most effective and efficient service model for this group further compounds the problem.

Aims / Methodology
This work aims to quantify the impact of increasing clinical indication referrals (CIR), access the views of colposcopists and outline potential service models introduced to manage this group.
Analysis of KC65 data for all colposcopy providers in the North of England 2007/08 to 2017/8.
SurveyMonkey electronic questionnaire to lead colposcopists and nurse colopscopists in the North of England

Results

- 18 fold increase in the annual number of clinical indication referrals to colposcopy (n=6445 in 2008/9 to n=116218 in 2017/8)
- 13.6 fold increase in all colposcopy referrals in the same time period (n=38551 2008/9, n=525586 2017/18)
- CIR as proportion of all colposcopy referrals varies from 4% to 61% between providers (annual mean for 2015-18)
- Wide variation in CIR trends at individual provider level
- Steepest rise in non urgent clinical referrals

Graph 1: Trend in number of all, urgent and non-urgent clinical indication referrals 2008/9 to 2017/18

Graph 2: Change in mean of all annual clinical indication referrals between 2008-11 and 2015-18 (%) by provider in North of England
Survey response rate= 58% (25 of 43 providers)

Table 1: Top 3 indications (25% respondants)

Indication	%
Postcoital bleeding	49
Suspicious cervix	14
Abnormal but not suspicious cervix	13

Table 2: Additional clinics/services in place

Clinic type	Number	Staffing
Postcoital bleeding clinic	2	Nurse/consultant colposcopist
2 week wait gynaecology	2	Consultant colposcopist/ gynaecologist/specialist oncology nurse
General gynaecology	2	Consultant gynaecologist
Flexi-fast track clinic	1	Consultant colposcopist
Nurse colposcopist clinic	1	Nurse colposcopist

Graph 5: Impacts reported by colposcopy from increase in CIR

Graph 6: Approaches suggested as the desired service model for CIR

Conclusion

The significant increase in clinical indication referrals will create further capacity pressures in colposcopy as more units experience the predicted increase in NHS CSP referrals with the full introduction of primary HR-HPV screening. Colposcopists identify the top priorities for improving CIR process as referral criteria; PCB/CIR clinic; primary care training and effective triage. Further work is needed to identify the most cost effective and efficient service models to best manage clinical indication referrals and manage colposcopy capacity.

(Word count 277 excluding tables, titles and graphs)

'Lockdown Low-Grades': A review of protocol and practice pre-pandemic

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Introduction / Background

BSCCP Guidance for Colposcopy during the COVID Pandemic was produced within 24 hours of the UK Lockdown measures declaration. This suggested only women who had a cervical smear indicative of high-grade disease should be referred for colposcopy to minimise face to face consultations. The UK Cervical Screening Programme was also 'paused' for this reason with referrals only coming from historic smear taking or colposcopy follow-up.

Aims / Methodology

We reviewed the low-grade smears referred to our trust in the first quarter of 2020 prior to Lockdown. We were interested in those who subsequently had a high-grade biopsy. Further evaluation of this cohort was undertaken in relation to the HPV status on the referral cytology. A comparison was made with the cases throughout the rest of Northern Ireland within the same time period.

Results

231 patients were seen in our colposcopy clinics in the 3-month period with low grade smear abnormalities, (164 Borderline nuclear abnormalities, 54 mild dyskaryosis and 13 normal cytology, HPV HR positive). Duration from smear to colposcopy was 21-488 days (median 158 days). 96 of these patients had a biopsy performed. 11.3% of low-grade referrals had a high-grade biopsy result. 53.4% of the high-grade biopsy results were in patients aged 30 years and under and of this cohort 12 referral smears tested positive for HPV 16 and two for HPV 18. Following these results, the decision was made to continue our normal colposcopy service throughout the pandemic for fear of missing high-grade disease on low grade referrals. As the screening service was 'paused' during this time, there is no longer a waiting list for any colposcopy clinics as patients are offered an appointment within a week of their smear result being released.

A 2-Year Audit of LLETZ Procedures: Does Histological Diagnosis, Depth of Excision or Margin Status affect whether Patients Pass Test of Cure Smear.

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Introduction / Background
LLETZ procedures are performed to treat dysplastic cervical cells, a test of cure (TOC) smear is performed after 6 months to confirm adequate treatment. This audit assessed whether our unit was meeting the updated NHS Colposcopy and Programme Management Guidelines (February 2020). Secondly, to determine whether histological diagnosis, depth of excision and margin status impact upon likelihood of passing TOC smear.

Aims / Methodology
A retrospective analysis of electronic colposcopy notes from January 2017 to December 2018 was undertaken.

Results
434 patients underwent a LLETZ procedure during the 2-year period. 91.0% LLETZ were performed under local anaesthetic (new Target 90%). 42.2% of patients were treated on their first visit and 88.0% had evidence of CIN2/3/CGIN/malignancy on histology (Target 90%). 79.0% were excised as a single sample (Target 80%). Depth of excision was adequate for 74.6% of type 1 squamocolumnar junction (SCJ), 68.7% of type 2 SCJ and 12.5% of type 3 SCJ (Target 95%). Margin status was clear in 52.0%, with 84.8% clear endocervical margins. 5.5% required further treatment (repeat LLETZ or hysterectomy). 88.4% of patients had a follow up TOC smear with 21.0% referred back to colposcopy. 100% of patients with high grade dyskaryosis on TOC had a biopsy (Target 95%) and only 1.5% required further treatment.
A diagnosis of CGIN increased the risk of failing TOC with 50% failure, other histological diagnoses had a similar failure rate between 17-25%. Unclear margin status also increased risk with 43% passing TOC and 51% failing TOC. Inadequate depth of excision did not increase risk, with 31% passing TOC and 30% failing TOC.
Our unit is achieving or close to the standards of care required, excepting depth of excision. However, this did not increase likelihood of failing TOC smear, while deeper excisions increase the risk of adverse obstetric outcomes.

A cohort study of depth of loop excision for the treatment of cervical intraepithelial neoplasia (CIN).

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Introduction

The goal of loop excision is to remove all the abnormal epithelium in accordance with the type of transformation zone (TZ). Excisional techniques should remove tissue to a depth of more than 7mm in ≥95% of cases in Type 1 cervical TZ, though the aim should be <10mm in women of reproductive age group. Loop depth of 10 to 15mm is recommended in type 2 TZ, and 15-25 mm for type 3 TZ in ≥95% of cases. For Cervical Glandular Intraepithelial neoplasia (CGIN), cylindrical biopsy should be taken to the depth of 20mm to 25mm of the endocervical canal.

High grade CIN extending to the deep lateral or endocervical margins of excision results in a higher incidence of recurrence but does not justify routine repeat excision if women are under 50 years of age and no evidence of glandular or invasive disease.

Aim/Objectives

Aim of this study was to analyse the depth of loop during excisional treatment for CIN and to check the persistence of CIN / HPV (Human Papilloma Virus) after the treatment.

Study method

The study had eligible cohort of women who had Long Loop Excision of Transformation Zone (LLETZ) for CIN during a twelve months' time. The numbers are underrepresented due to Covid Pandemic. The study parameters were collected from electronic colposcopy database. Four different colposcopists, all with more than ten years of experience did the treatment. Diathermy was applied to the loop base after the loop excision.

Results

We identified 60 eligible women, 2/3 were in the range of age 25-35 years; 90% of them had at least one child. 90% of treatment was done under local anaesthetic, 3% had fragmented specimen. One in five loop treatments had depth, less than 7 mm. No loops were below 7 mm in general anaesthetic treatment group. Overall margins were clear in 50% of treatments.

A six month follow up with test of cure showed, 90% of them having High Risk Human Papilloma Virus negative (HR HPV). In the group of women who had loop depth of less than 7 mm, 85% had HR HPV negative at 6 months follow up. 10% had HR HPV positive but cytology was negative. 5% were not due for follow up at the time of study.

Conclusion

Though one in five loop treatments were of depth less than 7 mm, majority (85%) had negative HR HPV test at 6 months post treatment. Diathermy to the loop base, seem to be helpful to give an ablative treatment effect at the loop base. We recommend regular review of the depth of loop and persistence of HPV or CIN within the colposcopy unit and aim to achieve optimum loop depth as per the national guidance according to the TZ.

A Prospective Cohort Study of the Conservative Management of Focal Cervical Intraepithelial Neoplasia 2

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Introduction / Background

Cervical intraepithelial neoplasia (CIN) is a premalignant disease of the cervix. CIN 2 is traditionally treated with a large loop excision of the transformation zone (LLETZ). However, recent evidence suggests that conservative management may be sufficient in low risk women.

Aims / Methodology

This prospective cohort study was designed to try to assess the rate of regression, progression and persistence of focal CIN 2 in women who were managed conservatively. We also attempted to measure the number of LLETZ treatments that were avoided in this cohort, thereby potentially avoiding the complications of LLETZ. We included women who in colposcopy clinic who were no more than 30 years of age, had a confirmed histological diagnosis of either focal CIN 2 or CIN 2 occupying less than 50% of the cervical biopsy and were deemed suitable for conservative management after discussion at the colposcopy multi-disciplinary meeting. Women were seen at six monthly intervals for a colposcopy examination, cervical biopsy and/or cervical smear and were followed for a total of two years.

Results

Thirty-one women met inclusion criteria and were included in the study. Of these women, 20/31 (64.5%) had regression of disease, 7/31 (22.6%) had persistence of CIN 2 and 4/31 (12.9%) had progression of disease. Only eleven women (35.5%) had a LLETZ done.
Conservative management may be considered in women who are less than 30 with focal CIN 2 who are compliant with follow-up. This may avoid unnecessary LLETZ procedures being carried out.

A Rare case of Vaginal Endocervicosis referred as Cervical Cancer

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Background
Endocervicosis of the vagina is a rare and benign condition that shows the abnormal presence of endocervical glands on the walls of the vagina. The common locations for endocervicosis include the outer cervical wall, the paracervical region and the urinary bladder near the trigone.
We describe a case referred initially as suspected cervical cancer and highlight the importance of thorough examination, investigations and management.

Case summary
A 48 year old woman was referred by her GP with an abnormal cervix noticed during a cervical smear appointment. Her cervical smear was overdue by 11 months due to heavy constant bleeding. She was on Tamoxifen for breast cancer. Examination showed a normal looking cervix. A 7 cm broad based vascular lump was seen in the posterior vaginal fornix. This bled on contact. Vaginal cancer was suspected and a biopsy was taken in the clinic. A Cervical smear was taken and was normal. The vaginal biopsy showed endocervicosis. She underwent vaginal excision of the polypoid mass under laparoscopic guidance and histology confirmed endocervicosis. At 5 months follow up a 2 cm recurrent vaginal lesion was noted. Patient underwent hysterectomy, bilateral salpingo oophorectomy and excision of the vaginal endocervicosis to reduce risk of recurrence.
Histopathology showed polypoid mucosal tissue containing benign Mullerian epithelium (endosalpingeal, focal endocervical and endometrial).

Conclusion
Endocervicosis occurs in women between the ages of 29 - 45 years and is usually asymptomatic. There are no risk factors for the condition and the cause is unknown. Some studies indicate that it may arise from Müllerian remnants or from displaced endocervical tissue.
Treatment includes conservative and surgical management. This lesion should be differentiated from vaginal adenosis and vaginal adenocarcinoma with biopsy. The vagina should be added to the list of locations in which müllerianosis can be observed.

A review of the findings for women referred to the colposcopy department with a clinical indication from 1st October 2017 and 1st October 2018 and to evaluate the impact of the CervicalCheck controversy on these referral rates.

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Introduction / Background

On 25 April 2018 Vicky Phelan won her high court action against the Health Service Executive (HSE) after being given incorrect smear test results in 2011. This event was the first in a series of events that led to what is now termed the CervicalCheck controversy.

In addition as the controversy unfolded it was confirmed that a number of smears has been misidentified as normal or low grade and the opportunity for early referral was delayed. This contributed to the concern among not only the women involved in screening but the smear takers too. By October 2018, over 83,000 additional consultations were held, with 42,000 out-of-cycle smears, or repeat smear tests, taken. This resulted in a 52% higher referral in the 'clinical indication' category than the same period in the previous year nationally within the colposcopy service.

Aims / Methodology

A retrospective review of all clinical indication referrals was undertaken from 1 October 2017 to 31 October 2018. Data were collected from the colposcopy database 'Mediscan'. The time frame was included a six month period either side of the CervicalCheck controversy.
From October 2017 to April 2018 323 referrals for a clinical indication were seen. From May 2018 to October 2018 477 referrals for a clinical indication were seen.

Results

CervicalCheck put the increase in clinical indication referrals at 54% nationally here in Tallaght University Hospital it was 48%. This poses a significant burden on the colposcopy services to see these women within the eight week Key Performance Indicator. It has necessitated a stricter adherence to the referral protocol; we now reject letters that do not describe suspicious appearances to the cervix.

An Audit about the outcome of patients with discrepancy between cervical screening, colposcopic findings and histopathology results with their surgical treatment success rates

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Objectives

To compare the performance outcome of patients with discrepancy between cervical screening and histopathology results and their success rate.
The Aim of this Audit is to identify patients with normal Pap smear who had abnormal colposcopic findings, Histopathology findings and to review the treatment success rate.

Design

Retrospective study was collected from Operation theatre and colposcopy clinic, register book, date was entered into the Performa sheet , and the results were analyzed manually .

Patients and Methods

The study sample size consisted of 60 women who underwent colposcopy and their surgical treatment modalities for abnormal colposcopy and histology during the period or May 2017 till July 2018
All Demographic details of the patients were entered in an Excel spread sheet noting age, parity, symptoms, contraception, smoking status, chronic diseases, index smear report, HPV status, Colposcopic impressions and biopsy results.
Different treatment modalities including LEEP Procedures, Excision reports as well as follow up of the patients with test of cure results.
Histology was taken as gold standards.

Findings

60 Patients who undergone colposcopy from the period from May 2017 till July 2018.
1 pt(1.7 %)<20 yrs,30 pts (50%)30-40yrs,9 pts(15 %)
4 pts(6.7) Nulliparous, 22 pts(37%)were P1-P2
25 pts (42%)P3
P4-6 , 7 pts(12%),2pts(3.3%)>P6
4 Pts(6.7%) Smoker and other not known smoking status .
16 pts(27%) had contraception
6 pts (10%)had GDM, 3pts (5%) breast cancer, 1 pt (1.7%)pelvic kidney, 1 pt(1.7%) cervical cerclage, 1 pt (1.7%)had lichen sclerosis, 1 pt(1.7%)had hirsutism,2 pts(3.3%)premature menopause, 1 pt (1.7%) CIN 1 ,had Electrocauterisation of the cervix .

Symptoms

6 pts(10%)had leukoplakia,10 pts(16.7%)had post coital bleeding ,10 pts(16.7%)pts had dysparaunea.
44 pts(73%)IMB,suspicious CX with vaginal discharge.
Pap smear , 17 pt(28%) had negative pap smear , 18 pts (30%) ASCUS, 3 pts(5%) LSIL,2 pts (3.3%) HGSIL , 20 pts(33%) inflammatory pap smear
23 pts (38%) negative pap smear, low grade lesion on colposcopy,CIN 1 cervical biopsy.
5 pts (8.3%) positive HPV testing, 55 pts (92%) Not known HPV testing .
3pts (5%) ASCUS---Histopathology CIN 3 undergone LEEP with TOC Negative, cured
Colposcopic Findings

5 pts (8.3%) low grade lesion, 7 pts (12%)squamous metaplasia , 10 pts (17%)high grade lesion , 36 pts (60%) low grade lesion with HPV changes .
2 pts (3.3%) inadequate colposcopy ,
1 Pt (1.7%) 46 years with CIN 1 underwent LEEP Procedures.

Cervical biopsy
1 pt (1.7%) ASCUS, High grade lesion on colposcopy , Biopsy CIN 3, undergone LEEP Procedure under GA .
58 pts (97%) had abnormal biopsy, 2 pts (3.3%) had negative biopsy .
19 pts (32%) chronic cervicitis and squamous metaplasia on biopsy.
1 pt (1.7%) had condylomatoma
1 pt (1.7%) had koilocytosis
24 pts (40%) CIN 1 on biopsy.
1 pts (1.7%) CIN 2 on biopsy
3 pts (5%) CIN 3 with koilocytosis
6 pts (10%) CIN 1 with koilocytosis
1 pt (1.7%) Leukoplakia
1 pt (1.7%) CIN 1 with lichen sclerosis

Treatment
22 pts (37%) undergone Electrocauterisation of the cervix under GA
11 pts (18%) LEEP Procedure under GA
10 pts(17%) had Anti-inflammatory treatment
1 pt (1.7%) got pregnant
13 pts (22%) defaulted
2 pts (3.3%) Surveillance follow up
1 pt (1.7%) hysterectomy

Test of cure
10 pts (17%) negative pap smear
HPV testing not done due to financial reasons
1 pt (1.7%) undergone Hysterectomy for CIN 3 at 47 yrs old
47 pts (78%) defaulted

Vaccines
17 pts (28%) received HPV vaccine
2 pts (3%) got pregnant
49 pts (82%) advised for the vaccine but defaulted

Outcome
3 pts (5%) HIGH GRADE, TOC Negative Pap smear cured
24 pts (40%) had discrepancy between normal Pap smear and abnormal colposcopy and abnormal biopsy. Received treatment and completely cured.
1 pt (1.6%) had negative Pap smear, high grade impression on colposcopy , Histology showed CIN 3 , Undergone LEEP Procedure. TOC Negative 6 months after .
1 pt (1.6%) had HIGH GRADE with CIN 3
11 pts (18%) had LEEP Procedures under GA .TOC negative in10 pts (16.7%) Completely cured, one defaulted .
22 pts (36.7%) undergone Electrocauterisation of the cervix under GA
TOC Negative, completely cured.
3 pts (5%) ASCUS, Colposcopy high grade, Histology CIN3, undergone LEEP, TOC negative 6 months later.

Discussion

Pap tests have a false negative rate of about 10 to 20 percent of all negative results, which might sound like a cause for alarm — but in practice, among those who receive regular Pap testing, cellular abnormalities that are missed once are, eventually, usually caught in time to be easily treated.

The false positive rate is low, between 1 and 10 percent of all positive results, but unfortunately, such a result can lead to more invasive treatment that might in reality be unnecessary. And a false negative result might allow precancerous cells to develop into cancer if they are not detected in a future round of Pap testing.

The sensitivity of a Pap test is about 70 to 80 percent

Most false negatives — 90 to 95 percent of them — are due to inadequate sampling or improper slide preparation.

With HPV tests, the false negative rate is only 5%.

Using the HPV test as the primary method of screening is the best from a clinical, economic and patient convenience perspective

The combination of HPV and Pap test screening would be beneficial for many reasons. Firstly, only those who are found to have infections with carcinogenic HPV types would be referred for Pap testing. Only about 6% to 10% of women above 30 have HPV infections, so more than 90% of women would be able to move from Pap tests every three years to HPV tests every five years. Secondly, Pap tests would only be done when there is a high concern that pre-cancerous lesions could be present. So technologists would be viewing 10-fold less Pap test slides, meaning the interpretation would be less prone to mental fatigue. Because technologists know that HPV has been detected in the samples they view, they would be more vigilant in looking for abnormal cells. Finally, combination testing would be cheaper – because HPV tests are automated and don't require the expertise of high-salaried technologists, they're not as expensive as Pap test

CONCLUSION

The sensitivity of a Pap test is about 70 to 80 percent

Most false negatives — 90 to 95 percent of them — are due to inadequate sampling or improper slide preparation.

With HPV tests, the false negative rate is only 5%.

Success rate of LLETZ were as high as 90.9 % which is excellent outcome compared to the NHSCSP with complete excision and negative pap smear at 6 months follow up , no test of cure HPV was implemented in the 6 months follow up after treatment of CIN.

Recommendations

Using the HPV test as the primary method of screening is the best from a clinical, economic and patient convenience perspective.

The combination of HPV and Pap test screening would be beneficial

Implementation of HPV testing as a test of cure following treatment of CIN

References

BSCCP, NHSCSP Guidelines 2013, HAAD Cervical Screening Program.

The American Cancer Society Guidelines for the Prevention and Early Detection of Cervical Cancer

Kaity's Story Leads to the Formation of P.E.A.C.E.

Posted on February 4, 2019 by Planned Parenthood Advocates of Arizona

There's a better way to screen for cervical cancer

April 13, 2016 Author:Eduardo Franco

Ogilvie G, Niekerk D, Krajden M, et al. Effect of screening with primary cervical HPV testing vs cytology testing on high-grade cervical intraepithelial neoplasia at 48 months [published online July 3, 2018]. JAMA. doi:10.1001/jama.2018.7464.
Published on: July 05, 2018
Study Suggests HPV Test More Accurate Than Pap Smear for Cervical Cancer Screening
Jaime Rosenberg

An audit of cervical cytology samples taken in the Gynaecology outpatient clinics at Kettering General Hospital (KGH)

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Introduction / Background
This audit was carried out to assess the outcome of samples taken in Gynaecology outpatient clinics (outside of the routine call/recall system) at KGH and to ensure the results were acted upon appropriately.

Aims / Methodology
A retrospective audit was done from November 2019 to 2020, of cases identified by the Derby cytology laboratory as having been taken at the gynaecology outpatients clinics (KGH), with the aim to assess whether results of the cytology samples were being reviewed in a timely manner and whether appropriate management was arranged.

Results
Out of the 217 cytology samples taken, 87% (190/217) were normal, 6% were HPV positive/cytology negative, 1% inadequate, 3.2% low grade (borderline/mild) dyskaryosis, 0.4% high grade (severe) dyskaryosis, 1.4% high grade ?invasive cancer and 0.4% abnormal glandular cells ?endometrial. Among the 3 High Grade?invasive cases, case 1 was seen in colposcopy clinic within 10 days of reporting and underwent a LLETZ treatment, case 2 had a colposcopy and cervical biopsies that showed CIN3 followed by a treatment LLETZ, Case 3 because of the clinical suspicion of invasive cervical cancer was biopsied in colposcopy clinic 16 days before the cytology report. The case of severe dyskaryosis was from a Test of Cure cervical smear which was discussed in colposcopy MDT 10 days after reporting and plan made for colposcopy assessment and management. The case of abnormal glandular neoplasia was seen in the colposcopy clinic 6 days after reporting. For the 4 mild dyskaryosis cases, colposcopy was offered within 19-33 days of sampling. For the 3 Borderline squamous cases, colposcopy was offered 30-38 days from sampling. For both the inadequate smears, letters were sent to arrange further sampling in primary care in 3 months.
Hence, 100% of abnormal results were seen in the colposcopy clinic within the recommended time frames and were acted upon in a timely manner as per the NHS Cervical screening programme and colposcopy management (Feb 2020).

An audit of invasive cervical cancers at a North London District General Hospital

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Introduction / Background

The NHS Cervical Screening Programme in England screens a target population of approximately 14 million people. Cases of invasive cervical cancer are audited on a three-yearly cycle in order to assess and improve the efficacy of this programme. Since the introduction of the programme, deaths from cervical cancer have fallen dramatically but hundreds of women still die every year in the UK.

Aims / Methodology

Our aim with this audit was to compare the cases of invasive cervical cancer at Barnet General Hospital between 2016 and 2019 with the standards set out by the NHS Cancer Screening Programme. We collected information from Mediscan and Open Exeter to create a database of patients diagnosed with cervical cancers during this time period and investigated their screening history, diagnosis and outcomes.

Results

Between 2016 and 2019, 5251 women were referred to the colposcopy unit at Barnet Hospital. Of these women, 27 cases of invasive cervical cancer were diagnosed. 22 of those patients were referred through the Cervical Screening Programme and five were referred from other areas of Gynaecology within the hospital. Four were referred with a clinical suspicion of cervical cancer and the remaining women with abnormal smears. The ages of the women ranged from 24 to 65 years old, reflecting the inclusion criteria of the screening programme. Ten of the women did not have full cervical smear histories with one woman having had only one smear test during 20 years of being eligible for the screening programme. Only two patients had cancers above stage 1 disease. Where further treatment was required, all patients were initially treated with cone biopsy or LLETZ. 14 women were referred to the tertiary centre where they went on to have a radical surgery, chemotherapy, radiotherapy or a combination of treatments.
In conclusion, the majority of cancers presented in the early stages and in the incompletely screened population.

An audit of liquid-based cytology samples reported as high risk HPV and borderline nuclear change in endocervical cells

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Introduction
Primary HPV screening, testing for the virus responsible for 99% of cervical cancers, was introduced in 2018 – 2020 in the UK. This was preceded by HPV triage of low-grade cytology from 2012. Much of the evidence incorporated into current NHS colposcopy guidance assessed outcomes prior to this change in screening. The aim of this paper is to assess adherence to NHS cervical screening programme standards, determine the incidence of cases reported as high risk HPV plus borderline nuclear change in endocervical cells, to calculate colposcopic accuracy and assess histological outcomes in this cohort.

Methodology
A retrospective audit of women referred to a colposcopy clinic in one NHS trust from 2016 to 2018. Data relating to histological outcomes, cytological follow-up and demographics were collected.

Results
Of 2001 referrals, 22 data sets identifying HPV positive borderline endocervical change were eligible for analysis (1.2% incidence). Median age was 29.5. Two thirds (68.2%, n=15) had high grade dysplasia at diagnostic biopsy. Those women with reassuring histology had normal cytological follow-up. Colposcopic accuracy was moderate (PPV 43.8%, NPV 100%).

Conclusions
Borderline nuclear change in endocervical cells is an uncommon condition but should be treated as a high-grade referral. All women should be offered a diagnostic biopsy at the initial colposcopy; if no histopathological abnormality is identified, alternative sources of pathology should be considered. Excisional treatment should be recommended to unreliable attenders, those with a complete family and inadequate colposcopy (TZ3) and considered in younger women with a TZ3.

AN AUDIT OF THE CERVICAL CYTOLOGICAL FOLLOW UP OF PATIENTS POST LAPAROSCOPIC HYSTERECTOMY AT THE NORTHERN ONCOLOGY CANCER UNIT IN GATESHEAD (NGOC)

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Introduction / Background

Women with cervical intraepithelial neoplasia (CIN) at the time of hysterectomy require post-surgical cytological follow up depending upon final histological findings. For those women with complete continuous follow up and no CIN there is no need for further cytology. Forwomen with no historical continuous cytology, they require a 6 month vault smear despite no evidence of CIN within the specimen. If this is negative then they can be discharged. If CIN is present within the specimen there is a requirement for a 6 and 18 month vault cytology assessment. If CIN is not completely excised, is classified as CIN 1 then they will require a vault cytology assessment at 6, 12 and 24 months post-surgery. If the CIN is grade 2 or 3 then they will require vault cytology assessment at 6 and 12 months and then 9 annual vault cytology assessments.

Aims / Methodology

The aim of this audit is to assess the follow up regime of women over a 6-month period to see if it compliant with the national standards.
The data of patients who underwent hysterectomy over the period November 2017-March 2018 were obtained from the MDT data base. Demographics of age, indication for surgery, final histology and follow up were all obtained from the notes, Medway database and the ICE database.

Results

A total of 43 patients underwent hysterectomy during the period November 2017-March 2018. The mean age of the patients was 60.26 years (range). Most patients in the cohort underwent simple TLH followed by radical with the fewest undergoing TLH with excision of vaginal cuff. The main indication for TLH was invasive cancer of the endometrium, followed by completion surgery for borderline ovarian tumour. . 30 women with no evidence of CIN in their hysterectomy specimens were not required to undergo cytological assessment. 1 woman underwent cytological assessment at 6 months as the specimen contained evidence of CIN 3. 11 women who should have undergone cytological assessment at 6 months did not undergo assessment.

An audit of the management of patients referred with low grade cervical cytology- before and after the introduction of HPVPS at QEH

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Introduction

Human Papilloma Virus Primary Screening (HPV PS) was introduced in Gateshead 10/4/2019. The impact of this change in referral pattern may have influenced workload and subsequent management of patients.

Aims/Method

Our aim was to evaluate the QEH management of patients referred to colposcopy with cervical screening tests reported as </= low-grade cytology compared to national standards[1,2].
A retrospective audit reviewed two six-month cohorts of patients referred to colposcopy clinic before and after HPVPS was introduced (1/04/2018 - 1/10 2018 and 1/04/2019 -1/10/2019). Electronic databases helped identify patients directly referred to Colposcopy with </= low grade hrHPV positive screening tests and their management. Sub analysis of clinical management based on colposcopy examination was performed.

Results

In 2018, 276 cases were referred with </= low-grade results compared to 347 cases in 2019; an increase of 25% following HPVPS introduction. Nine cases 2018 and ten cases 2019 were subanalysed separately due to an “Inadequate or Unsatisfactory” Colposopic examination.

From 2018 to 2019 189/264 (72%)cases compared to 279/323(86%)cases had a diagnostic punch biopsy.

Subanalysis, comparing 2018 to 2019 , 68/234 (29%) compared to 38/266 (14%) had a normal/low grade colposcopic examination and were discharged, without biopsy. Comparing 2018 to 2019 the PPV for these </=low grade referrals who had a colposcopic opinion of High grade changes which were proven to be high grade on biopsy was n=12/24 (50%)compared to n=24/56 (42%).

Unexpected high-grade CIN was found in 35/200 (18%)cases in 2018 and 28/210 (13%) cases in 2019.

There is an increase in referrals to QEH Colposcopy with </= low-grade cytology since the introduction of HPVPS. The PPV of colp opinion of high grade lesions remains within national standards in 2018/19. Since this change, more patients are remaining under the care of the QEH, and fewer are being discharged to the community.

An Audit to Assess the Clinical Effectiveness of Using DySIS in Colposcopy and Whether it Aids the Diagnosis of Significant Cervical Changes.

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Introduction / Background
The Dynamic Spectral Imaging System (DySIS) colposcope is recommended by NICE for assessing suspected cervical abnormalities but local audit is advised.

Aims / Methodology
To analyse the additional benefits of DySIS compared to conventional colposcopy in current clinical practice. This was a retrospective study with an unselected population of 511 women from February 2018 – October 2019. DySIS was used for women referred with borderline, low-grade dyskaryosis, negative cytology and high-risk HPV. This study analysed cases in which the DYSISmap led to a different interpretation of the cervix compared to the clinician's initial impression based on acetowhite changes.
Those women in whom there was a discrepancy between the DYSISmap and the colposcopist's initial impression were identified. Histology from these patients was compared with each impression.

Results
There was a discrepancy between the initial impression and DySISmap in 100 women. Histology was available for 78 of these.

- In 40/78, histology agreed with the initial impression but not the DYSISmap. Of those 40 it was found that 29 had an initial impression of normal with the DySISmap reporting LG changes.
- In 28/78, histology agreed with the DYSISmap but not the initial impression.
- In 10/78, there was no direct agreement between the histology result and either the initial impression or DySISmap. In 6 of these whose initial impression was normal, the DySISmap suggested either low or high-grade CIN and histology demonstrated CIN of a different grade.

Discussion
In this study, DySIS appeared to overreport abnormalities compared to the initial impression based on acetowhite changes only. Explanations for this include clinician technique and interpretation.
There were, however, specific examples of high-grade disease that was detected only by DySIS.

Conclusion
Our audit suggests that DySIS has increased sensitivity, but reduced specificity compared to conventional colposcopy. The DySISmap provides confirmation that women can be safely discharged.

An unusual presentation of Basaloid Squamous Cell Carcinoma referred as a Vulval lesion

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Background

Basaloid squamous cell carcinoma (SCC) is a rare variant accounting for 2-3% of the anal canal cancers. BSCC of the anus is known as cloacogenic carcinoma because it originates from a persistent remnant of the cloacogenic membrane. BSCCs are often misdiagnosed because they have several histological patterns. Few case reports are described with such aggressive cancer having good outcomes with chemo radiation therapy.

Case summary

A 48-year-old woman presented with a painful vulval lump present for 10 months. Her GP had examined her 8 months earlier with the same complaint and had found normal vaginal skin on speculum examination only. In the gynae clinic, on inspection, the vaginal skin, the perineum and cervix appeared normal. However, on digital examination there was a 5 cm mass felt between the vagina and the rectum extending from the introitus to the mid vaginal cavity. Per rectum examination showed mucosal irregularity in the anal canal. Biopsy using core biopsy needle revealed BSCC. Immunohistochemical staining showed the tumour expressing pan cytokeratin (AE1/AE3) along with p 16, p 63 and SOX 10.
MRI showed a 5 cm lesion at the rectovaginal septum infiltrating the posterior wall of the vagina and the anterior wall of the anorectal region. The lesion was infiltrating the adjacent pelvic floor musculature and the anal sphincter. The bulk of the lesion was more likely to be GI in origin. CT did not show any distant metastases.
The patient was started on radiotherapy with weekly Cisplatin chemotherapy.

Conclusion

BSCC is a rare and aggressive variant of the squamous cell carcinoma, which is mainly seen in the upper aero digestive tract and the anal canal. We highlight the importance of digital palpation in this case and a high index of suspicion for non vulval cancer in apparently normal appearance of the genital tract.

Analyses from the annual GMC national trainee survey since 2013 – till 2018 (last 6 years) - Time to make a difference to the specialty of Obstetrics & Gynaecology more attractive, minimise attrition and improve patient care

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Objective

How Obstetrics & Gynaecology training performed against the other specialties and what lessons to learn to make real change and improvement

Design

Analyse the annual national trainee survey feedback for last 6 years since 2013 to 2018. Comparing the outcome against the other specialties and making recommendations how we can improve the trainee perception in specialty of Obstetrics & Gynaecology (O&G)

Method

The data was collected from the annual trainee survey for the last 6 years and looking in depth to compare year on year outcome and trends. The intention was to find any improvements and then making recommendations about what we could have learned as a specialty.

Results

O&G is one of the acute surgical specialties. The average satisfaction rate ranged ranges between 74-79% one of the lowest amongst other specialties (the highest satisfaction was General Practice ranging 85-89%. The satisfaction rate was lower amongst the earlier trainees compared to the specialty trainee (ST) 6+ (77.05 vs 80.74%). Almost 4 out of 10 trainees overwhelmed by the increase workload (mean of 44%) making them to feel lack of sleep before next duty. However clinical supervision was rated highly amongst all group of trainees and in fact improved comparing to 2013 until recently ranging 85 to 93%. One of the persistent concerns was noted about undermining and bullying at work. O&G specialty scored one of the worst ranking amongst all other specialties followed closely by Surgery. Although there were some works and positive efforts from the surgical specialty to reduce the culture of bully and undermining; works from O&G specialty remained worryingly ineffective.

Discussions

Annual GMC trainee survey has been one of the highest feedback survey to assess trend. The trainees perhaps feel more open to provide their anonymised feedback. The survey also highlights that a significant number of trainees feel that raising their concern may not change the system. The educationist, trainers, politicians and deaneries should take the feedback as warning signs and must take robust steps to make positive changes. Royal College of Obstetricians & Gynaecologists (RCOG) workforce data has already highlighted a growing concern of regular gaps in the rota leading to workforce crisis. Before it becomes out of control we should make robust steps to address the persistent problems otherwise this will be a lost opportunity not only for the specialty but also the future women healthcare of the nation.

Courtesy

GMC National Trainee Survey

Analysis of LLETZ Performed under General Anaesthesia: Are There Preventable Causes? - A 2 years Audit -

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Introduction / Background
LLETZ under GA should be discouraged, unless strongly indicated. It causes more morbidity to the patient and increased NHS costs.

Aims / Methodology
The major objective of our study is to improve the practice in Colposcopy at our trust, and contribute in diminishing the number of LLETZ performed under GA. Moreover, to identify the causes which lead to the procedure being performed under GA, and to assess whether they were preventable or not.
This a 2 years retrospective audit (2017-2019). The information was retrieved from the Colposcopy Database. The data were collected and analysed using Microsoft Excel.

Results
A total of 842 patients were treated in the Colposcopy Clinic at our Trust. We identified 144 episodes of LLETZ under GA (16.6 %).
Recognised psychological factors were depression – 9.02%, anxiety –1.38%, bipolar disease –0.69% and mental health related to drug and alcohol abuse – 0.69%.
The Colposcopists making the decision for LLETZ under GA were Consultants in 41% of the cases and Nurse colposcopist supported by Consultant in 59%.
The time from decision-to-treat to the treatment in HG case had a mean of 41.5 days. The time from the GP referral to treatment had a mean of 59.5 days.
The reasons for GA were technical reasons (large lesion, extension into vagina) - 53%, and patients unable to tolerate the procedure under LA - 35%. 5% cases had a medical indication for GA, and 2% MDT advice.

Conclusions and Recommendations
The technical and patients' psychological factors were the most prevalent causes of LLETZ under GA. The anxiety and depression were frequent and are preventable.
Another preventable cause is the timeline from decision to treatment. Our unit is compliant with the 62 days (HG) and 18 weeks (LG) targets from GP referral to treatment.

Are we managing our patients correctly following treatment for cervical glandular intra-epithelial neoplasia (CGIN): an audit of practice at the Jessop Wing Colposcopy Unit.

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Introduction / Background
Follow up for women treated for CGIN must be rigorous in view of their significant risk of recurrence. Since the implementation of primary HPV screening in April 2013 the majority of our women at Jessop Wing Colposcopy are now discharged to the community for further cervical sampling.

Aims / Methodology
Retrospective cohort study performed between the 1st April 2013 and the 31st March 2019 identifying all women diagnosed with CGIN.
Study Aim - To assess the effectivity of community cervical sampling follow up in women treated for CGIN.

Results
159 women referred to the service were diagnosed with CGIN. Nineteen were diagnosed with cervical cancer following initial colposcopy management and therefore excluded from further analysis (n=140). When considering the first post treatment cervical sample 67% of eligible women had attended by six months; 84% had attended within twelve months. When considering the second post treatment cervical sample 52.5% of eligible women had attended by eighteen months; 70% had attended by 24 months. Women were recalled appropriately for six months test of cure following treatment for CGIN irrespective of whether samples were performed in either the colposcopy department or in primary care.
Recall at 18 months however was more unreliable. Twenty percent of women having their six month test of cure sample performed in primary care were incorrectly recalled as routine at three years, as opposed to being recalled at eighteen months post treatment.
Currently colposcopy departments are only able to provide one follow up date to the Cervical Screening Administration Service with the same information provided to centralised laboratories. As only the six months test of cure date will be provided then stringent protocols will need to be followed by centralised laboratories particularly with regard to CGIN diagnoses.

ASC-H (Atypical squamous cells cannot exclude high grade). High Grade or Low Grade? A four year review of ASC-H referrals to Sligo University Hospital Colposcopy Clinic

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Introduction / Background

Abnormal smear results and referral to Colposcopy cause emotional distress to women.
Psychological, emotional, relationship upset and anxiety are well documented.
An ASC-H smear result can cause increased levels of distress due to difficulties in providing a comprehensive explanation of this type of abnormality.
Is it High Grade (HG) or is it Low Grade (LG)?

Aims / Methodology

The aim of the study was to provide local Statistics of the incidence of High grade disease following such referral to Colposcopy. It was hoped that the findings would assist staff in providing psychological support to women.
Local data was collected from 2016-2019. It was categorised into HG, LG and normal histology following cervical biopsy at initial colposcopy visit.
Data was further analysed into the total number of women who required LLETZ and those who required observation.

Results

In 2016, 51%of ASC-H referrals had HG disease. 1 woman had SCC. All required LLETZ.
2017, 58% had HG disease. All required LLETZ.
2018, 50% had HG disease. 47.2% had LLETZ. 1 woman had SCC.
2019, 50% had HG disease.
A negative aspect to screening is the anxiety that an abnormal result produces. ASC-H is a complex result to explain. The study has assisted Colposcopy staff in supporting these women, by providing local data that not all ASC-H results are truly HG.
Education and psychological support are critical components in the holistic care of women referred to colposcopy. If we can assist in reducing the anxiety such results cause, women maybe more compliant with screening.
The data supports the need for HG triage of ASC-H referrals to colposcopy.
Further areas for research would be to observe progression/regression rates of women with initial LG or normal biopsy. There is limited data within the study to suggest progression detectable at subsequent follow up.

ASSESSING THE INCIDENCE OF NON-CORRELATION BETWEEN CYTOLOGY AND HISTOLOGY AND THE IMPACT THIS HAS ON COLPOSCOPY WORKLOAD

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Aim

The aim of this study was to assess the degree of non-correlation between cytology and histology and the impact this had on the clinical and administrative colposcopy work load.

Methods

This was a retrospective data collected by compiling all the colposcopy multidisciplinary (MDT) team meetings data from November 2013 to December 2018. Colposcopy MDT meetings are held monthly in our hospital. We collected a total of 99 cases during this study period.

Results

9 % (9) of the total population had a borderline cervical smear, 15% (15) and low grade dyskaryosis (mild), 50% (50) has high grade dyskaryosis (severe), 9% (9) had high grade dyskaryosis (moderate), 7% (7) had glandular cervical abnormalities, 4 (4%) had an unsatisfactory cervical smear and 5% (5) were referred because of other reasons like post-coital bleeding, having had a recent normal cervical smear.
In the borderline dyskaryosis group, 11% (1) had a histologically higher grade abnormality (CGIN), colposcopy correlated 100% with the smear result.
Low grade (mild) group- 13% (2) had a histologically higher grade abnormality (CIN3), and colposcopy was non-correlating with cervical smear in 6.6% (1)
High grade(moderate) group- 33% (3) had normal histology and 22%(2) had normal colposcopy, therefore were non-correlating.
High Grade (severe)- 34% (17) had a normal colposcopy, 2%(1) had a colposcopic impression of ectropion, 28%914) had a colposcopically low grade lesion, Histologically 40% (20) had a normal results or a low grade abnormality
There was a 100% correlation histologically with cervical smears showing glandular abnormalities.
Others- 20% (1) was found to have high grade CIN colposcopically and histologically.
Conclusions: 53% (50) patients were discharged back to the GP , however 47% patients needed a colposcopy follow-up for repeat colposcopies/biopsies, thereby significantly increasing the clinical and administrative colposcopy work load.
As a result of this audit, the cytology department are now sending all their difficult to report smears for a second cytological opinion. We plan to re-audit this again in one year.

Assessment of women's experiences of thermal ablation treatment within a cervical cancer 'screen and treat' service in Malawi

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Introduction / Background
Malawi has the second highest global incidence of cervical cancer. Cervical cancer screening is carried out using visual inspection with acetic acid (VIA). Recently, thermal ablation has been approved by the WHO as a safe and effective alternative to cryotherapy for the treatment of VIA-positive lesions. The objective of this study was to assess the experience of women receiving thermal ablation treatment and evaluate any predictors of pain and treatment sensation.

Aims / Methodology
VIA-positive women were treated with one of three instruments: the WISAP Standard instrument, or either of the newly available Liger or WISAP C3 thermal ablation instruments, at Nkhoma Hospital and associated health centres. Following treatment, trained patient assistants administered a patient experience survey. Using a complete case analysis approach, we ran descriptive statistics to summarize experiences of pain, and used Fischer's exact test to evaluate associations between demographic characteristics and pain experience.

Results
Data was available from 217 women (124 treated with WISAP Standard, 49 with WISAP C3, 44 with Liger). Varying pain levels were reported: 5.5% of women experienced no pain, 79.7% mild pain, 11.5% moderate pain, and 3.2% severe pain. No statistically significant associations were found between pain experience and HIV status (p=0.700), women's age (p=0.716), or number of children (p=0.639). Relative to the WISAP Standard instrument, women treated with either WISAP C3 or Liger had 2.2 times increased odds (95% CI: 1.02, 4.71) of experiencing elevated pain (moderate or severe pain) during thermal ablation (p=0.044).

Conclusions
Health messages for women attending cervical screening should include information on the potential for experiencing pain if treatment is required. Further research is needed to understand variation in reported pain following treatment by different instruments, and how healthcare professionals can manage and mitigate the pain experience of women undergoing thermal ablation treatment.

Association of cervical treatment to preterm labour (PTL)

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Background

Premature labour is when regular contractions start before 37 weeks of pregnancy. In the UK, eight in 100 babies are born before 37 weeks. The causes of premature birth are not always known. Treatment to the cervix is among some of the risk factors associated.

Aims

1. To analyse association of predetermined risk factors to spontaneous preterm labour.
2. Association of cervical treatment with preterm delivery.
3. Whether these women require extra monitoring in pregnancy?

Materials and method

This is a retrospective study over a period of 4 months at University Hospital Wishaw. Data was collected from electronic patient records.

Results

Preterm deliveries was 7.7% of the total deliveries. Of the 110 preterm deliveries, 43 were spontaneous while 67 were iatrogenic preterm deliveries. Certain risk factors association were previous preterm delivery 14%, PPROM 48%, previous late miscarriage 7%, vaginal bleeding after14 weeks 9.3%, multiple pregnancy 14%, smoking 18.6%, infection 14%. Commonest indication for IOL was IUGR/static growth pre-eclampsia for emergency caesarean section while MCDA twin was for elective caesarean section.
Of the 110 PTL, 8 patients (7%) had some form of treatment to cervix-3 LLETZ, 3 Cold coagulation and 1 had both CC and LLETZ. Of these, only 2 patients had spontaneous preterm labour (4.6%). Both had had treatment for high grade changes. About 9% (6/67) had iatrogenic preterm deliveries. One patient who had 2 LLETZ had an emergency Cesarean section for major placenta previa.

Conclusion

Overall risk of cervical treatment with preterm deliveries is seen as 7% and treatment for previous high grade changes seems to be associated with spontaneous preterm deliveries (100%). As the risk is low with one previous treatment, this study may be a guide to suggest extra monitoring to be limited to ones who have been treated for high grade changes only.

AUDIT OF CORRELATION OF DEPTH AND NUMBER OF PIECES OF LLETZ(LARGE LOOP EXCISION OF THE TRANSFORMATION ZONE) TREATMENT BIOPSY WITH TEST OF CURE SMEAR RESULTS

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Aim

To correlate depth of and number of pieces of LLETZ (large loop excision of the transformation zone) excisional biopsy specimens with subsequent test of cure smear results

Methods

Retrospective audit. Data collected from electronic records. Time period from 1/1/2017-31/12/2017. Total consecutive cases studied were 273.

Results

36% of women were 20-30 years, 35% were nulliparous. 35% were smokers. Depth of loop is 6-10mm in 53%, 1-5mm in 36%, 11-15mm in 3% and 16-20mm in 1.6% cases.78% cases it was intact loop and 12% was two pieces. 60% of cases margins were clear, 14% cases were involved and friable unable to comment in 0.4% cases.
72% cases deep lateral were clear and 6% deep lateral margins were involved.
Final histology was CIN 1 in 15%, CIN 2 in 6%, CIN 3 in 13%, CIN 1 and 2 in 22%, CIN 1 and 3 in 2%, CIN 1,2 and 3 in 13%, CIN 2 and 3 in 24%, no CIN in 2%, invasive cancer in 0.7% and unable to sample in 1% cases. Negative test of cure in 84%, HPV positive in 11 %, low grade in 2% and borderline in 3% cases. Out of positive test of cure smears the depth of loop was < 5mm in 25%, 5-7mm in 37.5%, 8-10mm in 19% and >10mm in 19% cases. Two pieces in 31% and one piece in 69% cases.

Conclusion

In this audit we observed negative test of cure in 84% of cases, in 72% cases deep lateral margins were clear, in 60% cases all margins were clear, 78% cases had intact loop, depth of loop was 6-10mm in 53% cases and out of positive test of cure smears depth of loop was <5mm in 25% cases. There was CIN 3 in 44% cases, CIN2 in 64% cases and invasive cancer in 1% cases. Overall there is an 84% rate of negative test of cure smears after a LLETZ procedure within our unit.

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AUDIT OF INADEQUATE CERVICAL PUNCH BIOPSIES IN COLPOSCOPY CLINIC AT THE QUEEN ELIZABETH HOSPITAL, GATESHEAD.

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Background

The National Health Service Cervical Screening Programme recommends that cervical punch biopsies should be carried out following an abnormal cytology screening result of ≥moderate high-grade dyskaryiosis.[1] Less than 10% of punch biopsies should be classified as 'inadequate'. [1] Inadequate is defined as '*insufficient representative material present to allow for pathological reporting'.* [2]

Aims and Objectives

- Audit the rate of inadequate cervical punch biopsy samples in the Colposcopy clinic at the QEH and assess compliance to the national standard.
- Sub-analyse by Colposcopist, Colposcopic opinion and Histology report.

Methods

The electronic patient record database (Dendrite) was used to retrospectively identify patients who had punch biopsies in clinic 01/01/19 – 30/06/19, their colposcopist, examination findings and patient outcomes. Patients' histology records on Medway were reviewed.

Results

398 patients undergoing biopsy were identified. 7 excluded. The inadequate cervical punch biopsy rate was n = 15/391 (3.84%). The inadequate rate was quantified per Colposcopist. n = 7/8 (87.5%) met the national standard. Sub-analysis by Examination showed n = 8/15 (53.33%) had a Low Grade Colposcopic Opinion. Sub-analysis by Histology showed n = 13/15 (86.67%) were reported as 'nonrepresentative of the transformation zone'.

Conclusions

The overall rate of inadequate cervical punch biopsy samples in QEH colposcopy clinic meets national standards. This should be continually audited, sub-analysed by colposcopist, to retain standard. Whilst inadequate rate is low, there remains an impact on these patients and on clinic workload.

References

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Audit of management of cervical smear with glandular abnormalities

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Background
Cervical screening with cytology can predict the presence of cervical glandular intraepithelial abnormalities. However, the accuracy of cytology for glandular lesions remains lower than that for squamous abnormalities.

Aim/Methodology
To find out if we are following NHSCSP guideline,To study correlation of cytology and histological diagnoses of women with abnormal glandular smear, To formulate local guideline in order to provide improved care. It was a retrospective audit of patients seen in clinic with abnormal glandular smear from January 2016 to December 2017. The data was collected from colposcopy data base and analysed.

Results
Total 42 patients were seen, of which 38 patients were with abnormal glandular smear of endocervical origin and 4 with non-cervical origin.All patients were seen within 2 weeks of referral (100%). All of them had colposcopic assessment (100%). 31(82%) of patients with abnormal glandular smear of endocervical origin had LLETZ at their first clinic but 7 (18%) patients had cervical punch biopsy only. Out of 31, 16 had HG CGIN, 6 had HG CIN, 4 had adenocarcinoma cervix and 5 had tubo-endometroid metaplasia on histology. Out of 7 patients who had cervical biopsy on their first visit, 2 had cervical adenocarcinoma. 5 patients had further LLETZ and histology confirmed HG CGIN. 36 patients needed LLETZ. 11/36 needed second LLETZ due to incomplete excision margins. 4/11 had depth of LLETZ <10mm. All patients had their Test of Cure smear at 6 and 18 months. None had residual disease. Histology reports of 4 patients with abnormal glandular smear of non-cervical origin showed one patient with endometrial adenocarcinoma and 3 with inactive endometrium.
This is what we recommended: All women should have excision biopsy (LLETZ) at their first visit. The depth of excision should be >10mm for women age <36 years and 20-25mm for women age > 36 years.

Audit of our compliance with National guidelines for low grade cervical smears at Nottingham University hospital NHS trust

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Introduction / Background

All women who are HR-HPV positive and have low-grade dyskaryosis reported in their LBC cytology sample must be referred to colposcopy. According to the waiting time standards of the National Health Service Cervical Screening Programme (NHSCSP) these women should be seen within six weeks of referral (99%). At colposcopy the national guidance should be followed for management of these patients

Aims / Methodology

To audit referral wait time and routine colposcopy performance for low grade cervical smears using the requirements of the NHSCSP.
Records of 520 women who underwent colposcopy for low grade cervical smears from the 1st of April 2016 to the 31st of March 2017 at the Treatment centre Queens Medical Centre, Nottingham University hospital NHS trust were reviewed.

Results

Only 92% of patients referred to our centre were seen within 6 weeks as opposed to the expected standard of 99%. The proportion of women who had recordings of visibility of the transformation zone achieved the NHSCSP requirement of 100%. Biopsy was taken only in 51% of patients as opposed to the perception that we took more biopsies. After colposcopy examination 87% of patients were discharged back to the community.

Conclusion

The reason for not meeting the 99% referral to appointment time is multifactorial which range from data collection, patients' choice and multiple non-attendance at clinic appointments. Patients brought back to clinic have justifiable reasons. Routine audit is essential to evaluate practice to check and maintain compliance with the national guideline.

Audit on management of Glandular Neoplasia on cervical smear and CGIN(Cervical Glandular Intraepithelial Neoplasia) cases over last 3 years in a district general hospital in the United Kingdom

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Introduction / Background

The NHS cervical screening programme is primarily concerned with detection and treatment of squamous abnormalities .The incidence of both preinvasive and invasive cervical glandular neoplasia continues to increase .Colposcopic appearances of CGIN (Cervical Glandular intraepithelial neoplasia) can be non-specific and uncharacteristic with skip lesions present in 13% of cases.CIN(Cervical Intraepithelial neoplasia) and CGIN can coexist(50%). These features in turn are reflective of delay in diagnosis and poor prognosis for patients with glandular lesions in comparison to those with squamous lesion.

Aims / Methodology

A retrospective audit was conducted for period of 3 years from 2015 to 2018.All abnormal endocervical smear referrals and histologically confirmed CGIN cases were included in the audit. Objective of the audit was to determine if management in the trust was as per standards(NHS Cervical screening programme : Colposcopy and Programme management ,publication 20).

Results

Almost half of all abnormal endocervical smear referrals were in age group 26-35 with 84.85% women in premenopausal group. The most common symptom in these referrals was vaginal discharge(53.33%) .93.94% of all endocervical abnormal smear had histological pathology.74.2% cases were histologically confirmed CGIN and 25.8% CIN.Almost 30% CGIN cases had invasion confirmed histologically.100% of all glandular neoplasia smear referrals had colposcopy within 2 weeks of referral.93.75% of patients had excisional biopsy with endometrial biopsy taken in 43.75% patients.87% patients with CGIN had complete excision with 78% patients with incomplete excision having a repeat treatment (Knife cone biopsy/Hysterectomy).Only 40 % of CGIN cases were discussed in MDT. 100% had follow up. TOC was negative in all patients at 6 months and in 92.3% at 18 months

Action plan

The need to set benchmark for certain standards was identified and this was laid out in the colposcopy operational meeting with action plan for re-audit in 2 years time.

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Audit to review current depth of LLETZ specimens against national recommendations in Northern Lincolnshire and Goole NHS Foundation Trust

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Background
The NHSCSP guideline for colposcopy state that excisional techniques should remove tissue to a depth of >7mm.
The idea of excision is to ensure that all of the abnormal epithelium has been removed, inadequate excision especially at the endocervical margin has an increased likelihood of recurrence, however loop/lletz samples >10 mm do not necessarily correlate with a reduction in recurrence, but there is an increased risk of miscarriage/preterm delivery where loop specimens are taken >10mm.
The recommendations are to excise tissue to a depth of 7mm, 10-15 mm and 15-25 mm for CIN I, CIN II and CIN III respectively. For CGIN, the whole transformation zone should be excised with 1cm of endocervix above the TZ (excise tissue approximately 20-25mm).

Aims
To compare the NLAG Trust performance against NHSCSP guidance on depth of LLETZ samples, to compare depth of LLETZ to clinical history, to assess the histology result of LLETZ samples and to assess the completeness of excision.

Methods
Specimen search was conducted for all Loop/Lletz specimens processed through the cellular department in 2018. It included both Scunthorpe and Grimsby sites. We reviewed total 390 samples of LLETZ sent by total 4 Colposcopists from both sites. This is the name recorded as a sender of the specimen but it may not be the surgeon who conducted the procedure.

Results
223/390(57%) of specimens had a known history from smear, biopsy or previous LLETZ of CIN 3. 42% of the LLETZ are CIN2. The majority of the LLETZ specimens taken are 07-15 mm in depth independent of previous history. No LLETZ specimens with a previous history of malignancy had a loop depth of <6mm. The majority of the LLETZ specimens with a previous history of CGIN or malignancy had a LLETZ specimen taken between 7-15 mm (31/39 or 79 %). Only 15 % of LLETZ specimens were taken at >15mm.
72% of LLETZ specimens were taken with a complete os.

Conclusion
We are compliant with NHSCSP guidance of >7mm depth. Majority of the LLETZ specimens are CIN3 and CIN2 with 7-15 mm depth of excision. We have high complete excision rate of 72%.

Borderline changes in endo-cervical cells
Management dilemma - requires Multidisciplinary team approach

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Method

We conducted a retrospective audit to assess the final histology outcome of this smear category in our Princess Royal University Hospital NHS Trust referred from January2018 till December2018.
A total of 15 cases were identified with borderline changes in endo-cervical cells.
One patient, 37 years old P0+0, ex-smoker had followed up smear after 1 year, known case of Stage 1A1 squamous cell carcinoma had previous 2 LLETZ, referred with BNC, had treatment and referred for IVF.
We performed colposcopy examination on all the patients within two weeks, except 1 patient who travelled abroad and attended after 33 days. (99%).

- BNC in endocervical cells: 10 Cases,
  BNC + borderline changes in squamous cells: 2 Cases,
  BNC + atypical glandular cells: 1 Case,
  BNC + herpes infection 1 Case and
  BNC + dyskaryosis of uncertain degree: 1 Case

Results:

100% patients had satisfactory colposcopy.

All cases were reviewed at colposcopy and 14/15 (93.3%) patients underwent single or multiple biopsies despite the absence or presence of abnormalities at colposcopy (as per our guidelines).

14/15 (93.33%) cases discussed in MDT for management and follow up plans, except stage 1A1 squamous cell carcinoma patient.

4/15 patients had no treatment. (26.6%).
11/15 patients underwent complete excision of the squamous lesion, LLETZ (73.3%).
6/11 had high grade histology CIN2 and CIN3 disease. (54% patient) almost half of the patients.

Conclusion

- It is challenging to distinguish BNCs from endocervical and endometrial origin. There is also limited guidance on the management.
- All should undergo colposcopy examination and biopsy. patients receiving no treatment, should have MDT discussion and a repeat smear, colposcopy and biopsy in 6 months.
- Those with BNCs in endocervical cells >40 years of age, or with other risk factors should have a pelvic USS and endometrial biopsy to exclude endometrial pathology.

Borderline Endocervical Dyskaryosis: One year follow up of the management of patients referred in 2019.

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Introduction / Background

The management of patients presenting with Borderline endocervical dyskaryosis was updated in Feb 2020 [1]. The new advice to perform LLETZ "excision", with limited clarification, led us to audit our previous 2019 practice - with completed one-year follow up, to see if this was prudent advice.

Aims / Methodology

We audited the management of all patients referred with "borderline endo-cervical dyskaryosis" 01-07-2019 – 31-12-2019 (prior to the new guidance), using the Dendrite, Medway/ICE and Open Exeter IT systems. One-year later, the subsequent screening test results and outcomes were reviewed.

Results

There were 15 patients referred with Borderline Endocervical dyskaryosis 01-07-2019–31-12-2019. (Table 1).

The average age was 31years (2 patients >35years old).

Table 1

Initial management groups	Number	Histology	MDT discussion	Screening at 1 year	Re-referral management	Screening at 3 years
LLETZ loop at 1st visit	2	SMILEx1 CIN1 X1	1/2	TOC Negative x2		
Single punch biopsy	7	CIN1 x7	6/7	Negative x1 Dnax2 B'line Sq x1 Lowx2 Moderate x1	 CIN1x2 Biopsy-NAD Biopsy - inadequate LLETZ- CIN2	
Single punch biopsy	3	HPV x 3	3/3	Negative x1		2 awaited
Multiple punch biopsy	2	CIN x1 HPV X1	2/2	Negative x2		
No biopsy	1*	None	Down graded to B/L Squamous			1 awaited
Totals	14/15	1/14	12/15	12/15	4/15	3/15

MDT discussion took place in 12/15 cases (80%).

Follow-up was recommended at 6 months (TOC) for 2/15; at 1year 10/15 (80%) and at 3years 3/15.

The DNA Rate shows 2 /12 (17%) patients have not yet attended for 1 year screening.
Completed 1 year follow up is available for 10/15 patients (67%).
The majority of patients underwent initial histology 14/15 (93%).
The histology outcomes revealed were SMILE (1/14), CIN 1 (9/14) and HPV changes (4/14).
Only one patient had histology (SMILE) which would have necessitated the New Guidance for an initial LLETZ Excision 1/14 (7%)

Discussion

Our quality assurance should be simpler and safer, if we used one comprehensive coordinated IT system.
Our practice should be improved, by ensuring that these patients are referred to the MDT automatically.
We intend to audit the clinical outcomes of those patients whose data is outstanding and complete the audit cycle. Our data will then be presented, with comparison to a future cohort, (subsequent to the new guidance issued Feb 2020).
We feel that the Guidance change to recommend LLETZ excision for patients presenting with a borderline endocervical smear needs urgent review, or clarification, as potentially (based on subsequent Negative HPV tests) we would overtreat at least 4/10 young patients with an unnecessary LLETZ excision.

Reference

- PHE Cervical Screening: programme and colposcopy management. Feb 2020

CASE REPORT : AN INTERESTING ASSOCIATION BETWEEN CERVICAL ENDOMETRIOSIS AND ABNORMAL SMEARS

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The cervix is a rare location for endometriosis, the likelihood of which is increased by procedures traumatizing the cervix. Most patients with cervical endometriosis are asymptomatic. A substantial number of patients reported in the literature only had abnormal smear results and were diagnosed during colposcopy or by pathologic examinations of their biopsy or hysterectomy specimens.

We report an uncommon case of a 50 year old woman whose initial smear in 2013 showed atypical glandular cells which was followed by LLETZ , results of which came back as CGIN with clear margins.

Her subsequent yearly smears were negative in 2014 and 2015.
In 2016 she underwent LLETZ and hysteroscopy D&C which was reported as endometriosis on LLETZ biopsy sample with the smear at that time showing AGH/Boderline glandular abnormalities. This abnormality persisted in her subsequent smears over the next 3 years.

Multidisciplinary meetings on a number of occasions suggested that her glandular abnormalities were result of endometriosis rather than distinct cervical pathology.

Option for hysterectomy was discussed repeatedly with patient in course of her follow up but she initially refrained from it. She finally agreed for hysterectomy in 2019, with endometriosis clinically evident at the time of laparotomy with histology subsequently reporting endometriosis of cervix.

Cervical smears can be misleading in cases of cervical endometriosis. The reason for this is that endometriosis undergoes different cytomorphologic changes under the influence of hormonal fluctuations during the menstrual cycle.

Cervical Cancer and COVID: A collaborative assessment of the effect of the COVID pandemic on the presentation of Cervical cancer in the North of England

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Introduction / Background

This study has compared the diagnosis and treatment of cervical cancer before and after the onset of COVID in the North West of England, to determine whether a COVID impact on cancer care is apparent.
Cervical cancer predominantly affects young patients and if identified at a very early stage (Stage 1a1); can be treated and cured with local treatment.

Aims / Methodology

All cases of cervical cancer diagnosed between May 2019 - Oct 2019 (Pre- COVID) and May 2020- Oct 2020 (Post-COVID) across five tertiary centres (Liverpool Women's Hospital, Preston and Manchester St Mary's, Leeds and Hull) were identified retrospectively using the Somerset Cancer Database. We focused on: number of referrals, stage at diagnosis, time from diagnosis to treatment and type of treatment.

Results

A total of 359 cases were reviewed with 222 patients vs. 137 patents being identified in the 2019 and 2020 cohort respectively, a case reduction of 38%.
Prior to COVID, 57% of patients presented with Stage 1b2 or less (23% Stage 1a1), compared to 50% Stage 1b2 or less (25% stage 1a1) post COVID ($p= 0.056$).
The mean time from diagnosis to treatment pre COVID was 105 days, compared to 144 days post COVID. This difference is statistically significant ($p<0.05$).

Conclusion

This study has demonstrated an increase in the stage of cervical cancer at presentation across the North of England. As survival from cancer is directly related to stage, this will likely translate to an increase in mortality as a direct response to the COVID-19 pandemic and will result in an increase in the requirement for radiotherapy and clinical oncology services.
We anticipate that these results and implications are likely to be applicable throughout cancer services and deleterious effects of COVID will therefore continue for quite some time.

Cervical cancer in a young low risk woman: A case report

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A 31 year old nulliparous woman was referred to colposcopy clinic with high grade severe dyskaryotic smear.
She had previous normal smears at age of 25 and 28 under NHS cervical screening.
She was not vaccinated against HPV
She never smoked.
She had been using OC pill for contraception for 15 years
Colposcopy revealed high grade lesion and biopsy confirmed extensive CIN 3.
She had LLETZ and histology showed moderately differentiated squamous cell carcinoma with complete excision of cancer cells.
At MDT discussion, histology confirmed the diagnosis. She was referred to regional oncology centre for further management.
Discussion: General coconscious is that it may take 10 years or longer for CIN 3 to develop into cervical cancer. This is why cervical screening has been advised every 3 years.
This woman had regular and timely smears which were normal. Her only risk factors was OC pill use.
So this case is a rare exemption of natural history of cervical cancer.

CERVICAL PAP SMEARS AND PANDEMICS: THE EFFECT OF COVID-19 ON CERVICAL CANCER SCREENING UPTAKE AND IMPROVING UPTAKE IN FUTURE

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Introduction / Background

The COVID-19 pandemic has led to unprecedented upheaval within healthcare systems and resulted in the temporary pausing of the NHS Cervical Screening Programme. With the World Health Organisation (WHO) recently launching their 'Global Strategy to Accelerate the Elimination of Cervical Cancer', the recognition of the importance of cervical screening is clear, however, this has come at a challenging time for the programme. Not only have there been less samples taken, there have also been fewer referrals to colposcopy as a result. Encouraging uptake for cervical screening is especially vital considering that the fears and barriers to screening that women may have are now exacerbated by COVID-19. A possible strategy to reach women who may be reluctant to attend for screening is HPV self-sampling, carried out by the woman in her home. Promisingly, this has been proven to improve uptake whilst maintaining a high sensitivity and crucially reducing the need for face-to-face contact. There are lessons to be learned from the pandemic and we must use this opportunity to improve cervical screening uptake in future.

Aims / Methodology

- To investigate the effect of the COVID-19 pandemic on the uptake of cervical screening within NHS Ayrshire & Arran
- To explore factors contributing to any reduction in uptake during the pandemic, including barriers to screening
- To discuss changes to colposcopy services during the pandemic
- To evaluate the effectiveness of strategies to improve uptake, mainly self-sampling and telemedicine

Results

In NHS Ayrshire & Arran, 11,209 individual samples were taken between 1st November 2019 to 31st October 2020, encompassing the pandemic. This is 43% of the previous year's total, or a 57% reduction (25927 tests recorded in 2018-2019).

GP practices in NHS Ayrshire & Arran had a mean reduction of 56% in the number of smear tests taken – the range was 21-112%.

Changing trends in colposcopy referrals and outcomes in the Republic of Ireland following a screening controversy

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In Ireland in 2018 a controversy erupted over cervical screening audit and disclosure of audit results. In the ensuing media and political storm there was confusion among women regarding the limitations of cervical screening. In May 2018, the Minister for Health announced an additional smear test for any woman with concerns resulting in a surge in demand and delays in results adding further to women's anxiety. During this period the rate of referrals to colposcopy increased.
We wanted to examine if the increase was significant and to assess if these referrals were appropriate by examining PPV of CIN2+ before and during the crisis.
Referrals for reason "clinical-urgent" increased from 12.8% to 17.6% ($p<0.001$); "clinical non-urgent" increased from 19.6% to 27.0% ($p<0.001$); abnormal cytology increased from 4.4% to 4.7% ($p<0.001$). PPV of CIN2+ for clinical-urgent referrals reduced from 11.0% to 7.1% ($p=0.012$); for clinical non-urgent referrals from 9.1% to 8.3% (ns); for high-grade smears from 74.1% to 68.1% ($p=0.05$). If a woman having a smear test is anxious about results and delays, smeartakers can circumvent waiting for results by assigning a status of clinical referral (urgent/non-urgent) to her test. This generates a colposcopy referral irrespective of result or turnaround time. During the crisis smeartakers used this facility significantly more often. PPV of clinical referrals demonstrates fewer significant findings on histology i.e. many referrals were unnecessary.
PPV of high-grade cytology shows that while cytology was the most efficient method of detecting CIN2+, the PPV reduced during the crisis. It is possible that in response to the crisis, screening laboratories erred on the side of caution by assigning higher results to smears. Colposcopy referrals rose, many of which were unnecessary. Inappropriate referrals increase waiting times for colposcopy and could lead to patients being harmed because of unnecessary investigations and treatments.

CIN 2, Should we stop the clock ?

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Introduction / Background

In CIN 2, finding the balance between conservative management and treatment is a challenge for colposcopists. The current guidance advises that high grade disease should be treated, however, local treatment of the cervix has been associated with adverse obstetric outcomes. We should be particularly mindful in women who are young, and not completed their families. The evidence for possible helpful criteria including age, fertility status, size of the lesion, immunity status, HPV genotypes, newer molecular markers and microbiomes, and patients' wishes should be taken into consideration when planning care.

Aims / Methodology

The aim was to study the outcomes of women who had colposcopy examination and a biopsy showing CIN 2 in a NHS Hospital in South East London, between January and December 2018. Database included 145 cases, 100 case notes obtained from Medical Records. Excel sheets used for recording findings and analysing data.

Results

Fourty two (42%) percent of patients were between the age of 25 and 30 years of age, and 49 percent were between the age of 31 and 40 years old. Fifty percent (50%) of patients between ages 25 and 40 years old did not have children (Para 0). Thirty one percent (31%)of them were current smokers at the time of colposcopy. More than 50 % of patients above the age of 50 years old were active smokers.
With regards to referral smears, only 47 % of patients had a low grade smear, and only 53 % had an impression of low grade abnormality on colposcopic examination.
Only 12 % of patients were managed conservatively, three of whom had subsequent negative smears, and 4 regressed to low grade abnormality confirmed on repeat biopsy. One patient became pregnant during conservative management, and progressed to CIN 3 six weeks after delivery. One patient had a see & treat LLETZ and histology confirmed progression to CIN 3.

Circulating HPV DNA as a biomarker in patients with HPV related Cervical Carcinoma

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Introduction / Background

High risk HPV infection is responsible for >99% of cervix cancers. In persistent infections that lead to cancer, the tumour breaches the basement membrane releasing HPV DNA into the bloodstream.
A next generation sequencing assay (NGS) for detection of plasma HPV circulating DNA (HPV cDNA) for high-risk HPV sub-types, has been developed and demonstrates 88% sensitivity and 100% specificity in patients with locally advanced cervix cancers undergoing radical chemoradiation (manuscript in preparation). We investigated this expanded panel assay in pre-invasive and invasive cervical lesions, testing the hypothesis that HPV cDNA is detectable in invasive cancers but not pre-invasive lesions.

Aims / Methodology

We recruited two cohorts of patients: those undergoing excisional treatment of high-grade cervical intra-epithelial neoplasia (CIN) and those with biopsy-confirmed early invasive carcinoma of the cervix (1A-1B). A blood sample was taken from these patients immediately prior to treatment and again at their follow-up appointment. DNA extraction from plasma followed by NGS were used for detection of HPV cDNA.

Results

We recruited 52 patients, 40 (77%) with high grade lesions and 12 (23%) with early invasive tumours - no prior history of HPV vaccination. None of the patients with pre-invasive lesions were positive for HPV cDNA. Two patients with invasive cancers were found to be > stage 1B at follow up and therefore excluded from the results. Of the remaining 10 invasive tumours, 1 (10%) reached the threshold of positivity for HPV cDNA in plasma. Re-calculating the thresholds for positivity did not increase the detection of HPV cDNA in early stage (<=1B) tumours.
We have confirmed that HPV cDNA is absent in high grade CIN. In early cervical tumours, there was very low detection of HPV cDNA. More sensitive assays are required before HPV cDNA can be used as a biomarker in this setting.

Clinical indications and LLETZ outcomes at the Jessop Wing Colposcopy Department, Sheffield, UK

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Introduction / Background

The majority of referrals to colposcopy are generated from cervical sampling. However, there are a proportion that are referred for varying clinical indications (PCB, IMB, abnormal looking cervix etc). As these referrals are for clinical indications, HPV testing is not available, unless the woman has a cervical sample performed at her appointment. We are therefore reviewing the outcomes of women who undertake a LLETZ treatment following referral for a clinical indication.

Aims / Methodology

All patients who underwent LLETZ at the colposcopy clinic in Sheffield Teaching Hospitals between 2014 and 2019 with the referral criteria 'clinical indication' were isolated from the departmental colposcopy database. Excel was used to collate and analyse the data.

Results

There were Fifty women referred with clinical indications whom subsequently had a LLETZ procedure over the 5-year time period. Age range was from 24 to 62yrs (mean 35 yrs). When considering histology from LLETZ procedures, eleven women (22%) had no CIN, one woman had CIN1 and the remainder (76%) had high grade changes or cancer.

There were seventeen women who had a 'see and treat' LLETZ at their first appointment. Of these, two women had no CIN, one woman had CIN1 and the remainder (82%) had CIN3 or cancer on histology.

Overall as a department the majority of women (76%) who underwent LLETZ following clinical indication referral had high grade changes on histology.

This suggests a good diagnostic rate of abnormalities for those patients referred to colposcopy for clinical indications within our department.

COLD COAGULATION TREATMENT OF CERVICAL INTRAEPITHELIAL NEOPLASIA: THE HUMAN PAPILLOMAVIRUS EVIDENCE OF CURE

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Since 2008, every woman in Ireland aged between 25 and 60 years old are provided with free cervical smear screening. Cold coagulation is the only ablative treatment used in Ireland as alternative to the current gold standard of LLETZ which has been brought with the risk of preterm delivery and increased risk of perinatal morbidity and mortality. Our colposcopy clinic in University Hospital Limerick has added Human Papillomavirus (HPV) testing to cytology post treatment since 2015 as it has higher sensitivity to detect high grade precancerous cervical changes. Starting 30 March 2020, Cervical Check Programme in Ireland is going to introduce HPV testing as primary cervical screening.

This retrospective study aims to evaluate the efficacy of cold coagulation treatment modality in our colposcopy clinic. All women who underwent cold coagulation treatment for cervical intraepithelial neoplasia in 2018 were included in this study and data obtained were analysed with SPSS and Microsoft Excel programme.

In total, 125 women received cold coagulation treatment with average age of 31.4 years old. 2.4% of the women attended our colposcopy clinic after receiving cervical treatment elsewhere with no corresponding smear result and subsequently received cold coagulation treatment due to high grade colposcopic impression. Majority of the women (57.6%) were referred with high grade precancerous cervical cells changes. HPV testing were only performed in less than half of the referred smear test and in which all were tested positive (41.6%). On average, all the women were called back for their first test of cure follow up in our colposcopy clinic within 208 days (6 months and 27 days). More than three quarters (76.4%) of the treated women had negative cytology and only 3.2% have moderate to severe dyskaryosis. The proportion of negative HPV in post treatment was twice higher than positive HPV test (68.3% versus 29.3%).

Colposcopy Audit in tertiary centre-QA recommendations and compliance with National Standards

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Introduction / Background

This audit was conducted to investigate whether the clinicians in our tertiary centre are following the national standards. As part of the QA recommendations we were asked to look the numbers of our new and follow up patients for each clinician, the biopsy rates for low grade referrals and the presence of high grade CIN at 'See and Treat' for high grade referrals.

Aims / Methodology

Our aim is to ensure that our local colposcopy practice is compliant with the BSCCP guidance.
We collected data from each colposcopist's session during a period of 4 weeks from 20/1/20 till 14/2/20. We analysed the number of new and follow up patients seen by each colposcopist, the reason for the referral and the biopsy rates for low grade referrals. Last but not least, we focused on the presence of high grade CIN at 'see and treat' for high grade referrals.

Results

The department has 7 colposcopists. The total number of appointments was 239. Total number of follow ups and new appointments were 105 and 109 respectively. 25 patients DNAed (10.6%)
5 out out of the 7 colposcopists were included. The majority of the clinicians performed punch biopsies in low grade dyskariosis referrals (60%). Only three out of the 12 biopsies were negative. Most of the biopsies results were consistent with CIN 1 or 2. 4 out of the 20 patients who were referred with low grade dyskariosis had LLETZ, while two of them came back with evidence of CIN3.
The number of patients referred with high grade dyskariosis was 16 and 87.5% of them had LLETZ.
All of the patients who were referred with high grade dyskaryosis and had LLETZ or punch Biopsy had evidence of CIN 2 or 3 (100%).

Colposcopy MDT audit-Appropriate referrals to colposcopy MDT in a tertiary center

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Introduction / Background

This audit was conducted to investigate the compliance of the colposcopy department in our tertiary centre with the referral criteria to the colposcopy multidisciplinary team meeting (MDT). The standards compared are described in the Cervical Screening Programme and Colposcopy Management May 2010 Public Health England document. The primary purpose of the MDT meeting is to plan the management of patients with discordant histology, cytology and colposcopy findings. Regular audit of MDT case selection and outcomes is highly recommended.

Aims / Methodology

Our aim is to ensure that our local colposcopy practice is compliant with the BSCCP and national guidance. This was a retrospective audit. We liaised with the colposcopy co-ordinator and we utilized our local data base. 5 MDT meetings were selected randomly. A total number of 107 cases were reviewed.

Results

104 out of 107 referrals were found to be appropriate, adhering to the criteria. Most common referrals were for colposcopy-cytology-histology discordance and for CGIN management. Other referrals were for persistently abnormal smear results, high grade HPV following LLETZ and cases where the patient has opted for conservative management of CIN2.

Conclusion

The outcome of the audit showed that the colposcopy department was compliant to the national standards. The cases referred to local colposcopy MDT meeting should be documented in a clear local protocol. Inappropriate referrals will result to an unnecessary increased workload. The recommendation was to repeat the audit in 6 months' time to investigate what is the exact impact of the COVID-19 pandemic to the colposcopy service. Last but not least, it was suggested to further evaluate the concordance rates between cytopathology and histology review.

COLPOSCOPY OF PATIENTS WITH HIGH-GRADE DYSKARYOSIS

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Introduction / Background
The NHS Cervical Screening Programme (NHSCSP) is a systematic, quality assured population-based screening programme, intended to reduce the incidence of and mortality from, cervical cancer. This audit aimed to determine the compliance with the NHSCSP document 20.

Aims / Methodology
A retrospective, descriptive audit of colposcopy practice over a 6-month period at the Buckinghamshire Healthcare NHS Trust. The colposcopy database, summary notes and result software of women with high-grade dyskaryosis at first colposcopy visit between January and June 2018 were reviewed with a total of 197 cases.

Results
Of the 197 cytology reports, 55.3% were moderate dyskaryosis while 44.2% were severe dyskaryosis. Excisional biopsies were taken in 89.3% of women while directed punch biopsies were taken in 9.1%. In total, 98.4% of women had biopsies taken, all of which were suitable for histological diagnosis.
Of the 161 women with histological evidence of CIN or CGIN, 95.7% were treated at first visit. The proportion of women managed as outpatients with local anaesthesia was 92.1%. Among those who had excisional biopsy, 63.8% were removed as a single sample.
The excision depth of tissues removed were >7mm in 67.3% of cases. For types 1 and 2 transformation zone lesions, the depth of excision was 15mm or less in 98.2% of women. Among 18 women with low-grade lesions on colposcopy and who were not treated, only 2 (11%) had multiple biopsies taken. The proportion of women with a negative test of cure 6 months after treatment was 75.9%.

Conclusion
The standard of the NHSCSP document 20 was met with regards to biopsies taken, suitability of the biopsies, women treated at 1st visit, use of local anaesthesia and excision depth for types 1 and 2 transformation zone lesions.

Comparison of expectant vs. excisional management of CIN2 in a UK Cohort

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Background

There is scant published UK data on the outcomes of conservative management of CIN2. This study aims to compare conservative and excisional/ablative CIN2 treatment outcomes following introduction of virological test-of-cure (TOC) on liquid-based cytology (LBC) samples as part of the NHS Cervical Screening Program.

Methodology

Retrospective study of prospectively collected data using available databases: UCLH Clinical Data Repository, CompuScope and OpenExeter. Patients with biopsy-proven CIN2 diagnosed between 01/07/2014-31/12/2017 were followed-up until discharge from colposcopy and then using OpenExeter. Initial conservative management group outcomes were:

- Cytological/histological regression = absence of high-grade CIN on biopsy and/or high-grade dysplasia.
    - Virological regression = cytological regression and negative HPV testing (UCLH had access to stand-alone high risk-HPV test swabs during this period, in addition to standard LBC HPV testing for TOC)
- Persistence = CIN2 on biopsy and/or moderate dyskaryosis.
- Progression = CIN3+ on biopsy and/or severe dyskaryosis.

Patients in initial excisional/ablative treatment group had TOC rate investigated.
Secondary outcomes were also assessed.

Results:

- Median follow-up was 22.6 months (range: 1.9-65.1 months).
- 175 (52.9%) patients were initially managed conservatively; 133 (77.3%) regressed, 23 (13.4%) persisted and 16 (9.3%) progressed to CIN3+. 97 (56.4%) patients achieved virological regression. Median regression time was 6.1 months; median progression time was 7.6 months.
- 156 (47.1%) patients underwent initial excision/ablation, with 89.4% virological TOC rate. Smoking significantly reduced TOC rates (p=0.003).
- 10 (3.0%) patients developed further CIN during median 17.2 months post-discharge, of which 7 (70%) were from the conservative management group and 3 (30%) from the planned treatment group (p=0.185).
- Patients managed conservatively vs. planned excision/ablation spent median 16.4 and 11.7 months respectively within colposcopy follow-up (p=0.136).

In conclusion, conservative management is a reasonable and effective management strategy in appropriately-selected patients with CIN2. The above data provide useful information for clinicians and patients when deciding management options.

COMPARISON OF OUTCOMES OF COLD COAGULATION VS LARGE LOOP EXCISION OF TRANSFORMATION ZONE IN HIGH GRADE DYSKARYOSIS

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Introduction

Among the treatment options available for cervical intraepithelial neoplasia 2 (CIN 2) and 3 (CIN 3), Cold coagulation (CC), and Large loop excision of the transformation zone (LLETZ) are widely practiced.

Methodology

We aimed to compare the cure rates and complications in women with confirmed CIN 2 and 3 treated with CC versus (Vs) LLETZ at 6 and 18 months post-treatment follow-ups, taking into consideration the HPV testing and the smear test. It was a retrospective cross-sectional study using convenience sampling from 2017 to 2018.

The cure rates were defined as the absence of any dyskaryosis (mild/moderate/severe) on cytology at 6 and 18 months follow-ups after treatment & Negative HPV testing. Data were recorded on a pre-designed proforma and analysed on Microsoft Excel using descriptive statistics.

Results

Among 65 women with CIN II and III, 33 and 32 were treated by CC and LLETZ respectively. Pre-treatment histology confirmed CIN II and CIN III in 51% and 49% of women respectively. The cure rate was 81% and 87% with CC and LLETZ, at 6 months follow up respectively. At follow up visit at 18 months, CC had a cure rate of 71% cure rate as a contrast to 62% with LLETZ.

Repeat LLETZ was done in 2 patients. One Hysterectomy was performed due to non-cure at 18 months and the patient's request. No complications were detected in both treatment methods, except only one case with vaginal bleeding post-LLETZ.

This study showed that women with confirmed CIN 2 and 3 had higher cure rates when treated with LLETZ Vs cold-coagulation, at 6 months follow up. On the other hand, at 18 months' follow-up, a higher cure rate with CC as compared to LLETZ. Further research on the follow-up of these patients in few years will give us pertinent information.

Conservative management of CIN2

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Introduction / Background
HPV screening has demonstrated an increased yield on CIN 2 in young women. CIN 2 in young women may have a different course to that in older women. Hence the decision for managing CIN 2 expectantly in young women may be preferable, if appropriate.

Aims / Methodology
The main aim of the audit was to see the outcome of women with CIN 2 who were managed expectantly. It was a retrospective audit where we assessed all 21 cases of CIN2 managed conservatively between January 2018 to December 2018.

Results
57% of these women were between 25-29 years, 28% were between 30-34 years and the remaining 15% were over 35 years. 48% of them were non-smokers. Most of them were referred with low grade HPV positiive smears and only one had a high grade referral smear. Colposcopy opinion was low grade for all and hence the MDT decision was to manage them conservatively. Smear and colposcopy after 6 months was low grade in all women and none required any further treatment.

Conclusion :
Conservative management in young women with CIN 2 is preferable, as there is a 40% regression of CIN 2 in one year and 63% in 2 years. One should be cautious and expectant management to be done only in selective patients. Young women planning family, with small lesions and those certain of compliance may be appropriate. However if CIN 2 is persistent for more than 2 years, treatment has to be warranted due to high risk of progression.

CONSERVATIVE MANAGEMENT OF CIN2 EXPERIENCE IN UNIVERSITY TEACHING HOSPITAL

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Background
In most colposcopy units in the UK, CIN2 is managed by loop resection just as CIN3. But in general management of CIN2 is variable even within the same unit with some colposcopist preferring to offer conservative management depending on age and reproductive status of patient without any structured unit guideline or protocol.
Cervical loop excision is associated with reproductive morbidities of late miscarriage, preterm labour and preterm birth.
In some patients, particularly in young females below 32 years of age natural regression and resolution of disease including HPV occurs due to immune defences often occurs thus preventing need for loop excision treatment.

Aim
Analyse outcome of conservative management of CIN2 in a University Teaching Hospital

Methods
Prospective recruitment and analysis of data of conservative management of women with CIN 2 over a period of 18 months and more using set unit guideline

Results
In majority of women, we noted natural regression and resolution of disease and negative HPV and return to routine recall without the need for loop excision.

Conservative management of CIN2; what are the outcomes for patients?

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Introduction / Background

Treatment to the cervix is not without risks and is known to have an effect on long term reproductive morbidity. There are high regression rates of cervical intra-epithelial neoplasia 2 (CIN2), particularly in young women and CIN2 is not always precancerous. For these reasons, conservative management of CIN2 is offered to appropriate patients within our colposcopy unit.
Sunderland Hospital started to offer conservative management of CIN2 in 2018. Patients are given the option of treatment with a LLETZ procedure or consideration for conservative management of CIN2. If opting for conservative management then their case is discussed at the regional MDT to ensure it is appropriate to offer conservative management, and patients are followed up over a 2-year period.

Aims / Methodology

- To review the final outcomes for patients who opted for, and were felt appropriate for, conservative management of CIN2.
- A retrospective audit of all patients who opted for conservative management of CIN2 from 1st April 2018 to 31st March 2019.
- Patient electronic records were reviewed for all patients with a diagnosis of CIN2, who opted for conservative management. The outcomes at each visit were assessed.

Results

- 30 of 159 (19%) patients opted for conservative management of CIN2.
- 13 of 30 (43%) showed regression at a follow up appointment
- 7 of 30 (23%) had CIN2 at 6-month follow up.
    - Of those 6 opted to have a LLETZ before the end of the conservative management period.
    - The patient who continued on conservative management had regression (CIN1 on punch biopsy at 18months) and was discharged.
- 4 of 30 (13%) had CIN3 at 6-month follow up, and had a LLETZ.
- 5 of 30 (17%) did not attend their follow up appointments.
- 1 of 30 (3%) was pregnant at follow up.

Conservative management of women referred to coloscopy with high grade disease

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Introduction

Large loop excision of the transformation zone (LLETZ) remains the most common excisional treatment for high-grade intraepithelial neoplasia. The aim of the study was to analyse the outcome of women who were referred to colposcopy with an initial smear reported as "high grade dyskaryosis" and were managed conservatively.

Materials and Methods

This is a retrospective study where data were collected from the electronic records (01/01/2014 - 01/04/2019). All patients who were discussed at the multidisciplinary meeting (MDM) with initial referral smear reported high grade dyskaryosis and managed conservatively were identified. Demographic details and outcome were collected.

Results

A total of 42 women were included in this study, aged 25-72 years old. Mean age was 32 years. All patients had initial referral smear reported as high grade dyskaryosis.
Of the women referred with high grade dyskaryosis on smear:

- 14 patients had a normal colposcopic impression (33%), so no biopsy was taken
  - 11 patients had a low-grade appearance at colposcopy (26%). Of these 7 confirmed CIN1 on biopsy and the remaining HPV change.
  - 10 patients had a colposcopic appearance of CIN 2 (24%).
  - 4 patients had a colposcopic appearance CIN 1-2,
  - 1 patient colposcopic impression was inadequate,
  - 1 patient had a colposcopic image of HPV.
  - One patient was had a colposcopic appearance of CIN 3

Overall, twenty-seven women were followed and eventually discharged with negative smear and normal colposcopy.

All cases were discussed in MDM, and patients were offered a diagnostic LLETZ or conservative management with 6 months follow up. Six patients eventually underwent LLETZ for progression of dyskaryosis on follow up appointments.

Conclusion

This study demonstrates that women referred to colposcopy with smears reported as high grade dyskaryosis with discrepancy in the biopsy and / or colposcopic images may benefit from the conservative management approach and active surveillance.

Correlation of colposcopy with Histological results of biopsy of Abnormal Cervical Lesions

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Background

Cervical cancer is the fourth most frequent cancer and it is the second leading cause of cancer death in women. Cervical cancer is preventable and curable when detected in its early stages. Regular cervical screening is associated with a reduction in incidence of and mortality from, cervical cancer. Colposcopy is a continuation of the screening process, providing further evidence about the nature of observed changes. Colposcopy offers an accurate way to diagnose CIN and to differentiate high-grade lesions from low-grade abnormalities. The aim of colposcopy is to identify areas of abnormal epithelium and perform directed biopsies. This allows for a histological evaluation of abnormal cytological results.
The purpose of this study is to evaluate the role of colposcopy and its correlation with cervical biopsy in detection of pre malignant cervical lesion.

Methods & materials

This is an observational study of 69 women, who were refereed with abnormal smears to colposcopy unit in Louth County hospital. Extracted information included colposcopic impression and histology result of biopsy. All information was obtained from MediScan.

Results

Colposcopic findings in this study: 51 (74%) cases were low grade CIN I and 18 (26%) cases were high grade CIN III. Histological results: 18 (26.1%) cases were normal, 25 (36.2%) cases were low grade, and 26 cases were high grade (37.7%). The correlation was 72.2% in the high grade category and 37.3% in the low grade.

Conclusion

This study shows good correlation between colposcopy and histology in high grade cervical lesion. This is comparable with results from similar studies in the literature. The accuracy of colposcopy could be improved by taking multiple colposcopy guided biopsies.

COVID 19. Delay of Colposcopy and the possible Impact onWomen with HPV Positive, Mild and Borderline Cytology on cervical sample

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Introduction / Background

The COVID 19 pandemic had significant impact on provision of colposcopy services at Hull University Teaching Hospitals(HUTH) which covers a screening population of 147,600 women.
Contributing factors were shielding staff and increased appointment time for infection control measures to be carried out. National health Service Cervical Screening Program (NHSCSP) issued guidance to defer appointments during pandemic. It acknowledged that this rescheduling of appointments carries risk of delayed diagnosis. HUTH operated as per NHSCSP recommendations. In May 2020 we identified that 616 women were deferred, combination of follow-up and new patients. 334 were postponed follow-up patients. 242 were new patients who had HR-HPV positive with mild dyskaryosis/borderline nuclear changes. The colposcopy team commenced restoration project of additional clinics for 7 weeks -'Colposcopy Sundays'

Aims / Methodology

A retrospective analysis from colposcopy database system as to how this restoration project had managed deferred referrals and their outcomes.

Results

A total of 227 additional Colposcopy appointments were offered. 17(7%) Patients did not attend. Total of 210 outstanding patients were seen. Out of the 210 patients, 37 patients needed cytology (previous hysterectomy with residual CIN, 1a1 cancer cervix etc.); 157 were abnormal cytology reviews; 16 were other(abnormal looking cervix, cervical polyp etc).

Out of 157, 104 had normal colposcopy and normal histology and were discharged from colposcopy. 50 patients from deferred category had Cervical intraepithelial neoplasia (CIN).
3 who had vaginal intraepithelial neoplasia(VAIN) on histological review. Out of 50, 23 were CIN1, CIN2 alone 16, CIN2 and CIN3 10patients, CIN3 1 VAIN 2 and 3 – 3 patients. It is of immense significance that 25 patients out of the deferred category who had high grade CIN on histological review and required treatment Large Loop excision of transformation zone treatment and 3 patients needed further laser vaporisation for high grade VAIN.

DOES LLETZ DEPTH GREATER THAN 7MM GUARANTEE A SUCCESSFUL TEST CURE FOR CIN AND CGIN?: A THREE YEAR AUDIT.

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Introduction / Background
Large loop excision of the transformation zone (LLETZ) is an established excisional method for treatment of cervical intraepithelial neoplasia (CIN) and cervical glandular intraepithelial neoplasia (CGIN). For ectocervical lesions, a LLETZ tissue depth/length of more than 7mm has been found to be adequate with an audit standard of 95%.

Aims / Methodology
We performed an audit of LLETZ procedures for CIN and CGIN and TOC between 2016 and 2018 at the University Hospitals of Leicester NHS Trust. Our aims were to determine compliance with the standard for LLETZ specimen depth and to evaluate the influence of depth on TOC results. Patients with carcinoma on histology, no CIN, no CGIN or incomplete results were excluded.
Frequency tables were utilised to determine the proportion of adequate LLETZ specimens using 7mm as the cut off depth. Cross tabulation and chi-square analysis was used to compare LLETZ depth with TOC pass rates and LLETZ depths with type of CIN, CGIN and TOC pass rates in women aged ≥50years. A P-value less than 0.05 was regarded as statistically significant.

Results
LLETZ procedures were performed in 1486; 404 women were excluded. The sample population was 1082 with overall TOC pass rates of 75.8%. Depth was 7mm in 7.6% and above 7mm in 79.5% of women. TOC pass rates were similar with depths above and below 7mm (76.2% v 74.1%, p=0.832).
When depths were compared with pass rates stratified by CIN type or CGIN, no statistical significance was found. Depths were also compared with TOC pass rates in women aged 50years or older with no significant influence of age on pass rates(p=0.641). In conclusion, LLETZ depths above 7mm may not significantly improve TOC pass rates, particularly in women above 50years of age. Larger hospital based or multi-centre studies are required to confirm these findings.

DYSIS Colposcopy MAP versus Standard colposcopy in diagnosing High-Grade CIN

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Introduction / Background
NHS Diagnostic guideline suggests using DYSIS with colposcopy improves diagnostic accuracy for CIN2+. Most recent meta-analysis shows improving sensitivity although it is associated with reduced specificity.

Aims / Methodology
DYSIS colposcopy were introduced in Southend hospital since May 2015, this study is to assess the clinical practice using DYSIS adjunctive technique.
Two Arm retrospective observational study was conducted, patients attended colposcopy appointment were allocated to have either standard colposcopy or DYSIS colposcopy between 2018-2019.
839 of them had DYSIS Colposcopy and 885 of them had standard colposcopy.
Patients have histological diagnosis by either diagnostic or excisional biopsy were included in the study.
Standard Colposcopy impression and DYSIS MAP applied impression were used for data analysis.

Results
Similar percentage of patients underwent biopsies (45% versus 43%), 112 patients and 107 patients were diagnosed with high grade CIN in each group.
The sensitivity of diagnosing CIN 2+ using colposcopy alone is 32%, this improved to 54% whilst using DYSIS adjunctive technique.
The difference is more prominent in low grade smear abnormality referral.
The results showed using DYSIS adjunctive technique improves diagnostic accuracy irrespectively experience of colposcopists. However, by adopting lower threshold for histological assessment, the management strategy and short-term outcome does not vary with either technique.

EFFECTIVENESS OF DYSIS IN IDENTIFYING HIGH GRADE CIN LESION IN CASES WITH LOW GRADE SMEAR CHANGES - A RETROSPECTIVE STUDY

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Introduction / Background

Cervical cancer accounts for 1% of all cancer deaths in females in the UK.
Colposcopy is used to detect cervical intraepithelial neoplasia (CIN) and cervical cancer in women with abnormal results from a cervical smear test or with high-risk human papillomavirus (hrHPV) infection. Dynamic Spectral Imaging System (DySIS)map (DySIS Medical Ltd, Edinburgh, UK) is a high resolution digital colposcope with an adjunctive map that can be used as adjuncts to conventional colposcopy. In clinical trials DySIS has been shown to significantly boost sensitivity in detecting cervical cancer in its earliest stages and hence it is now an approved advanced technology by NHS cervical screening programme.

Aims / Methodology

Retrospective study to ascertain the effectiveness of DySIS in identifying high grade CIN (2+) Lesions in a District General Hospital over a period of one year. All women attending colposcopy clinic in year 2018 between January to December with low grade or borderline smear changes, postcoital bleed or polyps were included (n=624).
The index test was DySISmap as an adjunct to colposcopy used for the diagnosis of CIN or cervical cancer. The reference standard was histopathology based on excisional or treatment biopsies.

Results

152 DySIS guided biopsies were performed of which 32 cases were confirmed to be high grade cervical lesions. CIN 2 cases were 20, 11 were CIN 3 and invasive malignancy was found in 1.
Test positive rates is calculated to be 21% this is in accordance with quoted range from 21.22% to 55.51% for DySIS and from 13.77% to 42.68% for colposcopy alone in 6 dysis studies (Budithi et al. in press, Coronado et al. 2016, Louwers et al. 2011, Roensbo et al. 2015, Salter et al. 2016 and Soutter et al. 2009). Larger multicentral RCT studies are recommended to assess cost effectiveness.

Embryonal Rhabdomyosarcoma of the Cervix (RMS)

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Introduction / Background

We report a case of 33 year old female, para 1, who presented with abnormal vaginal bleeding and large friable cervical mass on examination. The patient was diagnosed locally and referred to Gynaecological oncology Centre for further evaluation and treatment.

Aims / Methodology

Case Presentation: A 33 year old was referred to the Gynaecology Clinic with menorrhagia and abnormal vaginal bleeding on a background of previous history of oligomenorrhoea. This para 1 lady had delivered by caesarean section six years before presentation. She had a cervical smear 2 years ago that was normal. Her past medical and family history was unremarkable. The patient had an elevated BMI of 43.7 and on pelvic examination she was found to have blood clots in the vagina, the cervix appeared swollen with a protruding exophytic friable mass that was biopsied and the histology consisted of highly proliferative embryonal rhabdomyosarcoma of the cervix. The patient had a staging CT TAP and MRI locally. MRI revealed an expansile neoplasm extending into the uterine cavity and into the upper third of the vaginal cavity. The largest dimension of the tumour was 8cm with no pelvic lymphadenopathy. The patient was referred to the Gynaecology Oncology Centre. PET CT scan demonstrated a bulky pelvic mass and no distant metastatic disease identified. MDT decided for a cycle of IVAD chemotherapy before surgery. Re-staging MRI showed interval reduction in the size of the pelvic tumour. The patient underwent hysterectomy, bilateral salpingectomy and lymph node dissection. The histology demonstrated botyroid embryonal rhabdomyosarcoma with evidence of treatment effect with no lymph node involvement. Following surgery she had further cycles of chemotherapy and also had maintenance chemotherapy. At the tertiary centre she was screened for DICER mutation and no genetic mutation was identified. This patient has been followed up regularly over the last four years with no clinical or radiological evidence of disease recurrence.

Results

RMS is a rare type of Sarcoma. Literature review shows that Rhabdomyosarcomas (RMS's) are a group of tumours that arise from immature cells destined to form striated skeletal muscles. Of all Cervical Cancers RMS incidence is reported to be about 1% to as low as 0.4%. [1]

RMS is subdivided into four types; embryonal, alveolar, sclerosing and pleomorphic. The embroyonal RMS is the most common type, accounts for 68% of all RMS and is subdivided into three categories: botroid, spindle cell and not-otherwise specified. The disease is exceedingly rare in patients above 40 years of age.[21]

Our patient was 33 years of age and presented with abnormal vaginal bleeding, on examination a cervical mass was identified, as in most cases reported in the literature. The first MRI of our patient revealed the largest dimension of the tumour to be 8cm. This is larger than the mean size reported in most series.

Our patient was embryonal botryoid variant which is associated with much more favourable outcomes than other subtypes, the other prognostic factors were that the tumour was arising from the cervix, no lymph nodes were involved and the response to chemotherapy. Following surgery and cycles of chemotherapy at the Oncology Centre, the maintenance chemotherapy was facilitated locally at local medical oncology unit. As the patient is now 4 year post treatment with no clinical or radiological evidence of recurrence she is now being followed up six monthly.

[1] Uroosa Ibrahim et al, Embryonal Rhabdomyosarcoma of the Cerivx: A Rare Disease at an Uncommon Age, The Cureus Journal of Medical Science

Conclusion

Clinicians should keep in mind that embryonal RMS's of uterine cervix, despite it's malignance and rarity, can be cured if adequate treatment is given. Speculum examination in this age group for cervical smear may present an opportunity for early detention.

ENDOCERVICAL LESION MASQUERADING AS CERVICAL CARCINOMA

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Introduction / Background

We present an unusual case of an endocervical lesion in a 39 year old nulliparous female. The most recent cervical smear available to us was from 2016 which was reported as normal. Subsequent to this she had defaulted her cervical smear.

She presented with per vaginal discharge. Examination revealed a hyperaemic enlarged cervix with no obvious external growth. This raised the possibility of an endocervical lesion.

The accompany USS revealed an endocervical lesion measuring 36x26x31mm suggestive of malignancy.

Based on the above, she underwent a diagnostic Large Loop Excision of Transformation Zone and a cervical smear. During the LLETZ procedure, a significant amount of pus was seen to be draining from the cervical os.

A hysteroscopy was performed at the same time which revealed a normal uterine cavity.

Surprisingly, the histology did not support the diagnosis of a malignancy, instead the histology confirmed the presence of inflammation, supporting the presence of pus.

Results

This case highlights the importance of considering other possible causes for endocervical lesions. In retrospect, if further imaging was performed pre-operatively we may have recognised the presence of pus which may have had an impact on our management plan.

Environmental and modifiable risk factors for Cervical Cancer: An umbrella review

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Background
Cervical cancer is caused by HPV infection. However, HPV infection alone is not sufficient for oncogenic change. Many risk and protective environmental exposures have been studied however randomised-control trials are uncommon and the strength of evidence gained from observational research remains unclear. We explored through an umbrella review the strength of evidence, and risk of bias, for all epidemiological evidence in the risk of HPV infection, cervical dysplasia and cancer.

Methods
We searched PubMed, Ovid MEDLINE and Embase Classic and included studies relating modifiable/environmental risk factors with risk for any HPV infection, cervical dysplasia and cervical cancer phenotypes. Primary analysis focused on cohort studies. Evidence from meta-analyses were graded into strong, highly suggestive, suggestive or weak based on the random-effects model summary estimates of each exposure and outcome pair, using the following data: largest study, number of cases, 95% prediction interval, small studies effect using Egger's regression asymmetry test, excess significance bias and sensitivity analysis with credibility ceiling.

Results
154 meta-analyses from 47 studies were included and 62 different exposure contrasts were identified. Including only cohort studies, three associations were supported by strong evidence. HIV+ women are at almost doubled risk for HR-HPV acquisition (RR 1.87, 95% CI 1.32-2.67) and treatment failure is five times more likely (5.3, 4.2-6.8). Immunosuppressive therapy for people with inflammatory bowel disease increases the risk for cervical high-grade dysplasia (1.34, 1.23-1.46). Highly suggestive evidence supported that HPV clearance rates are halved in HIV+ people (0.5, 0.38-0.66) and that altered vaginal microbiota increases HPV infection rates (1.56, 1.16-1.96). When including case control studies in the analysis, there was highly suggestive evidence linking smoking with increased rates of cervical cancer.

Conclusions
From proposed predisposing factors for cervical cancer, we identified risk factors with strong evidence of association for cervical cancer phenotypes, which can inform targeted prevention strategies for high-risk women.

Establishing a Sustainable Cervical Screening Service in West Uganda- Education and Training

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[1]Knowledge for Change, [2]The Mid Yorkshire Hospitals NHS Trust

Introduction / Background

Cervical cancer is the leading cause of cancer death in women in Uganda and the incidence is rising. 80% of patients present late with advanced disease. A major barrier to improving health and prevention of cervical cancer includes lack of trained personnel. WHO estimates that Sub-Saharan Africa accounts for 24% of the overall global burden of disease, but has only 3% of the global health workforce. In Uganda, midwives and nurses make up the majority of this workforce. Task-sharing with a team-based approach can be safe and effective. Knowledge for Change, a UK-registered charity, aimed to collaborate with staff at Kagote and Bukuuku health centres, Kabarole District, Uganda to establish a unique, integrated and sustainable cervical screening service for the local community.

Aims / Methodology

A training programme consisting of plenaries on the normal cervix, sexual health, benign abnormalities, cervical cancer, screening and treatment of pre-cancerous lesions was delivered. Communication stations on counselling and consent gave healthcare workers a chance to practice clinical scenarios and receive feedback. Pelvic models made from shoeboxes were used to practice using the 'Enhanced Visual Assessment' (EVA) mobile colposcope and the 'Liger' thermocoagulator for pre-cancerous lesions suitable for treatment. Clinical training at the health centres was also conducted. An education programme for Village Health Technicians promoting the service and providing community information was created.

Results

19 trainees took part in the last training programme and 5 village health technicians. Overall confidence and exam scores on assessments pre and post training improved. Ongoing need for training and education was identified. Distance mentoring and support is still provided by the UK team, aided by the shared Mobile ODT Web portal, and 5 trainees have since had the opportunity to come to the UK for further experience through 'CommonWealth Professional Placements'.

Evaluating management of women 50+ who had lateral/endo incomplete excision of CIN2+ and their outcome

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Introduction / Background
Women aged 50+ with CIN2+ at lateral/deep margins of LLETZ where satisfactory cytology, HR-HPV typing and colposcopy can't be guaranteed must have repeat excision to obtain clear margins, according to the publication 20 guidance (2016, target 100%).

Aims / Methodology
We audited this standard at STMH and compared the outcome of women with retreatment against surveillance.
Inclusion criteria: All women aged 50+ with histology of CIN2+ on LLETZ

Results
Of 124 eligible women, 81(65%) had clear margins. Of 43(35%) women with positive margin, 19 (15%) had ecto and 24(20%) endo/lateral margin positive. 19 out of 24 women had retreatment suggesting 79% compliance with standard. 17 had LLETZ and 2 had hysterectomy. Remaining 5 women had surveillance. 3 women were seen and offered surveillance due to deficient cervix and two were discharged for TOC without an offer of retreatment.

ToC was negative in %, 84% and 75% women with positive ecto, retreated positive endo/lateral and surveillance group of positive endo/lateral margin respectively.

Conclusion
Whilst the numbers are small, there is no evidence of harm so far if women with positive lateral/endo margin are offered surveillance, particularly where further LLETZ is challenging or risky. Re-audit to reassess the improvement in standard and follow-up of women is planned.

Excisional Treatment for CGIN in Early Pregnancy. A Case Report.

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Open Poster Viewing, April 15, 2021

Introduction
High grade cervical intraepithelial neoplasia is generally managed expectantly in pregnancy, with excisional treatment reserved for cases where there is clinical suspicion of invasive disease.
We present the colposcopic and obstetric outcome of a patient who opted to have a LLETZ procedure in the first trimester of pregnancy for treatment of CGIN.

Case Report
A 31 years old nulliparous woman was referred to colposcopy with a cervical smear showing ? glandular neoplasia of endocervical type and was found to be pregnant. Colposcopy was suggestive of high grade CIN. Her case was discussed at the colposcopy MDT and the recommendation was for expectant management with colposcopic monitoring in pregnancy and treatment postpartum.

The patient was very anxious about expectant management despite reassurance that current evidence suggests that it is safe. She requested immediate treatment and was considering terminating the pregnancy if this option was not offered to her.

A trans vaginal ultrasound showed a singleton, live, intrauterine pregnancy, 11 weeks by crown rump length. The risk of haemorrhage associated with excisional treatment in the 1st trimester was discussed as well as the uncertainty regarding the risk of adverse obstetric outcomes including miscarriage and preterm labour. She made an informed decision for treatment. An excisional loop including a top hat excision of cervical canal was performed. The were no complications and bleeding was minimal. Histology confirmed CIN III and CGIN which were completely excised.

Cervical length monitoring was performed between 17 and 24 weeks and the cervix remained long with no funneling. She was transferred for Midwife led antenatal care at 24 weeks.
She went to spontaneous labour at 40 weeks of gestation and had a normal vaginal delivery on a midwife led unit

Conclusion
LLETZ in pregnancy may be a safe option in carefully selected cases after thorough counselling

EXCISIONAL TREATMENT OF CERVICAL NEOPLASIA (LLETZ/LEEP) UNDER LOCAL ANAESTHETIA VERSUS GENERAL ANAESTHETIA

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[1]*Gstt*

Aims
To assess the performance of excisional treatment by LLETZ/LEEP (large loop excision of transformation zone/loop electrosurgical procedure) under local (LA) and general anaesthetics (GA).

Objective
To assess rates, criteria, completeness of excision and cure rates of excisional treatment under local anaesthetics versus general anaesthetics.

Study Design
A retrospective observational study over 12 months period.

Methods
All cases treated by LLETZ/LEEP at the colposcopy unit at Guy's Hospital between 1st January 2019 and 31st December 2019 were reviewed. Assessment of 'test of cure' carried out at 6-8 months to evaluate success of the procedure.

Results
Total number of LLETZ/LEEP procedures were n= 327 in 2019, n=219 (67%) done under local anaesthetics and n= 108 (33%) under general anaesthetics. Complete excision was higher in LA group 65% versus 47% under GA. Higher single samples under LA n=143 (97%) vs GA n=50 (68%). Deeper excisions under GA 11.5mm vs 10mm under LA. Greater volumes under GA 4284mm^3 vs LA 2612mm^3. 85% of test of cure (TOC) were normal in both groups, did not attend (DNA) LA =12% GA=15%.

Conclusion
This study shows LLETZ/LEEP performed under LA is acceptable to two thirds of patients and is at least as effective as GA in managing cervical neoplasia. Choice of anaesthesia is influenced by national standards, personal choice, colposcopic assessment and resort to multidisciplinary discussion.

FOLLOW UP AUDIT OF THE NON-ATTENDANCE RATES IN THE COLPOSCOPY CLINIC AT MILTON KEYNES UNIVERSITY HOSPITAL:ASSESSING THE IMPACT OF METHODS IN PLACE TO REDUCE THIS RATE

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Aim
To review the DNA rates as compared to NHSCSP guideline publication 20 over a 6 month period (15/07/2019 – 15/01/2020) following on from an original 12 month audit of non-attendance (13/07/2018 – 12/07/2019)
Procedures in place to enhance attendance rates had changed according to availability of administrative support and clinicians had noticed increased rates of non-attendance.

Methods
Retrospective audit data collected from the hospital electronic database over a 6 month period (15/07/2019-15/01/2020). This was to compare DNA rates to the NHSCSP pub 20 guidelines where the default rate should be less than 15%.
(N.B Audit completed prior to February 2020 updated NHSCSP default guidelines)
The figures were then compared to the preceding yearlong DNA audit of the same department (13/07/2018-12/07/2019) to ascertain changes according to measures in place to enhance attendance rates. Text message reminders to patients had commenced during this period but telephone calls to the patients and reminder letters had ceased.

Results
Between 15/07/2019 & 11/10/2019 707 patients were seen:

- 424 New - 30 DNAs = 7.08% rate
- 283 F/U – 45 DNAs = 15.90% rate

Between 14/10/2019 &15/01/2020 748 patients were seen:

- 443 New – 44 DNAs = 9.93% rate
- 305 F/U – 59 DNAs = 19.34% rate

Overall – 15/07/2019-15/01/2020, Total DNA rates (New and F/U) = **12.23%** compared to the total in the preceding year (7.78%)

Conclusions
There has been a significant increase in the overall rate of DNAs coinciding with a general increase in numbers of patients seen. The overall default rate in this 6/12 period (12.23%) does not exceed the NHSCSP guideline of <15%. However, DNA rates for follow up patients **were** exceeding NHSCSP guidelines in both quarters of the audit figures. This was the same for new patients in one quarter of this period. It appears that text messaging has not enhanced the attendance in clinic. Figures from the previous audit suggest that telephone reminders to patients had a positive effect on attendance rates. Reminder letters had ceased near to the beginning of the initial audit and therefore the impact of these cannot be assessed.
Future considerations for ongoing audit

- Consider reinstating telephone reminders to patients
- Consider reminder letters - ?computer generated to save administrative time
- Look at the impact of HPV triage on the general increase in clinic numbers

- Assess the impact of a new guidelines for the management of non-attenders
- Establishing **why** patients DNA is an **essential** future consideration for the management of non-attendance sand part of NHSCSP guideline

FOLLOW-UP AUDIT ON CONSERVATIVE MANAGEMENT OF CIN2 (CERVICAL INTRA-EPITHELIAL NEOPLASIA)

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Aim
The aim of the audit was to evaluate cases of conservative management of CIN2 and follow the cases for two years.

Methods
Retrospective audit. Data collected from electronic records. Time period from 8/2/2015-1/11/2017. Total consecutive cases studied were 27.

Results
62% women were aged 20-25 years. 63% were nulliparous.31% were smokers and 41% were on the pill. 100% women were counselled about the options and seen by a consultant.
Referral smear was low in 22%, borderline in 4%, high(severe) in 11% and high (Moderate) in 56% cases. Colposcopy showed CIN 2 in 44%, CIN 1 in 30% and CIN 3 in 11%. Cervical biopsy showed CIN 2 in 30%, CIN1/2 in 59%.
Colposcopy in 6 months showed-CIN 2 in 15%, CIN1/2 in 18%. Smear in 6 months showed- high grade in 22%
Colposcopy in 12 months showed- CIN 2 in 4%, awaited in 4%
70% women did not require any treatment. LLETZ was performed in 30% cases. Final histology showed- CIN 2 in 7%, CIN2/3 in 15% and CIN1/2 in 4%.19% were discharge to routine recall in 11 months and 4% in 17 months. Final histology showed CIN2 in 26% cases.

Conclusions
60% women who acquired CIN2 were less than 25 years of age and were nulliparous. 70% of the women did not require any treatment and there were no cases of cancer.
At 2 year follow up it was seen 30% were discharged to routine recall, 48% had LLETZ, 11% had two loop treatments and 11 % did not attend the follow up. Women who do not turn up for appointment are discharge after two letters are sent. This supports conservative management of CIN 2 especially in younger women but needs a re-audit with larger number.

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GP referrals to colposcopy – indications and outcomes

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Introduction / Background
There are two sources of referral into Homerton Colposcopy clinic, direct referrals from the laboratory and referrals from GPs.

Aims / Methodology
100 GP referrals to colposcopy in October 2019 were analysed.

Results

- Age: 54% were age 34 or younger.
- Referral indication: The majority (44%) were referred with postcoital bleeding and/or intermenstrual bleeding; 29% had a previous abnormal smear or biopsy; 13% had a clinically suspicious cervix/contact bleeding; and 11% had a cervical polyp/inadequate or difficult smear.
- Referral smear or histology status: The majority (44%) were negative and only 2% had high grade changes.
- 20% patients were referred as urgent.
- Colposcopy impression: 33% didn't have a colposcopy (DNA/cancellations); 24% had no abnormality seen; and 4% were thought to have high grade disease.
- Colposcopy smear/biopsy results: 26% had no tests taken due to normal colposcopies; 25% had negative/benign results; and 6% had high grade results.
- Outcome: 48% were discharged.
- Test results from the 44 patients referred for PCB/IMB:

DNA/cancellations	14
Benign pathology/negative results/none taken	21
HPV only	4
Low grade	4
Unsatisfactory biopsy	1

- Test results from the 13 patients referred with clinically suspicious cervix/contact bleeding:

DNA	1
None taken	6
Negative	5
HPV only	1

Conclusions

- There is a high DNA/cancellation rate.
- The 6% women with biopsy/smear proven high grade disease were all referred due to abnormal smears.
- In this sample, purely clinical indications for colposcopy, in the absence of an abnormal smear, yielded no significant pathology.

How alarming is post-coital bleeding? A Re-audit at Colposcopy Clinic

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Background

Cervical cancer constitutes 2% of all new cancer cases in female. As per the literature review a high incidence of cervical neoplasia has been reported in women with postcoital bleeding. Therefore, after excluding infection and hormonal causes of post coital bleeding these women must be referred for examination by an experienced gynaecologist and if suspicious of cancer then should be referred for colposcopy examination on a 2 week wait referral pathway.

According to the available literature there are no national guidelines on management of postcoital bleeding. The initial audit was conducted at the George Eliot Hospital in 2002. The main aim of the audit was to determine the frequency of cervical neoplasia in women presenting with PCB at the colposcopy clinic. Most common identifiable cause of PCB was cervical ectropion (70%), however 9% women with postcoital bleeding had abnormal histology and 7% had cervical neoplasia in presence of normal smears.

Re-audit was undertaken over a 16-month period from November 2016 to March 2018. Most common identifiable cause of PCB was cervical ectropion , 4% of patients had neoplasia even in presence of normal smears and 2% had invasive cancer in patients with no previous screening.

Recommendations

Thus, women with post-coital bleeding with previous normal smears should be seen in colposcopy clinic after excluding infections and hormonal causes to exclude cervical neoplasia.

HOW CAN CERVICAL SCREENING PROVIDERS AND COMMISSIONERS HELP TO REDUCE INEQUALITIES IN CERVICAL SCREENING? INCREASING THE FOCUS ON SCREENING HEALTH INEQUALITIES WITHIN THE SQAS VISIT PROCESS IN THE NORTH OF ENGLAND.

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Introduction / Background
Public health England (PHE) aims to reduce health inequalities and launched the screening health inequalities strategy in May 2018. Screening Quality Assurance Service North has increased their focus on addressing screening health inequalities by interviewing public health commissioners in the visit process and developing a health inequalities tool. Colposcopy services may perceive that they have little influence on reducing inequalities in the cervical screening programme. This work describes quality assurance visit recommendations that are more focused on addressing screening health inequalities across the whole screening pathway including colposcopy services and includes examples for shared learning.

Aims / Methodology
Review of findings and recommendations for 21 visits cervical screening quality assurance visits between January 2018-October 2020 in the North of England

Results
76 of 774 visit recommendations were adapted to increase focus on addressing screening inequalities. 3 commissioning recommendations from other programme visits were cross-linked to cervical screening visits.
Main themes include equity in service provision, updates to patient information leaflets, invitation and results letters, implementation of community based test of cure, health needs assessment, 'did not attend' audit and failsafe, screening pathway for women prisoners, opportunistic screening, equipment for support screening for women with physical disability and access to a female colposcopist.
19 examples of shared learning from actions being taken by commissioner and screening providers are identified. Main themes include locality based health needs assessments, working in partnership to improve cervical screening coverage, community outreach, media engagement, initiatives to reduce 'did not attend rates' and policies to support attendance for women with physical disability and other additional needs.

Conclusion
This work highlights what colposcopy services can do to help reduce inequalities in cervical screening and demonstrates how the quality assurance visit process in England can support this.

HPV genotype, CGIN, and outcomes of excisional treatment at Jessop Wing Colposcopy.

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Introduction / Background

Around 10% of cervical cancers are adenocarcinomas. HGCIN is more likely to progress to cancer than CIN. Women who have suspected glandular changes on cervical smear are therefore referred to colposcopy on an urgent basis. Glandular changes can be more challenging to diagnose at colposcopy. It is useful therefore, to evaluate cases seen in colposcopy that have glandular changes at LLETZ.

Aims / Methodology

The aim was to evaluate all cases seen in the colposcopy department in Sheffield between 2014 and 2019 that had glandular changes on LLETZ. All cases with glandular changes were isolated from the departmental clinical database and analysed using Excel.

Results

There were ninety-three women who had glandular changes on LLETZ. Age range was 24 to 61yrs (mean 35yrs). Only half of these women had suspected glandular changes on referral cytology.
When HPV tested, HPV 18 was found in the highest proportion of patients (41.9%), with HPV 16 found in only 16.1%.
Over half (64.5%) had complete excision margins at first LLETZ, though the majority underwent repeat excision. Eight Women (8.6%) had concomitant CIN 2/3. The majority of women tested negative for HPV at their 6 month TOC (77.4%). A small number went on to have a hysterectomy (5.4%). A small proportion failed their TOC with five being positive for HPV with negative cytology, and three having abnormal cytology (one LG CIN, one HG CIN, one glandular).
From these results we can discern that in Sheffield, the majority of glandular cases arise from those with HPV 18, unlike HGCIN which is predominantly HPV 16 in our area. There are relatively high rates of incomplete excision requiring further repeat excision, likely owing to the pathophysiology and location of lesions. However, most women have a negative TOC with only 1 woman having persistent glandular changes.

HPV primary screening and colposcopy workload real world evidence from Cumbria

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Introduction / Background
Cervical screening by testing for high-risk HPV and cytology triage achieves greater sensitivity than cytology alone in detecting CIN and protecting against cancer. The Sentinel sites study in England piloted the HPV primary screening protocol between 5/2013 and 12/2014 before general roll-out. The results demonstrated the increased detection of high-grade disease, but also highlighted a significant increase in the number of colposcopy referrals.

Aims / Methodology
In contrast to the other participating sites, all screened population at North Cumbria University Hospital was channeled into the pilot. This is a unique opportunity to study the effect of the new program on colposcopy referrals over the years, through analysis of KC65 data. For this analysis we looked at the annual returns from pre-implementation to date. We also assessed the increase and the clinical significance regarding the patients referred for colposcopy with persistent HPV positivity and negative cytology, that constitute the main new patient cohort undergoing colposcopy.

Results
Our data show that compared to cytology-based screening, the number colposcopy referrals increased significantly and progressively over the years following the implementation of primary screening with HPV. From 773 colposcopy referrals in 2012-2013, to 1034 in 2013-2014, to 1393 in 2014-2015, to 1393 in 2015-2016, 1376 in 2016-2017, 1620 in 2017-2018 and 1643 in 2018-2019, an overall two-fold increase. A large portion of this increase can be attributed to the new HPV+CYT- population that in 2018-2019 constituted 24.6% of total attendances. The detection of CIN2+ among these women was on average 6.7%. Colposcopy clinics in England should prepare for this increase and the impact it will bring. On the long run, the screening of vaccinated cohorts should reduce the workload, but this will take multiple years as the first vaccinated generation is entering screening-appropriate age only in 2020.

Improving Diagnosis Accuracy in Lower Grade Smear Abnormalities: Experience of using DYSIS MAP Adjunctive Technology

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Introduction / Background

NICE recommends using Dynamic Spectral Imaging System (DYSIS) with DYSIS map adjunctive colposcopy for assessing suspected cervical abnormalities.
At Southend Hospital, DYSIS was first introduced in May 2015. it has been used in over 3500 patients/visits in 4.5 years' time.

Aims / Methodology

The primary objective of the study is to identify whether using DYSIS map technology would be more useful picking up high grade CIN in low grade cervical smear abnormalities. Secondary outcome is to look at high grade CIN detection in high grade cervical abnormality referral.
Final histology results were used as gold standard for diagnosis of CIN.
Between May 2018 and Apr 2019, there were 839 patients underwent DYSIS Colposcopy, 259 patients underwent biopsies under NHSCSP pathway. Two hundred and nine patients had low grade smear referral, fifty of patients were labelled as high grade dyskaryosis.
The comparison was made between DYSIS video colposcopy impression (initial) and final impression after applying DYSIS Map adjunctive technique.

Results

In low grade referral group (209 patients), there were 73 patients were diagnosed with CIN2+ histology, using video colposcopy was able to identify twelve cases (16.3%). After using DYSIS Map adjunct, thirty cases were identified (41.1%).
In high grade smear referral group (50 patient), using video colposcopy alone were able to identify 22 cases whereas using DYSIS adjunctive technique, the number equals to 28.
The results showed using DYSIS Mapping Technology improves sensitivity of diagnosing CIN2/3 in both low grade and high-grade abnormalities referrals. It is more useful when it is used in low grade smear referral.
The study shows that using DYSIS Map technique helps to identify high grade CIN therefore the correct treatment modality (excisional biopsy) is not missed. It also suggests to regularly review imaging for false negative and false positive cases through DYSIS software to improve clinician skills in future practice.

Increased detection of cervical intraepithelial neoplasia (CIN) by electrical impedance spectroscopy (ZedScan) to improve clinic capacity by reducing the need for return visits

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Introduction / Background
As the prevalence of disease (CIN2+) falls it reduces the performance of colposcopy. Adjuvant technologies may help with increased detection of CIN2+. Move to primary hrHPV screening will lead to new pathways in colposcopy increasing referrals to colposcopy, affecting clinic capacity.

Aims / Methodology
To establish the performance of colposcopy with EIS (ZedScan) in women referred to colposcopy. A prospective cohort study of women undergoing both colposcopic and ZedScan examination at a single colposcopy clinic. ZedScan detects changes in tissue impedance indicative of dysplasia which are independent of aceto-white change.
183 patients underwent both colposcopic and ZedScan examinations. The referral population included HG cytology 35 (19%), LG cytology 126 (69%) and clinical referrals 22 (12%).32 (18%) cases of HG disease (CIN2+, HGCGIN) were found, 22 cases associated with HG cytology, 9 with LG cytology, 1 with no cytology. ZedScan detected 29/32: sens 91%. Colposcopy detected 18/32: sens 56%. An additional 11 cases of HG disease were identified as positive by ZedScan where CI was low grade or normal. Use of ZedScan increased detection from 18 to 29 (61%). All cases of disease were detected by standard colposcopic practice plus ZedScan (sens 100%).

Results
ZedScan in routine colposcopy practice increases the detection of CIN2+. ZedScan can detect more disease, reduce unnecessary biopsies and improve health economics. Colposcopy and ZedScan combined increases sensitivity so disease can be confidently ruled out and women can be returned to routine surveillance/screening.

Conclusions
ZedScan identified additional cases of disease in all referrals which may have been missed by colposcopy alone. ZedScan increased detection in low grade referrals from 2 to 9. No women underwent see and treat but 12 women who were identified as suitable for treatment at first visit by ZedScan had CIN2+ on biopsy. Reduction in follow up appointments increases capacity for new referrals from primary hrHPV screening.

International Survey of Interval Cancer Audit and Disclosure in Cervical cancer Screening

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In 2018 a high-profile legal case regarding an audit of invasive cervical cancers created a national controversy in Ireland. The resultant media coverage and political response created confusion and anxiety among the public regarding cervical screening and audit. An Expert Reference group with international input was established to explore and design a revised/new process for invasive cervical cancer audit for the future.

To inform the process a survey was undertaken of international population-based cervical screening programmes to determine if and how they undertook audit, if women were asked for consent to slides being in audit, and whether results of audit were disclosed to women. Inclusion criteria were; national or regional population-based cervical screening programme; country/region population ≥ population of Ireland; and identifiable contact. In May 2019 the questionnaire was sent to 22 regions/countries in Europe, Canada and Australia via a link embedded in an emailed invitation to participate. Two follow-up reminders were sent.

Seventeen screening programmes completed the survey (response rate 77%). Eleven (64.7%) responding programmes have an audit process for invasive cervical cancers, 6 (35.3%) do not. Of the 11, 6 (54.5%) carry out routine individual patient cancer review; 3 (27.2%) undertake routine programme-wide review, with calculation of interval cancer rates. Of the 11 who audit, 3 (27.2%) carry out a blinded review, 4 (36.4%) include control samples with cases when undertaking cytology review. Three (27.2%) countries/regions inform patients that a cervical cancer audit is taking place. Six (54.5%) countries/regions have an open disclosure (OD) policy for medical incidents; of these 4 (66.7%) are mandatory. Of these 2 (33.3%) have an OD policy that applies to interval cancers in screening. Three countries/regions (27.2%) have legal protection for interval cancers.

Screening programmes carrying out audits differed in their approach and there is lack of consistency in audit practice internationally.

INVASIVE CERVICAL CANCER DISCLOSURE AUDIT AT MILTON KEYNES UNIVERSITY HOSPITAL- 2018-2019

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Aim

This audit was undertaken as a part of the quality assurance process of the colposcopy service at Milton Keynes University Hospital. The primary aim of the audit was to ascertain compliance of our trust to this QA standard, secondary aim being to assess the number of women who accepted disclosure.

Methods

Data was collected on all women diagnosed with cervical cancer at Milton Keynes University Hospital between January 2018 to November 2019. The rationale for the audit was to assess compliance of the trusts' invasive cervical cancer disclosure policy which recommends that all women diagnosed with invasive cervical cancer should be offered disclosure (where eligible) to comply with national standards.
Data was collected retrospectively from individual invasive cervical cancer audits with the help of the cervical screening provider lead (CSPL) and lead cytologist. This was compiled on an excel spreadsheet to specifically focus on the number of cases detected by cervical screening who had smears within the past ten years, all of whom were then offered disclosure at the first appointment after their initial treatment. The women were sent a patient information leaflet and then seen face to face by the lead colposcopist to obtain written consent and disclosure offered, given and recorded on paper in the presence of the gynaecology nurse as a witness. This was then confirmed and noted on a separate form and a letter done to the GP with a copy to the woman.

Results

There were a total of 18 cases of invasive cervical cancer from January 2018-November 2019. Out of these 9 (50%) were detected through cervical screening and 6 (33.3%) were diagnosed through the out-patient hysteroscopy clinic. 6 (33.3%) had cervical smears in the last 10 years (excluding the index smear). Out of the 6 that had had smears within the last 10 years and therefore were eligible to offer disclosure to, all 6 (100%) were offered and accepted disclosure and were given disclosure after their initial treatment. Out of these 6 women that were given disclosure, 2 (33.3%) were found to have had their most recent cervical smear (excluding the index smear) under-called. All 6 (100%) screen detected cervical cancers were low grade (stage 1A- stage 1B1), while the non-screen detected cancers ranged from stage1A1-stage 3B. 17 (94.4%) of the total number have been successfully treated so far with 1(5.5%) succumbing to the cervical cancer.

Conclusions

Milton Keynes University Hospital has been offering and providing robust invasive cervical cancer disclosure to all eligible women within the cervical screening programme in accordance with the trust and national guidance. Thus far a total of 18 cases of cervical cancer have been identified since the implementation of the local trust guidelines. Of these 9 cases were in the last year. This is an ongoing quality assurance audit and completed data is submitted to the quality assurance (QA) team. The fact that 50% of these cancers were detected thorough cervical screening and were all low-grade cervical cancers establishes the efficacy of the cervical screening programme.

LEARNING FROM INCIDENTS IN THE CERVICAL SCREENING PROGRAMME IN ENGLAND

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Introduction / Background
Guidance on the identification, management and learning from incidents in the cervical screening programme in England has been published by Public Health England (PHE) since 2015. PHE's role in incidents is to provide expert advice on the assessment of potential incident situations and on the management of incidents, and also to collate and identify lessons that can be shared to reduce the risk of incidents recurring, and to support professional learning.

Aims / Methodology
PHE's Screening Quality Assurance Service (SQAS) collates the learning outcomes from all incidents on a quarterly basis and summarises these for feedback as part of its routine SQAS activities, such as the local professional meetings it arranges.

Results
The most common incident themes will be presented, along with descriptive case study examples of serious incidents to aid local learning and continuing professional development.

Conclusion
Providing feedback on lessons learnt and case study examples to bring situations to life should help reduce the likelihood of recurring incidents. Feedback from incidents also informs SQAS audit and QA visit processes as well as contributing to updating national guidance documents to mitigate issues arising in the future.

Lest we forget: borderline changes in endo-cervical cells- an audit of management.

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Introduction

Women with borderline endocervical cells (HR HPV pos) are at increased risk of a clinically significant lesion even with a negative comprehensive evaluation. In 50-62% cases there is an association with high-grade histology (HGCIN/ CGIN/invasive carcinoma) as compared to borderline changes in squamous cells with 16-18%.

Individuals referred with borderline changes in endocervical cells with an adequate but negative colposcopic examination should be discussed at MDT and not automatically discharge to routine recall. Punch biopsy is not usually appropriate in the management of these women. Colposcopy and histopathological assessment of an excisional biopsy (including the endocervical canal) should be the method to investigate and diagnose CGIN/ SMILE.

Method

A retrospective audit looking at the management and follow up of all borderline changes in endocervical cells cytology referrals at the Whittington hospital NHS trust from January 2018 to December 2020 identified via Cyres and Mediscan software.

Results

Twenty cases were analysed. No patients were referred on a 2 week-wait pathway. Four cases were discussed in MDT. A high-grade colposcopy was seen in 30% of cases, 65% had a normal or low-grade examination. 60% of women had punch biopsies at the first visit. All the women with high grade colposcopy had a punch biopsy. Two women were offered treatment. 50% of women with low grade colposcopy had punch biopsies. Of these, 2 had CGIN on biopsy and had excisional treatment. 80% of women were offered follow up 9-12 months later. There was one case of cancer at 12 months follow up in a first low-grade colposcopy.

Conclusion

All patients with borderline changes in endocervical cells should be referred in a 2 week wait cancer pathway. They should be discussed at MDT. Excisional treatment likely to be treatment of choice. The outcome for all 20 cases will be presented.

LLETZ procedures in colposcopy service Audit; Are we following the National Standards? Doncaster and Bassetlaw NHS Teaching Hospitals

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Introduction / Background

LLETZ is one of the excisional techniques commonly used in colposcopy to remove the entire cervical TZ enabling a comprehensive histological examination.

Aims / Methodology

The Audit was designed to review the practice of LLETZ procedures at our colposcopy unit and to assess if we are compliant with the national standards.

A retrospective data collection of 64 patients who underwent LLETZ in the trust in a 6 months period.

Results

We have Met the national standards in:

a) 60/64 (93.75%) LLETZ that were performed that thought to have CIN on colposcopic findings actually contained CIN.

b) We have managed to remove 80% of our specimens as a single sample and 100% of our histology reports had recorded dimensions.

c) 62/64 (96.8%) patients had LLETZ in outpatient setting. Only 2 patients had the procedure under GA with documented reasons.

d) We had no admissions secondary to complications.

e) 91.6% of our TOC had negative cytology, while only 8.3% had abnormal smears.

We have failed to achieve 1 standard, which required the LLETZ depth to be depended on the TZ type. That was secondary to poor documentation in the patients' notes.

Recommendations:

Following the Audit; we have introduced an electronic colposcopy database which helped in prompting the clinician to fill all the mandatory colposcopic findings including TZ type and helped unifying the nomenclature in Colposcopic impressions in keeping with the BSCCP recommendations.

Discussion: LLETZ is a quick, economical, well tolerated office-based procedure aiming at eradicating preinvasive cervical process, preventing cervical cancer. Our trust was overall compliant with the national standards with 1 limitation. Electronic databases can prove useful for the future as it enables ease of data input and collection.

References:

NHS Cervical Screening; Programme and Colposcopy Management, NHSCSP Publication number 20, Third Edition March 2016.

LLETZ Treatment - Are we doing it right?

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The aim of this audit was to assess the depth of LLETZ excision based on the type of transformation zone (Tz) amongst women with suspected high grade CIN at colposcopy.

A retrospective audit was carried out over a 6month period in 2018 involving 140women who were referred to the colposcopy clinic with high grade squamous intraepithelial neoplasia (HSIL), atypical squamous cells cannot exclude high grade (ASC-H) and high-risk HPV with atypical squamous cells of undetermined significance(ASCUS) or low grade squamous intraepithelial lesions(LSIL). Auditable standards were developed using the NHS cervical screening programme document 20. This highlights the goal to remove all abnormal epithelium during excisional treatment of high grade CIN. For treating type I Tz, excisional techniques should remove tissue to a depth >7mm and <10mm (95%). For type 2 Tz, remove tissue to a depth of 10mm to 15mm (85%). For type 3 Tz remove tissue to a depth of 15mm to 25mm (85%).

114women had LLETZ treatment, 38women had CIN3, 31women had CIN2, 23women had CIN1. Of the women with high grade lesions, 14LLETZ biopsies were incompletely excised. 8LLETZ biopsies had positive lateral margins, 6LLETZ biopsies had positive deep margins. Based on the type of transformation zone, 79% with type 1 Tz had LLETZ depth of >7mm and <10mm, 94% with type 2 Tz had LLETZ depth of 10mm to 15mm, 99% with type 3 Tz had LLETZ depth of 15mm to 25mm.

This audit highlights commendable excisional techniques during LLETZ treatment for women with high grade CIN.

LLETZ treatment for high grade dyskaryosis and the pregnancy outcome

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Introduction / Background
Large Loop excision of transformation zone (LLETZ) as well has become the standard treatment for women affected by cervical precancerous lesions, owing to its ability to combine diagnosis and therapy in an outpatient clinic

Aims / Methodology
This is a retrospective observational study was conducted in a tertiary centre from January 2005 to August 2020. We included all women during their singleton pregnancy after loop excisional cervical treatment for CIN (LLETZ).
The primary outcome was preterm birth before 37 weeks. Secondary outcomes were preterm birth before 34 weeks, spontaneous preterm birth, preterm premature rupture of membranes, and perinatal mortality.

Results
A total of 746 pregnant women underwent an excisional cervical treatment (LLETZ) prior to their pregnancy, and were eligible to be included in our analysis.
The main indication for the loop was CIN3 72% (537/746), followed by CIN2 14% (102/746), Inadequate colposcopy, and CGIN were the reason for 7% (52/746) of the loops in our cohort of patients. Average loop size (>15 mm length).
Out of the identified 746 women with a pregnancy after LLETZ treatment, 13% (99/746) had preterm delivery <37 weeks, (14/746)1.9% ended up with 2nd trimester miscarriage, and 85% (633/746) delivered at ≥ 37 weeks. Women with LLETZ when compared national data had higher spontaneous preterm birth rates (13% vs 7%) and the difference was significant ($p<0.0001$), with the earliest spontaneous preterm birth occurring at 25 weeks. Preterm rupture of membrane (PPROM) occurred in 20% (20/99) of patients who had preterm delivery. Of our 746 cohorts of women 4.6% (34/746) continued to smoke during pregnancy, out of which 35% (12/34) had preterm delivery following LLETZ.

Conclusion
LLETZ is safe and effective method for the treatment of CIN. However, it clearly predisposes to preterm birth. Therefore, unnecessary or “see and treat” procedures should be avoided.

LLETZ under GA - the value of audit

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Introduction / Background

NHS CSP standards (prior to February 2020) suggest that more than 80% of patients undergoing a LLETZ procedure should have this done under local anaesthesia. In the newly released guidelines this has increased to a minimum of 85% with an achievable target of 90%. There are many different reasons for the requirement of a general anaesthetic including patient factors (eg anxiety) or clinical factors (eg large lesions, vaginal wall laxity).
Anecdotally clinicians felt that there had been a significant increase in patients attending for LLETZ under GA during the autumn/winter of 2018. This was confirmed with a retrospective audit.
The audit was repeated following dissemination of the initial audit results. Reasons for performing the LLETZ under GA were identified. Potential risk factors for requiring a LLETZ under GA were examined

Aims / Methodology

The aim of the audit was to see if, following evidence of poor performance on the initial audit, reminding clinicians of the NHS CSP standards brought about an improvement in the number of patients having a LLETZ under LA.
An initial retrospective audit of all patients undergoing LLETZ from 01/04/2018 to 31/03/2019 took place. The repeat audit will include all patients undergoing LLETZ procedures from 01/04/2019-31/03/2020. In this audit, data was collected (from the electronic patient record) on reason given for type of anaesthesia, operative difficulties, number of pieces for LLETZ, age of the patient, BMI (where recorded) and parity.

Results

The initial audit of 251 patients revealed that only 70.5% of patients had a LLETZ under LA. The indications were equally split between patient indications (eg anxiety) and clinician reasons (eg vaginal wall laxity).
At the time of submitting this abstract the results to date (228 patients from 01/04/2020 to 10/2/2020) show that 82% of patients had a LLETZ under LA. This clearly demonstrates the benefit completing the audit cycle has had on performance within the unit. The final results of the audit will be presented at the BSCCP Annual Scientific Meeting 2020 and will include indications for GA as well as looking at whether there are any risk factors that seem to make a GA more likely. Given the new, more challenging target, ways to decrease the GA rate further will be discussed.

Long Term follow up of women referred to colposcopy with smears reported as glandular abnormalities

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Introduction
The natural history of glandular neoplasia remains unclear. A case series of women referred to colposcopy with a single cervical cytology sample reporting as "glandular neoplasia" were associated with high levels of invasive and preinvasive disease. Women must therefore be referred to colposcopy, urgently.

Aim of the study
To review the management and long-term outcome of women referred with glandular abnormalities.

Methods
In this retrospective study, data were collected for all women referred with a smear reported as "glandular abnormalities" from the electronic colposcopy record Viewpoint, clinical notes and open Exeter, for the period of 01.07.2013- 31.12.2019. Demographics, initial indications for referral smear, smear history, and the outcome were analysed.

Results
Thirty-six women were referred to colposcopy clinic with smear reported as cervical glandular abnormalities during this period. All patients were offered appointments within 2 weeks and all were seen within this period, except for 2 patients who deferred their appointment for personal reasons. The mean age of the patient was 36 years old (range 27-51). One patient transferred her care to different hospital and was excluded from further analysis.

Of the remaining 35 patients who had colposcopy in the unit:

- 3 women were downgraded following colposcopy, biopsy and review at the MDM and eventually discharged without treatment (8%)
- 7 women had invasive disease (20%) and were followed up by the oncology team.
- 15 patients had high grade CGIN (43%)
- 10 women had high grade dyskaryosis (29%)

All those with women CGIN and high grade dyskaryosis underwent LLETZ treatment.
All women who were followed at the unit eventually had a negative HPV and were discharged to the GP as per current guidelines.

Conclusion
This study demonstrates a high incidence of invasive disease and high-grade abnormalities in women referred with smears reported as glandular abnormalities (78%). These findings are consistent with the necessity of seeing women with glandular abnormalities within 2 weeks.

MANAGEMENT OF CERVICAL INTRAEPITHELIAL NEOPLASIA 2 (CIN2): A GAP IN THE GUIDELINES?

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Introduction / Background

The aim of the NHS Cervical Screening Programme (NHSCSP) is threefold; to prevent cervical cancer, prevent recurrent CIN and minimise risk to the women.

Abnormal cervical screening results and colposcopy findings are managed according the NHSSCP Document 20 with clear standards and treatment algorithms. This involves excision for high grade dyskaryosis, often offered on a "See and Treat" basis as per the guideline. However 43% of CIN2 is thought to regress without treatment. Also treatment is not without potential sequelae, especially in younger women who have not completed their families.

Some national discussions have focussed on a more conservative approach with strict follow up of women with CIN2 to ensure that any persistence or progression has prompt treatment. This has been done locally in some cases but is not standard practice.

Aims / Methodology

We undertook a retrospective audit of our practice and outcomes to identify if a conservative approach could be offered to a selective group of women found to have CIN2 on cervical biopsy.

All women who had a histology result of CIN2 between 15/1/18 and 31/12/18 were identified and their case records reviewed.

Results

95 patients were captured, 7 were excluded as they were not identified as part of the screening program. 57 had a punch biopsy showing CIN2 and 31 had CIN2 on a loop biopsy direct from smear result. Of the 57 with CIN2 on a punch biopsy, 14 chose conservative management and 43 were managed with loop biopsy. In those women in the conservative management group, 65% have avoided excisional treatment to date. No progression of disease has been found and there has been good attendance for follow up.

Our data supports the development of a protocol for the management of CIN2. However we are aware of the limitation that this audit contains small numbers.

MANAGEMENT OF CIN 2: IS P16 A RELIABLE PREDICTOR FOR HIGH RISK DISEASE?

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Introduction / Background
While conservative treatment for CIN2 is becoming more commonplace, identifying suitable candidates is challenging and many women are still recommended to proceed with LLETZ treatment. While LLETZ is a valuable tool, it is not without complications such as infection, bleeding, cervical stenosis and an increased risk of pre-term delivery with greater depth of excision.
Despite CIN2 positive biopsy, it is recognised that between 5.9-41% of LLETZ histology will be negative for any CIN.

Aims / Methodology
Cases of LLETZ following a cervical punch biopsy demonstrating CIN2 were identified. Histology of the LLETZ biopsy was reviewed to identify those with or without high grade disease, CIN2+. These two groups were then compared for characteristics which could help identify those suitable for conservative management.

Results
Between January 2015 and October 2019 , 398 cases were identified, of these 38% (152) were found to have no high grade disease on histology. The average age was 30 years with a range from 23-62 years. 75% of cases were nulliparous with parity ranging from 0-8. Smoking was reported in 30% of cases with 10% being ex-smokers. These demographic findings were similar in both histological groups.
Referral cytology was found to be similar in both groups. Those with high grade disease on LLETZ histology were more likely to have had an impression of high grade disease at colposcopy (58% vs 42% p = 0.00561) . The mean number of biopsies and the mean size of biopsy was the same for both histology groups, 2 and 5.2mm respectively. Interestingly , Positive p16 staining on initial punch biopsy was reported in 24% of those with high grade LLETZ histology and 23% of those without.

Conclusion
We recommend offering conservative management to carefully selected CIN2 patients . P16 immunostaining was not effective in risk stratification in this cohort.

Management of CIN2- Is it time to Change Status Quo?

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Introduction / Background

CIN2 regresses in 43%, persists in 35%, progresses to CIN3 in 22% and invasive in 5%. Hence in carefully selected cases and after discussion in MDT CIN2 can be managed conservatively. CIN1 and CIN 3 are easily diagnosed and cause no doubts for pathologists, CIN2 is an equivocal diagnosis and poorly reproducible. Addition of p16 staining significantly improves the reliability of CIN2 diagnosis. There are currently no national guidelines and introduction of p16 staining would lead to lessen the number of excisional treatments in women. Vast majority of precancerous lesions are < 5mm depth suggesting that treatment that can reach 6-7 mm below epithelium are adequate in women. Cervical length scanning is offered to women after 2 LLETZ hence it's important to communicate result in writing to those who had a deep first LLETZ as it would start early monitoring and prevent mid trimester losses

Aims:

1. To look into management of CIN2
2. To see the potential use of p16
3. To look into the depth of LLETZ and communication to the patient

Methodology:

Retrospective audit – 01.01.2020-07.07.2020
CIN 2 on biopsy
Data collected from colposcopy data base
Histology results collected from Cerner system
Total 100- 5 Excluded

Results

56% -25-34 years. 27% were nulliparous and 33% P1. 68.4% were non-smokers'. Referral smears – 55.7% mild, 26.3% moderate, 11.5% severe and 6.3% with suspicious symptoms. Colposcopy impression HPV-17.8%, Low grade-43.1%, High grade 36.8% and unsatisfactory 2.1%. In 75% the TZ was type 1. In 52% p16 was not done and in 18% p16 was not needed as biopsy showed CIN3. 89.2% had LLETZ 5.3% conservative treatment and 2.1% see & treat. LLETZ Depth- 39.5% 7-9mm, 34.9% 10-14mm, >15mm 18.5%. LLETZ Biopsy results – CIN1- 27%, Focal CIN2- 11%, CIN2- 35.8%, CIN3 17.2%.

Mechanical dilatation of the stenosed cervix under local anaesthesia: a prospective case series

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Introduction / Background
Cervical stenosis is frequently associated with previous loop excision and may result in inadequate cervical assessment; disrupting surveillance under the national screening programme. Rigid mechanical dilatation is commonly performed in the theatre setting to resolve stenosis, however use in the outpatient setting under local anaesthetic (LA) is poorly reported.

Aims / Methodology
Data was collected prospectively from all patients attending the gynaecology treatment suite with cervical stenosis from 20/03/2015 to 23/09/2020. Mechanical dilatation of the cervix was performed using Hegar dilators under LA. Hegar size was recorded, alongside any immediate complications. All women were asked post-procedure whether dilatation under LA was acceptable or whether they would prefer general anaesthesia (GA). Subsequent colposcopic assessment, cytology, histology and management were recorded.

Results
149 cases were referred for cervical dilatation, 63 (43%) of which had complete stenosis. 118 (79%) patients had previously undergone cervical procedures. Successful dilatation under LA was achieved in 119 (83%) patients; five (3%) declined (requesting GA), six (4%) did not tolerate speculum examination and 19 (13%) had unsuccessful procedures. The median Hegar size used was 8mm (7,8). Dilatation under LA was reported as acceptable in 93% attempted procedures. 13 episodes of restenosis were recorded with no major adverse events. Younger age ($p=0.045$) and severe (compared to complete) stenosis ($p<0.0001$) were associated with procedure success, with improved results over time ($p=0.003$). Successful dilatation permitted cervical assessment; eight patients required cervical excisions, two underwent hysterectomies, with one confirmed case of adenocarcinoma.

Conclusions
Rigid cervical dilatation in the outpatient setting provides effective, instantaneous treatment for women who have failed cytological or colposcopic assessment. For the vast majority of women, the procedure was well tolerated and preferred to using GA. However, given that 1 in 10 women experienced restenosis, patients should be counselled about the possibility of requiring further management.

MOBILE COLPOSCOPY WITH ARTIFICIAL INTELLIGENCE;A BLESSING OR A CURSE

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Introduction / Background

Colposcopy, a subjective diagnostic procedure, has suffered severe criticism for incorrectly interpreting changes in the cervical epithelium that would indicate the presence of cervical precancer or early invasive cancer. Notwithstanding this criticism a number of studies have shown that effective teaching will improve the diagnostic accuracy of colposcopy.

Aims / Methodology

To further improve diagnostic accuracy and reduce the subjectivity of colposcopy a mobile colposcope has been developed with artificial intelligence with a large preliminary study showing a high sensitivity in the diagnosis of major grade cervical precancer (CIN2+) of 90% accuracy (Hu et al, 2019). in this observational study, (validated by the US National Institute for Cancer) of deep learning and automated evaluation of cervical images for screening showed that this technique was statistically more accurate than conventional pap smears, liquid-based and neural network-based cytology and HPV testing.

With improvements in this specific technology now installed in this devise it is possible that a higher level of sensitivity can be expected. The question now arises whether this technology poses a blessing or a curse for traditional colposcopy?

The answers must lie in the types of populations in which this technology is employed. Ninety percent of cervical cancer occurs in the developing world where the application of screening and treatment let alone vaccination is challenging. 'See and treat' protocols employing a mobile colposcopy system would seem perfect in such settings. The ability to instantly transmit images for verification is ideal.
Its place in developed countries' management systems is controversial. In poorly performing audited units there would be a strong argument for employing mobile colposcopy with AI in the diagnostic arm of clinical management. Isolated units will benefit from instant image transmission for authentication. Its main benefit may be in teaching colposcopists with a view to improving diagnostic abilities.

Results

Mobile colposcopy with AI poses obvious blessings but also curses in selected settings worldwide.

New Referrals with Post-Coital Bleeding in a DGH setting- demographics, Colposcopy findings; Diagnosing Cervical Intraepithelial Neoplasia & Cancer

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[1]*Western Sussex Hospital Trust*

Introduction / Background

Post-coital bleeding (PCB) is an important symptom of cervical intraepithelial neoplasia (CIN) and cervical cancer. Recent studies suggest PCB prevalence could be as high as 9% in the population. Among them, up to 17.8% may be associated with CIN and up to 5% with cervical cancer.
It is important to appropriately investigate PCB to timely diagnose CIN and cervical cancer. Around 0.6% of women with PCB with a negative smear and a normal appearing cervix will have cervical cancer. Additionally, women with a negative smear and PCB are 15 times more likely to develop invasive cancer than women without PCB.

Aims / Methodology

We present the findings from a retrospective audit of all PCB referrals to our Colposcopy Service over a 12-month period from April 2019 to March 2020. Our sample size was 123.
A detailed literature review was undertaken. As no clear protocol was in place within the region, we aimed to utilise the findings of our audit to devise local pathways and protocols for the management of PCB. Within the sample, our aim was to identify any correlation of PCB with demographics, aetiologies and treatments. We reviewed the number of patients diagnosed with CIN who were too young for the national smear programme or who had previous normal smears.

Results

While no patients were identified with cervical cancer, 28% of patients were identified with CIN. Almost three quarters of the CIN positive patients had previous normal and up-to-date smears. 18% were too young for the national cervical smear programme.
Our results further strengthen the importance of timely colposcopy for PCB. Local pathways and clear National Guidelines need to be established urgently to ensure timely diagnosis and treatment. Our findings raise the question whether further consideration should be given to lowering the age of first smear within the national smear programme in England.

Outcome of catch up and routine HPV vaccinated cohort women referred to colposcopy clinic with hrHPV positive & abnormal cytology: a DGH experience.

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Introduction / Background
Population data on the effect on HPV prevalence in women routinely immunised at age 12-13 years show substantial reductions in target and cross protected HPV types. Routine and catch up immunisation using the bivalent HPV vaccine against high grade cervical disease has been found to be highly effective.

Aims / Methodology
This is cohort study of women who received HPV vaccine to determine the effect of routine immunisation with the bivalent HPV vaccine on levels of cytological abnormalities and cervical intraepithelial neoplasia (CIN). Retrospective audit data was collected from hospital electronic database and Open Exeter system, from 2015 and still on-going.

Results
Women vaccinated with the bivalent HPV vaccine Cervarix from 2008 as part of the catch-up programme entered the national cervical screening programme at age 25 yrs. from 2015 and those that received the quadrivalent vaccine Gardasil from 2012 will enter the programme from 2020 onwards. This cohort all completed at least 1 or 2 doses of Cervarix vaccine. None received Gardasil.

- 14/20 (70 %) of these women were referred with low grade cytology & positive HR-HPV
- 6/20 (30%) with high grade cytology (CIN2+ at histology)
- 10/20(50%) of this cohort have now been returned to routine recall within 3 yrs. of having entered the programme after reverting to negative HPV and cytology
- 4/20 (20%) NTDD after June 2020
- 3/20 (15%) DNA's
- National uptake in the catch-up cohort was about 65% overall, but uptake in the routinely immunised cohorts has consistently exceeded 85% in Merseyside.

Discussion
The human papillomavirus (HPV) types that remain after immunisation might not be associated with persistent disease. However there remains a vaccinated cohort susceptible to HPV and cervical cancer. Further longitudinal studies may elucidate the effectiveness of HPV vaccination in this young population.

Outcome of colposcopy in premenopausal women presenting with postcoital bleeding

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Background
Postcoital bleeding (PCB) refers to spotting or bleeding that occurs during or after sexual intercourse and is not related to menstruation. The point prevalence ranges from 0.7 to 9.0%. Spontaneous resolution seen in 51% of the premenopausal women at two years with no further signs of recurrence .
Postcoital bleeding mainly comes from surface lesions of the genital tract including cervical polyps, cervicitis, ectropion, cervical intra-epithelial lesion (CIN), or carcinoma.
A thorough emphasis on patient history and detailed clinical examination often leads to an accurate diagnosis of postcoital bleeding.

Aim
Aim of our study was to investigate the outcomes of colposcopic assessment of the women referred for postcoital bleeding to our unit.

Methodology
Women referred with PCB were identified from our colposcopic database between January to July 2018.The demographic details, referral smear, and the outcome of the colposcopy were analysed.

Results
During this study period 60 women with PCB were seen in our unit. The median age was 32.
Among these 54%presented with PCB and 46%presented with both PCB and intermenstrual bleeding (IMB).
At referral 70% had normal smear, 17%has ASCUS/LSIL and 13% had no smear.

Of the 60 women referred 28% had normal colposcopic examination and were discharged from the clinic.
Ectropion was seen in 30% of the patients.
Colposcopic directed biopsies were performed in 65%. Histology confirmed CIN 1 in 16%,
CIN 2 in 2%, CIN 3 IN 2% .No case of cervical cancer was found.

Conclusion
In our study 40(66%) women who presented with postcoital bleeding did not have a serious abnormality. Our study proposes that these women can be managed in our dedicated gynae outpatient services. A standardised care pathway for post coital bleeding in premenopausal women will improve the efficacy of treatment. This will also reduce the number of referrals to the colposcopic unit.

Outcome of Colposcopy referral for Postcoital Bleeding /Suspicious Cervix

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Outcome of Colposcopy Referral for Postcoital Bleeding and Suspicious Cervix
Aim- to identify if patient referral is appropriate for 2ww pathway
To identify rates of cancer/ precancerous disease in this group
Methodology- Retrospective data collection.
Outcome and follow up management of this group of patients.

Outcome of women referred with Moderate dyskaryosis

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Introduction / Background

The change in terminology for cervical smear to a 2 tier system of low-grade and high-grade dyskaryosis, eliminates the central category of moderate dyskaryosis and has been incorporated into the high-grade group. The aim of this study was to see the outcome of the moderate dyskaryotic smear in relation to colposcopic impression and treatment.

Aims / Methodology

This was a retrospective audit of all women who were referred to colposcopy unit with a moderate dyskaryotic smear. This was carried out for a 6-month period between October 2018 to March 2019. There were 30 women in total who were referred with moderate dyskaryosis during this period.

Results

Thirty women with moderate dyskaryotic smears were referred to colposcopy during this period. 70% of them were classified as having a high grade lesion on colposcopy. The other 30% were low grade. Punch biopsy confirmed CIN 2 in 50%, CIN 3 in 24% of these women. CIN 1 (13%) and chronic cervicitis (13%) was seen in the remaining women. All women with high grade CIN on biopsy were offered treatment. Those women with discrepancy between colposcopy and biopsy were also offered treatment after multidisciplinary review. So, 80% of women who were referred with moderate dyskayosis underwent Large loop excision of the transformation zone (LLETZ). 84% of the LLETZ specimen confirmed CIN 2 (63%) and CIN 3 (21%).

20% did not have treatment. 16% of these women were managed conservatively. Repeat colposcopy and biopsy after 6 months was low grade in these women.

Significant number of women referred with moderate dyskaryosis required treatment. Conservative management in selected women to be decided only after multidisciplinary team review.

Outcomes of low grade and borderline nuclear changes in squamous cells pre- HPV triage and with HPV triage.

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Introduction / Background

NHS cervical screening programme was introduced 1988, with HPV screening introduced from 2013. HPV is found in 99% cervical cancers, with HPV 16/18 in 75% cervical cancer. BSCCP aims to detect precancerous changes (CIN/CGIN) and reduce the incidence of cervical cancer and mortality.

Aims / Methodology

Our aims were to see if management of mild dyskaryosis and borderline nuclear changes (BNC) in squamous cells in our unit was according to the new guidelines with introduction of HPV triage and to compare the management with pre -HPV triage to see if expected advantages seen. Retrospective data was collected from West Midlands Colposcopy Database with the following index smear referral reasons; Clinical indication-non-urgent, borderline changes/ mild dyskaryosis. The same 3 month time period was used 1st January to 31st March in 2007 and 2013. HPV triage not applicable in 2007 and HPV triage in 2013.

Results

Comparable numbers were analysed in the two groups N= 69 in 2007 and HPV triage N= 74 in 2013, age ranging from 20-64. LLETZ in the 1st visit 49.2% vs 5.4%. Punch biopsy in 1st visit 28.9% vs 27.0%. Punch biopsy followed by LLETZ 8.7% vs 27.0%. Total LLETZ 58.0% vs 32.4%. No CIN or CIN1 only 20.2% vs 0%. Number where treatment could have avoided- 20.2%. 21% vs 28% discharged after 1st visit and 18% vs 26% discharged after 2nd visit. 24% had more than 2 appointments compared to 14% for HPV triage.
In conclusion HPV triage has been an advantage to patients as unnecessary treatment is avoided. We have seen a reduction in number of colposcopy visits. With HPV triage the reduction in the number of visits would have indirectly reduced the women's anxiety. However as time target to see has changed to 6 weeks with HPV triage this has continued to put pressure on colposcopy appointment slots.

Performance of an RNA based test as a Test of Cure (TOC) of treatment- a retrospective study

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Introduction / Background

Cervical screening detects pre-invasive abnormalities which with effective treatment can avoid progression to invasive malignancies. It is important to monitor the effectiveness of treatment. In Scotland, test of cure (TOC) is carried out by performing a combined HPV and cytology test, six months post treatment. Women who are positive for either HPV and/or have low grade or worse cytological abnormality are referred to colposcopy. The HPV test used for TOC will change from a DNA based test to an RNA based test from March 2020. While there is much data on the relative performance of DNA vs RNA assays in a screening context, there is a paucity of data on their comparative performance in a post treatment setting.

Aims / Methodology

Between Feb 2011 and August 2019, 37809 women were tested for TOC in Scotland using the Abbott RealTime HPV test. We performed a retrospective case-control study where an RNA based test (The Aptima HPV test, Hologic) was applied to cases, defined as women who went on to develop or harbour ≥CIN2 post treatment (n=63) and controls, defined as women who had ≤CIN1 or were cytology negative over two time points (n=160). Clinical performance of the assay for the detection of residual ≥CIN2 was performed and compared to the DNA test (Abbott Real Time HPV Test).

Results

Both assays have high sensitivity for detection of ≥CIN2 in a test of cure population. Preliminary data indicate that the sensitivity of the RNA based test for residual ≥CIN2 was high at 96.8% (95% CI- 88.0% - 99.4%) and very similar to that observed with the DNA based test- 93.6 % (95% CI- 83.8% - 98.0%) - p=0.011. These data are reassuring as sensitivity is the key performance parameter for the post treatment population given their additional risk of recurrence compared to the general population. Complete data will be presented.

Positive high risk HPV (hrHPV) test with negative cytology – challenges in management. Is there a risk of overtreatment?

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Introduction

The risk of CIN3+ in hrHPV positive women with negative cytology is low. The success of the HPV screening programme lies in increased sensitivity, and also ensuring women are appropriately discharged following colposcopy to ensure clinics are not overburdened and individuals are not inconvenienced. The cytology negative subgroup is a new group for Colposcopists and can pose management challenges. As a pilot site since 2013, we audited this group to identify the burden of disease, management and outcomes over a 5-year period.

Method

Retrospective review of all hrHPV positive cytology negative referrals to Hillingdon Hospital between April 2014 and April 2019.

Results

There were 646 hrHPV positive cytology negative referrals in 565 patients. 28 (4%) had high-grade disease at their first appointment. Overall there were 54 (10%) treatments in subsequent follow up over the 5 years. 170 (26%) patients without CIN at their first appointment were followed up instead of being discharged, of which only 7 (4%) were diagnosed with high-grade disease before their next routine smear.
54 (8%) patients with unsatisfactory colposcopy were appropriately followed up. 16 (30%) of these subsequently had treatment, of which the majority (88%) were over 50 years. 6 (11%) had negative cytology before treatment and none had high-grade disease on histology. 1/4 was hrHPV positive on their test of cure.
144 (22%) were less than 30 years and 5% of these had high-grade disease. All had a negative test of cure after treatment.

Conclusion

The burden of high-grade disease in this group of patients is low. However, there is a risk of overtreatment if there is an unsatisfactory colposcopy in the older women (over 50 years), and despite treatment they may still remain hrHPV positive. Failure to discharge to routine recall may result in increased workload, unnecessary follow up and anxiety for patients.

POSTNATAL SURVEY ON CERVICAL SCREENING

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Background
Aim of cervical screening is to reduce the incidence and mortality from cervical cancer through a systematic quality assured population based screening programme for eligible women. Screening should cover 80% of eligible women to achieve this aim. NHSCSP offers screening every 3 years for women 25 to 49years and 5 years for 50 to 64 years. National data for women between 25-49years (June 2019) confirmed 71% of women had screening within 3.5years. Local data Lambeth 65% and Southwark 64% respectively for 25-49 year.

Objective
Survey was conducted to target women of child bearing age to assess whether pregnancy has impacted on screening, their views and awareness of Primary HPV screening.

Method
A questionnaire was distributed among postnatal women during Oct-Nov 2019.

Results
No of postnatal women who responded n=53,
Age: range n=22 to 43, average age 33years
Parity range= 1-6 children
Antenatal Booking recording of cervical screening; n=38 (71%)
Compliance with screening n=36 (67%)
Previous abnormal smears n=9 (16%)
Pregnancy effected smear compliance n=17 (32%)
Awareness of Next test due date (NTDD) n=42 (79%)
Awareness of HPV Primary screening: n=3 (6%)

Conclusion
Screening uptake in this group is low 67% and pregnancy effected compliance in 32%. Majority 79% aware of next date for smears, only 6% aware of Primary HPV screening.

Recommendations
Repeat survey as only 53 women responded, distribute leaflets 'Cervical Screening helping you decide' to give information about Primary HPV screening and to encourage uptake.

PRE-EMPTING THE ANTICIPATED RISE IN CERVICAL CANCER IN THE OVER 50s IN THE SOUTHERN HEALTH & SOCIAL CARE TRUST

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Introduction / Background
A recent publication in the Lancet has suggested that the peak age of cervical cancer diagnosis will shift from the ages of 25–29 years to 55–59 years over the next 10 years. This anticipated shift is due to the introduction of HPV vaccination. It is therefore imperative to review and identify common themes in presentation and pathology in this older age group with the aim of improving our services in this area.

Aims / Methodology
We performed an observational chart review of women over the age of 50 years old diagnosed with cervical cancer in the previous ten years (2009 – 2018) in the SHSCT. A list of the 46 patients was obtained. Each patient's hospital chart, electronic care record (NIECR), Colposcopy attendances (Excelicare software) and screening history were reviewed. Data collected included demographical information, presentation, time to diagnosis, cervical screening history, histopathological diagnosis and outcomes.

Results
In this period approximately 4-5 women per year over 50 years old were diagnosed with cervical cancer. The majority (74%) presented with symptoms; most commonly vaginal bleeding. And 22% of diagnoses were made as the result of cervical screening.
Considering risk factors for cervical cancer; 43% were smokers and 52% had a parity greater than or equal to three. However, only 17% had a complete cervical screening history.
In this older age group women were more often found to have rarer histopathological types of cancer than younger women.
This review highlights that cervical cancer should be considered as a differential in the presentation of vaginal bleeding, particularly post-menopausal bleeding. The local PMB proforma has therefore been amended to include cervical screening history and a prompt to undertake this if appropriate.

Primary HPV Screening for cervical cancer - trepidation, challenges and opportunities - Clinician's perspective

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Introduction
Cervical cancer is the leading cause of death in women worldwide, with over 530,000 new cases and 275,000 deaths noted per annum. Despite largely preventable It is still the sixth most common cancer in women in developed world.[1] Primary HPV screening has recently been rolled out in the UK with trepidations amongst the patients and clinicians alike.

Aims and Methodology
We wanted to discuss some of those questions here in the context of the Consultant interview AAC at the Luton and Dunstable Hospital while asked to present on the challenges of primary HPV screening in the National and Local context.

Results
Following concerns were raised:

- Demands for colposcopy may outstrip capacity and adherence to QA and KPI
- Clinician's concern how to tackle normal cervix on colposcopy with background HPV positive
- Loss of follow up in short term
- The interval of the screening not been formalised
- How to pick up disease when the HPV is self limiting
- Increased anxiety amongst the patient and consort resembling sexually transmitted infection
- Keeping up the skills of cytologists
- Centralised screening tests
- Quality control at the local level – delay in action if any missed data
- HPV negative but high grade disease e.g. glandular disease could miss the assessment

Conclusion
There were more questions than answers in the presentation. Colposcopist raised concerns of managing a normal cervix on colposcopy in the background of a HPV positive result where sensitivity of the colposcopy is ranges 30-70%. The random biopsies may miss the disease. Concerns raised as the cytologist may over call in the background of positive HPV leading over treatment.

Reference
1 Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, et al. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. Int J Cancer 2015;136:E359–86.

Rare case of cervical hemangioma mimicking cervical malignancy

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Introduction / Background

Cervical hemangiomas are quite rare with around 55 to 60 reported cases in literature. They are benign tumors that may cause gynecological or obstetrical complications. They can be found at all levels of the uterine wall, including the serosa, myometrium, and endometrium.
In addition, these lesions express hormone receptors, indicating that their growth is at least in part due to sex hormone stimulation. Although most lesions are symptomatic (mostly bleeding), the diagnosis is frequently unsuspected. Cervical hemangiomas are benign with no recurrences or adverse outcomes reported to date.

Aims / Methodology

We present a case of 44-year-old lady who had a history of chronic pelvic pain with new symptoms of cyclical pelvic pain with urination and back ache. She had been diagnosed with endometriosis in the past. MRI findings showed large cluster of cysts in the cervix suspicious of adenoma malignum.
Following this she had a LLETZ which revealed florid endocervical glandular hyperplasia with numerous Nabothian cysts. No malignancy was noted.
A laparoscopic hysterectomy and bilateral salpingectomy was performed which confirmed the histological diagnosis of benign vascular malformation favoring hemangioma. The patient had an uneventful recovery with resolution of her symptoms

Results

Although hysterectomy has been a common mode of therapy, conservative treatment by observation, cauterization, or local excision has been quite successful. Topical estrogen therapy in one prepubertal patient resulted in a cessation of bleeding.

Retrospective review of the women presented with suspicious cervix in our Colposcopic unit.

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Background
In the wake of a number of high profile legal cases in Ireland in 2018 there has been an increased awareness in both the public arena and in primary care that a negative smear does not out-rule cervical cancer. This has resulted in a substantial increase in the number of women referred on clinical grounds rather with an abnormal smear. The usual referral alludes to a "suspicious cervix" which is an all-inclusive term used to describe a myriad of cervical lesion and has very little clinical specificity.
The principle reason for a colposcopic examination in the context of a "suspicious cervix" is to eliminate cervical cancer as a cause of the abnormal appearance.
We wished to examine the possibility that these women could safely be assessed in general gynaecology and that other relevant investigations could be undertaken directly as indicated rather than 2 outpatient appointments being required.

Aims and objectives
We wished to assess the number of women presenting with a "suspicious cervix" were identified to have cervical cancer, and how many had other significant either symptoms or signs requiring further evaluation or management.

Method
Retrospective review of electronic records of eighty-seven women who attended our dedicated colposcopic clinic was carried out using the Mediscan data base over the period of six months from July to December 2018.

Results
None of the 87 women referred with a "suspicious cervix" had cervical cancer,40% were asymptomatic and referred based on incidental finding on taking a smear. At the time of colposcopy 92%had a negative smear result and 3% had an abnormal smear (2% LSIL, 1% HSIL). Further Gynaecological investigations were required in 26% presented with intermenstrual bleeding (IMB) and 27% with post-coital bleeding (PCB) .
On colposcopic examination 39 (44%) women had an entirely normal examination and were discharged. A further 37 women had benign clinical conditions (ectropion, polyp, nabothian follicles etc.) and in some cases a cervical biopsy was performed. A number of these women were identified to have low grade dysplasia on histological examination.
Overall, the incidence of low-grade dysplasia and high-grade dysplasia was 11% and 2% respectively. CIN 3 was confirmed on LLETZ in 1 woman who was referred with abnormal smear.

Conclusion
Our study validates the proposal that women referred with a clinically suspicious cervix should be assessed in a general gynaecology clinic rather than colposcopy because most will not have cervical cancer. After assessment in the gynaecology clinic women with further clinical suspicion of cancer can be reviewed within 2 weeks in colposcopy, whereas women with benign pathological result can be treated appropriately in the general clinic.

RISK OF PRETERM BIRTH FOLLOWING LLETZ: DOES PREVIOUS OBSTETRIC HISTORY HAVE A GREATER IMPACT THAN DEPTH OF EXCISION?

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Introduction / Background
LLETZ for the treatment of CIN is associated with increased risk of pre-term birth (PTB), however many studies have not included women's previous obstetric history as a potential confounder. We evaluated obstetric outcomes in women receiving antenatal care in a specialist prematurity- prevention-clinic (PPC) to determine the impact of previous-PTB (PPTB) compared to LLETZ-alone.

Aims / Methodology
A retrospective observational cohort study on patients referred to the PPC at University Hospitals of Leicester between 2009-2016. Patients were categorised by referral indication: LLETZ-only; LLETZ+PPTB; PPTB only; and 'other'. Information was collated on patient demographics, LLETZ dimensions, antenatal investigations/interventions and gestation/mode of delivery.

Results
1231 singleton pregnancies were analysed, 624 with history of LLETZ, of these 81 had LLETZ+PPTB. The majority of women had a single LLETZ (551 cases) and total depth of excision was available in 489 cases. Patients included those receiving obstetric interventions and those observed only. 91.2% of LLETZ-only women delivered after 37 weeks gestation (2.6% $\leq 33^{+6}$ and 6.26% $\leq 36^{+6}$) compared to 63.0% (13.6% $\leq 33^{+6}$ and 23.5% $\leq 36^{+6}$) in the LLETZ+PPTB ($p<0.0001$) and 71.3% (13.0% $\leq 33^{+6}$ and 15.7% $\leq 36^{+6}$) in the PPTB-only groups ($p<0.0001$). There were no significant differences in delivery gestation between primiparous and multiparous women with no PPTB in the LLETZ-alone group. Delivery gestation was negatively correlated with increasing excision depth in the LLETZ-only group ($p=0.0068$), although median delivery gestation was above 37 weeks for all depth groups: 1-9mm 39^{+4}, 10-14mm 39^{+6}, 15-19mm 39^{+3} and >20mm 39^{+0}. Depth of excision was not associated with delivery gestation in the LLETZ+PPTB group ($p=0.2087$).

Conclusions
PPTB appears to have a much greater impact on PTB risk than LLETZ. Depth of excision does not appear to influence delivery gestation in women with LLETZ+PPTB, instead delivery gestation is comparable to a high-risk obstetric population who haven't had cervical surgery.

Simplification of simulation in colposcopy, the value of using costa coffee plastic cup as a simulator to train beginners

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Introduction / Background

Colposcopy is a specific discipline that relies on optics to acquire a detailed view of the cervix and the lower genital tract. This detailed vision will enhance precision of achieving biopsies and treatments leading to accurate clinical decisions. This will depend on acquiring specific eyes hand coordination skills working in a two-dimensional view. These competencies are essential part of training and certification in colposcopy. Simulation can shorten the learning curve and here simplification of the process is suggested and demonstrated practically through using costa coffee plastic cup together with standardised exercises.

Aims / Methodology

Medium size costa coffee plastic cup is fixed at the edge of the examination coach of colposcopy simulation a speculum examination of the cervix. The trainee colposcopists will be helped to use the colposcope optics to achieve eye hand coordination, learning the optics of the colposcope and ergonomics. Subsequently additional exercises are added to acquire agility of taking biopsies smoothly. Advanced skills are possible through learning local anaesthesia and loop biopsies through various substances that represent cervical tissue positioned at the end of the cup.

The technique was used in training 6 colposcopist successfully in west Cumberland hospital colposcopy unit moving their levels of confidence remarkably up before the clinical sessions.

Results

The trainees' level of eye hand coordination was noticed to improve quickly with this way of simulation. The simplicity of the technique allowed flexibility of the training and accessibility and later self-directed learning through independently practicing on the model. All the trainees gave positive feedback on the trainer. The tasks were simple and standardised and aimed to represent tasks done during colposcopy session. Simulation improves performance and confidence, and simplification and practicality of simulators facilitate faster learning. This will be more significant given most courses are turning virtual during Covid pandemic.

SUPERIORITY OF COLD COAGULATION OVER LLETZ IN TREATMENT OF HIGH-GRADE CIN: DECREASED DISEASE RECURRENCE OVER 8 YEARS OF FOLLOW-UP

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Background

Cervical cancer is a significant driver of morbidity and mortality, and is characterised by a long, detectable pre-invasive disease stage: cervical intraepithelial neoplasia (CIN). Cervical screening programmes seek to detect CIN and to offer treatment before invasive disease develops.

Large-loop excision of the transformation zone (LLETZ) is the commonest modality offered in the UK for high-grade CIN (CIN2/3). Cold coagulation (CC), a thermoablative alternative technique with reduced risk of impact on fertility, has not been common in several decades. Success of the treatment measured by Test of Cure (ToC) appeared to be comparable in the two groups in a parallel study done in our unit and been accepted as a presentation at BSCCP meeting. To our knowledge, there has not been a study looking at long-term outcomes following failed Test of Cure and we believe our study is unique because of the large number of patients treated with CC and long term follow up available.

Aims & Methodology

The principle aim of this study is to evaluate the outcomes of CC vs LLETZ in treatment of high-grade CIN (HGCIN), after failed ToC 6 months post-treatment: hr-HPV carriage (virology), dyskaryosis (cytology), or both.

We present retrospective data from our colposcopy unit where CC is used frequently, and extensive follow-up data (cytological and histological) over an 8-year period have been retained. Over this period, 1008 women were treated with CC, 20% of whom failed ToC (n=182); 865 were treated with LLETZ, 23% of whom failed ToC (n=166). Kaplan-Meier survival curves were constructed from these data, and comparisons evaluated by log-rank/Mantel-Cox tests.

Results

Only a small proportion of women treated with CC who failed ToC developed recurrent HGCIN in the follow-up period (6.5%), and CC-treated women had a lower rate than LLETZ-treated women (15.6%) ($p=0.0019$). Negative cytology as well predominated among post-treatment outcomes for CC (65% vs <50% for LLETZ). Women treated for CIN3 had the highest HGCIN recurrence, but lower in CC than LLETZ treatment groups ($p=0.0005$). The highest rate of recurrence was seen in LLETZ-treated women who failed both virology and cytology ToC components (>65% vs 25% for CC-treated women).

Conclusion

Our study shows that CC has a high success rate of treatment of high grade CIN comparable to LLETZ and also associated with a lesser incidence of persistent or recurrent CIN. We conclude that in appropriately selected patients, CC is a dependable treatment modality for HG CIN.

Telephone consultation in Colposcopy during Covid 19 Pandemic

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Introduction / Background

Telephone consultations were introduced to colposcopy to reduce patient's anxiety and to avoid delays in their management. Smear history, histology, and colposcopic images were reviewed in order to determine the appropriate clinical pathway: either to allocate a face-to-face appointment or discharge to primary care for a smear with a telephone consultation. In general, tele-consultations were most suitable for follow up patients and selected new patients.

Due to delays secondary to COVID19, NHSCP sent letters to patients to attend their GP practices for smears while they were still under hospital care and were awaiting an appointment. Thus, most of these patients were actually suitable for discharge after a telephone consultation. To this end, this process has now been incorporated into clinical pathways and has appropriately replaced some outpatient appointments.

Aims / Methodology

Telephone clinics were set up on PiMS according to current post-COVID administrative processes. If colposcopy examination was deemed to be an essential part of the assessment, a face to face appointment was arranged. Language, safeguarding, capacity, and confidentiality issues were considered at all times. Teleconsultations were converted to face-to-face appointments when required in order to adequately address any of these issues.

The telephone clinics were run by the lead colposcopist. Consultation times were booked for 30 minutes to address patient's concerns, provide adequate time to listen actively, and leave time for questions. Patient's feedback was explored to ensure that the patients' needs were being met. Ultrasound scan appointments were made during or soon after consultation if required. To date, the lead colposcopist performed over 300 tele-consultations, which has been audited.
Following the telephone consultations, outcomes were entered on PIMs. Discharges were clearly stated in viewpoint. Letters were uploaded to EPR and viewpoint the same day, and a copy sent to the patient and GP.
When patients were not available by telephone at the allotted time slot, at least 5 attempts are made at other times during the half-hour before a non-attendance is recorded.

Results

During the period between 1st June 2020 and 30th December 2020, two hundred and forty consultations were carried out including 198 follow-ups (83%) and 42 new (17%). There were 6 patients referred for colposcopic examination (2.5%), 28 referred to smear clinic (12%), 1 patient referred to vulva clinic, and the remainder discharged (85%).

Conclusion

Tele-consultations were well accepted by patients during the COVID19 pandemic and appear to be both safe and efficient at reducing anxiety and avoiding delays. It is most suitable for follow up and some new patients provided it is run by a senior colposcopist.

Telephone virtual clinics in initial assessment of patients during a pandemic: Do they merit inclusion through a blended approach under innovative models of health care within Colposcopy services in this post-pandemic era?

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Introduction / Background

East Lancashire Hospitals NHS Trust Colposcopy Services see approximately 3800 patients a year by 7colposocpists. During the pandemic first wave, there was 43% reduction in colposcopists as 3 out of 7colposcopists were on shielding and additional impact from clinic slots being reduced from 12 to 7patients per clinic due to mandated deep cleaning.

Aims / Methodology

The remote off-site telephone virtual clinics was formally ratified with Standard Operating procedure as a Quality Improvement project to study the impact of the new clinics through PDSA cycles.
Results: 76remote telephone clinics were booked 28/4/2020-30/10/2020. 696patients were called and 578 (84%) responded. DNA 16% (n=118) was comparable to high DNA rates in face to face clinics during this period.

Conclusions and recommendations

696 patients booked through the 76 telephone clinics equated to 100 face to face clinics. 17% (118) were discharged after consultation under Untreated CIn1/Test of cure pathway, remedial measures agreed over telephone, or deferred follow up agreed tailored to individual patient needs thereby staggering follow ups. Remote telephone/virtual clinics reduce footfall to face to face clinics reducing infection spread risk while reducing pressure on front line staff and service demands. They reduce patient anxiety from uncertainty of waiting during a pandemic. All the above besides being able to provide continuity of patient care were acknowledged as definite added gains besides the ability of trust to support shielded colleagues with reasonable adjustments to be productive &resourceful reducing moral distress. It was concluded that this model is effective with demonstrable gains to benefit patients and services during ongoing crisis such as this pandemic with potential to incorporate this as part of norm in the post Covid era with appropriate governance framework to support.

Test of Cure and Beyond After Cold Coagulation

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Background

Our unit routinely uses Cold Coagulation (CC) for treatment of High Grade Cervical Intra-epithelial Neoplasia (HGCIN) in appropriately selected women. It is important to demonstrate that this treatment is non-inferior to Large Loop Excision of the Transformation Zone (LLETZ), which, despite known risks, remains the preferred treatment modality elsewhere.

Aim

To evaluate outcomes of women who failed Test of Cure (TOC) following treatment of HGCIN with CC compared to LLETZ.

Methodology

The study population comprised all women treated in our unit for CIN 2 or 3, by CC or LLETZ between April 2012 and March 2018 . Women previously treated for CIN were excluded. Follow up data was collected from the National Colposcopy and Cytology and local pathology databases. Kaplan Meir curves demonstrate the treatment failure rates over time .

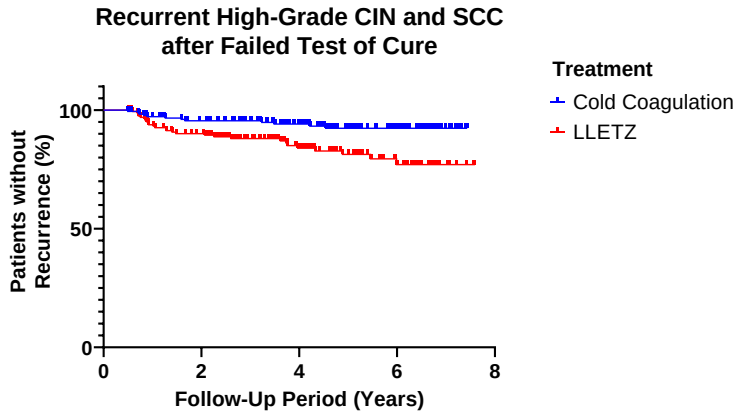
Results

1873 women (n=1008 CC and n=855 LLETZ) were treated for HGCIN .TOC result was available for 909 CC and 722 LLETZ treatments.

In the CC cohort: 182 (20%) failed TOC . Of these 5 (0.05%) had histologically confirmed persistence of HGCIN within 12 months and 7 (0.07%) were diagnosed with HGCIN in the extended follow up period (13 to 90 months).

In the LLETZ cohort: 166 (23%) failed TOC . Of these,10 (1.3%) had confirmed persistence of HGCIN within 12 months; and 16 (2.2%) were diagnosed with high grade CIN in the extended follow up period (13-90 months). There was one invasive cancer in the LLETZ cohort .

Recurrent HGCGIN was significantly more common in women treated with LLETZ compared to CC ($p < 0.01$; significance determined by log-rank/Mantel-Cox test).



Conclusion

Our study demonstrates high success rates of treatment of CIN with low rates of persistent disease and recurrence up to 6 years. In appropriately selected, albeit non-matched, populations Cold Coagulation is non-inferior to LLETZ.

The audit of the outcome of expectant management of CIN 2.

Kandanearachchi P[1]

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Introduction/Background

After the introduction of new guidance, conservative management of Cervical Intraepithelial Neoplasia (CIN) 2 can be offered to younger childbearing age women. There is evidence to show CIN 2 is a more heterogeneous group compared to CIN 3. It may not have been caused by Human Papillomavirus (HPV) 16 like in the majority of cases of CIN 3, which is less likely to regress.

In our Health Board, women aged 30 years and under are offered conservative management, in accordance with the Cervical Screening Wales guidelines. The criteria stipulates an ectocervical CIN 2 lesion with satisfactory colposcopy can be offered expectant management maximally up to 12 months. Patients with persistent disease after 12 months went on to have treatment. The selected cases for expectant management were subjected for multi-disciplinary team (MDT) review and approval. Colposcopy review has been planned at six months initially and 12 months subsequently if necessary.

The initial findings of this conservative management at six month follow-ups were reviewed during this audit.

Aims/Methodology

This is a retrospective audit and the cases were identified from the MDT case notes. 30 cases were identified and their six months follow-up visits were reviewed.

Patient characteristics, cytology result, colposcopy findings and the histological diagnosis made at the six month follow-up were reviewed.

Based on the results obtained, patients were classified as regressed, progressed or unchanged in histology. All 30 patients had histology repeated by means of punch biopsies.

Results

After six months of expectant management, three patients have regressed to no CIN, 13 patients have regressed to CIN 1, 11 patients remained as having CIN 2 and only three progressed to CIN 3, who then had treatment. None of the patients have developed invasive cancer during the initial six month period.

Based on our initial follow-up, high regression rates have been observed (53%). This audit will continue further to conclude the 12 month follow-up for those that remained unchanged.

The colposcopy multidisciplinary team meeting: is there an educational value?

Howe E[1], Lyon R[1], Ellis K[1], Tidy J[1], Gillespie A[1], Macdonald M[1], Palmer J[1]
[1]*Sheffield Teaching Hospitals*

Introduction / Background
Colposcopy multidisciplinary meetings (MDM) are well established within cervical screening services yet supporting literature is lacking with regard to their functionality, benefits, and educational opportunities.

Aims / Methodology
This study aims to assess the potential educational value of the colposcopy MDM by comparing provisional pre MDM management plans with final MDT outcome decisions. Retrospective cohort study performed between 1st January 2010 and 31st December 2019, Jessop Wing Colposcopy Unit, Sheffield, UK.

Results
1011 cases were discussed. Concordance rates for mismatch cases in cytology and histology were 81% and 95% respectively. Seventeen percent (n=136) of cases were referred with no provisional management plan of which, 38% were referred for difficult case discussion; 21% were referred for un-assessable cervix. Provisional management plans were not concordant with final MDT outcomes in 98 cases (15%); 39 (40%) were upgraded from follow-up to treatment; 22 (22%) downgraded from treatment to follow-up; 37 (38%) had follow-up plans amended.
Women referred for un-assessable cervix, difficult case discussion, and no provisional MDM management plan were found to be significantly older than those of other MDM referral categories.

Conclusion
This study revealed educational opportunities for colposcopists, cytologists and histopathologists involved in these meetings with at least 44% of cases being of educational value.
Older women and those with an un-assessable cervix pose significant challenges to clinicians involved in their care, which is clearly reflected in the caseload referred to the colposcopy MDM. The educational value of the MDM is therefore potentially greatest in this specific complex patient cohort.

The Impact of Age and Smoking on Persistent HPV post LLETZ Treatment

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Introduction / Background

Human papillomavirus (HPV) is responsible for nearly all cervical cancer and pre-cancer. Recent studies suggest that the incidence of HPV post large loop excision of transformation zone (LEETZ), may be as high as 40% 6 months post treatment. There are many factors which contribute to persistent HPV infection, including but not limited to smoking, advanced age and immunosuppression.

Aims / Methodology

A retrospective cohort study was conducted of all LLETZ procedures in Galway University Hospital from January 1st to December 31st 2019. The HPV status pre and post LLETZ, age (greater or less than 40), smoking status, and whether margins of the resection were clear or not were recorded. The aim of the study was to evaluate if these factors impacted HPV status post treatment.

Results

329 (n=329) charts were reviewed. 237 women had HPV detected pre-LLETZ. 75 women did not have pre-LLETZ HPV testing performed due to high grade changes on cytology. 9 women did not have HPV detected pre-LLETZ but had gross cervical abnormalities. For 8 women, data was incomplete. 73 (22.2%) women had HPV detected on the first test of cure. Of the women aged 40 or older, 39% had HPV detected post-LLETZ. When looking at the group of women aged less than 40, 20% had HPV detected post treatment. When looking at smoking status, 28% of smokers versus 19% of non-smokers had HPV detected on the first test of cure. Out of women with clear margins 23.5% were HPV positive following their LLETZ and where margins were not clear, in 19.6% had persistent HPV.

Conclusion

This study confirms advancing age and smoking are associated with persistent HPV post LLETZ treatment. Clear margins do not appear to impact HPV status post LLETZ.

The impact of the CervicalCheck controversy on provision of colposcopy services in Ireland

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Introduction
In 2018, an inquiry into the Irish Cervical Cancer screening programme (CervicalCheck) was initiated, following publicised cases of non-disclosure regarding internal audit results of cytology screening in women diagnosed with cervical cancer. The inquiry attracted widespread media coverage and the government offered women free, out of programme screening. It led to an increase in anxiety regarding the quality of cervical cancer screening among both the public and health care professionals.

Aims
We aimed to investigate whether the controversy led to an increase in referrals based on clinical suspicion and the impact on waiting times for abnormal cytology.

Methods
A retrospective cross-sectional analysis compared all colposcopy referrals before (March 2016 - 2018) and after (March 2018 - 2020) the media coverage. The chi-squared (χ^2) test was used to perform between-group analyses.

Results
After the CervicalCheck controversy, referrals based on clinical suspicion significantly increased from 10.1% to 14.2% of all referrals ($p<<0.05$), with no difference in the number reported as abnormal ($p=0.003$). However, a change in practice was seen, with an increase in punch biopsies performed ($p=0.014$) and an increase in abnormal histologies ($p<<0.05$). Target waiting times were not achieved for more low ($p<<0.05$) & moderate grade ($p=0.041$) cytologies after the controversy but severe cytological referrals were unaffected ($p=0.838$).

Discussion
This study highlights the profound impact that the Cervical Check Controversy had on the women attending colposcopy and clinicians performing the screening tests, and the direct impact on women with confirmed cytological abnormalities. The increase in suspicious cervix referrals reflects a lack of confidence in both clinical practice and screening test results. The importance of public trust in the effective delivery of screening services cannot be ignored. Increased resources are required to ensure all women are seen within recommended time frames.

An Epigenome-wide Association Study of Cervical Precancer and Cancer

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Introduction

Cervical cancer is one of the most prevalent and leading cause of cancer mortality for women worldwide. Persistent infection with HPV is associated with the development of cervical cancer. Although most infections are cleared by the immune response, the factors related to persistent infection and eventual carcinogenesis are less well understood. Epigenetic alterations have been shown to be essential in the development of many cancers; while aberrant hypermethylation of CpG sites has been associated with cervical carcinogenesis in several targeted studies, epigenome-wide exploration has been limited. In this epigenome-wide association study we explore differential DNA methylation signatures associated to CIN3 and cervical cancer, to better understand potential drivers and biomarkers of cervical carcinogenesis

Methods

After quality control processes, 247 samples of women attending gynaecological appointments, cervical screening and oncological treatment between 2014-2020 at an English and Greek referral hospital were obtained. Methylation signatures were obtained following bisulphite conversion of DNA extracted from exfoliated cervical cells and sequenced using the Illumina 850k array data. Principle component analysis and linear regression were used to identify associations between clinical variables to variance in the data. Generalized linear models (GLM) and a conditional logistic regression model (CLM) were used to test for association between CpG sites and case-control status. The normality of the p-values of GLM and CLM were assessed to adjust for appropriate confounding variables.

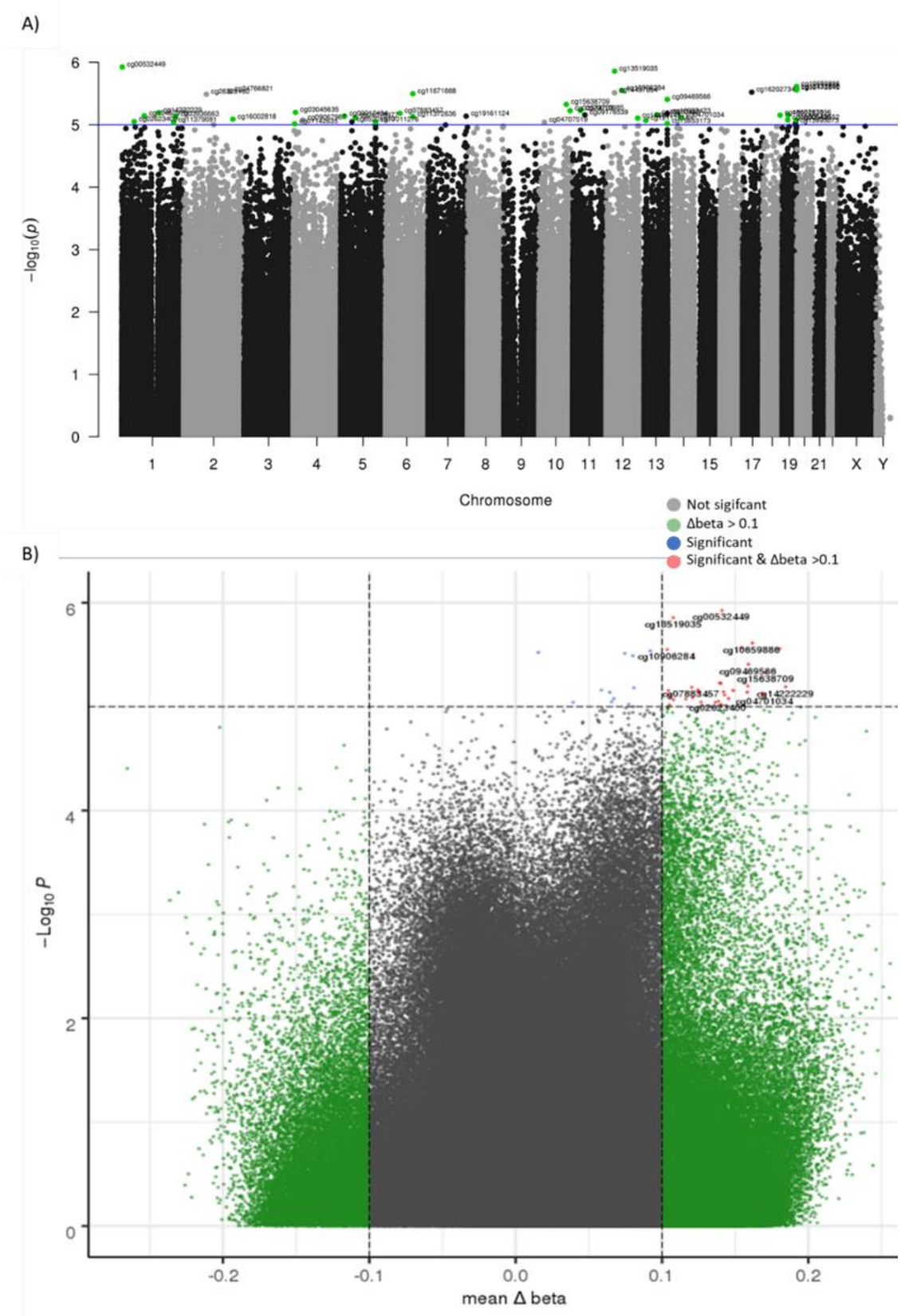
Results

Twelve clinical and technical variables showed significant association to the principle components of beta values. 33 CpG significantly associated to case control status ($p<5x10^{-6}$) and had a mean methylation change of greater than 10% (delta beta>0.1) were identified. All 33 CpG sites showed gain of methylation.

Conclusion

This study highlighted the overall hypermethylation nature of cervical cancer as well as significant CpG sites strongly associated to cervical cancer. We also identified 33 CpG sites significantly associated to case status. Functional annotation suggested two CpG sites in ATX8NOS and ATP8A2 genes were of interest for future functional studies - these genes are currently known be involved in cervical cancer tumorigenesis. Methylation signatures of cervical cancer genes are promising for a diagnostic and prognostic tool.

Figure 1. A) A Manhattan plot of the p-values from the selected GLM models. 44 CpG sites were identified with a p-value of less than $-\log_{10}(10^5)$ shown by the blue p-value cut-off line. CpG sites highlighted in green has a p-value of $-\log_{10}(10^5)$ and mean change in beta value of greater than 0.1 beta. B) A volcano plot showing p-values of each CpG sites (y-axis) and mean change in beta between cases and controls (x-axis).


A)
−log10(p)
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
15
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19
21
X
Y
Not sigifcant
Δbeta > 0.1
Significant
Significant & Δbeta >0.1
B)
−Log10 P
mean Δ beta
-0.2
-0.1
0.0
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cg00532449
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cg10906284
cg10659886
cg09469586
cg15638709
cg14222229
cg04701034

TO ASSESS THE EFFICACY OF SECOND LOOP TREATMENTS IN WOMEN WITH EARLY STAGE CERVICAL CANCER

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[1]*Milton Keynes University Hospital*

Aim
The aim of this audit was to assess the role and efficacy of performing a second LLETZ (large loop excision of the transformation zone) treatment in women with early stage cervical cancer

Methods
Retrospective data was collected from patient records from May 2019 to present. A total of 8 cases were collected during this period.

Results
87.5% (7) of the total population (8) were referred to colposcopy due to abnormal smears. Out of these abnormal smears, 57.1% (4) had severe dyskaryosis and 42.9% (3) had glandular neoplasia. 12.5% (1) of the total population were detected in the gynaecology department at Milton Keynes Hospital.

Out of the patients referred due to an abnormal smear (7), 85.7% (6) underwent LLETZ. Out of this population, 66.7% (4) had more than one LLETZ with 25% (1) of these having no further treatment. The remaining 75% (3) had further treatment – TLH and BSO and one case also having pelvic lymph node dissection. Of this population, 66.7% (2) had clear post-op histology.

Out of the patients referred due to an abnormal smear and who underwent LLETZ, 33.3% (2) had only one LLETZ. 100% (2) of these went on to have further treatment. One patient had a TAH (total abdominal hysterectomy) and BSO (bilateral salpingo-oophorectomy) with block dissection of the pelvic lymph nodes and the other had a TLH (total laparoscopic hysterectomy and BSO with PLND (pelvic lymph node dissection). Both of these had invasive adenocarcinoma of the cervix and therefore the MDT recommended pelvic clearance as opposed to a repeat loop.

Out of the population of those referred with abnormal smears (7), 100% of these had cervical cancer.

Conclusion
Second loops for early stage cervical cancer are effective in eradicating cervical squamous cell cancers however with cervical adenocarcinomas pelvic clearance is likely to be the preferred option when compared to a repeat loop given the risk of skip lesions within the endocervical canal.

Trust and cancer screening: effects of a screening controversy on women's perceptions of cervical cancer screening in Ireland

Sharp L[1], O'Donovan B[2], Mooney T[3], Rimmer B[1], Fitzpatrick P[3], Flannelly G[4], Doherty L[5], Martin C[2], O'Leary J[2], O'Connor M[6]

[1]Newcastle University, [2]Trinity College Dublin, [3]National Screening Service, [4]National Maternity Hospital, [5]Health Service Executive, [6]University College Cork

Introduction / Background

Distrust of the healthcare system and/or medical profession is a barrier to breast and colorectal cancer screening participation. In Ireland, in 2018 an audit of cervical cancers was the subject of significant negative publicity with a focus on 206 women whose previous smears, taking within the national screening programme (CervicalCheck) were upgraded on review. Within a study on influences on cervical screening participation, we explored the impact of this controversy on women's trust in cervical screening.

Aims / Methodology

A purposive sample of women (stratified by age-group and whether their screening history was adequate) was generated from the CervicalCheck register; women undergoing colposcopy clinic surveillance, with cervical cancer or awaiting smear test results were ineligible. Semi-structured telephone interviews were conducted August-December 2019. Interview transcripts were analysed thematically.

Results

48 women were interviewed. All women raised the controversy without prompting. Themes relevant to this were: (1) perceptions of the screening programme; (2) emotional impact of the controversy; (3) potential effects on screening behaviours; (4) positive outcomes of the controversy; and (5) implications for screening programme. Many women described significant loss of trust in screening and feelings of frustration, anger and confusion. The previous reassurance which had been afforded by screening participation was lost. Women who regularly attended screening, and those did not, both expressed doubts about the reliability of screening. They reported anxiety about the accuracy of their past screening tests and those they might have in the future. However, all women had a greater awareness of screening. Several reported increased belief in the importance of screening as a result of health information provided to the public following the controversy.

Conclusions

Women's perceptions of, and trust in, cervical screening have been adversely affected by this screening controversy. These findings provide a key information to inform strategies to rebuild trust in screening.

Understanding influences on cervical screening participation in older and younger women

Sharp L[1], O'Donovan B[2], Mooney T[3], Rimmer B[1], Fitzpatrick P[3], Flannelly G[4], Doherty L[5], Martin C[2], O'Leary J[2], O'Connor M[6]

[1]Newcastle University, [2]Trinity College Dublin, [3]National Screening Service, [4]National Maternity Hospital, [5]Health Service Executive, [6]University College Cork

Introduction / Background

Screening uptake among older women (≥50 years) is sub-optimal. We aimed to: (1) explore factors that influence women's decisions to participate in screening and (2) determine if these differ between older (≥50) and younger (<50) women.

Aims / Methodology

We conducted semi-structured telephone interviews with women invited for routine screening within the national cervical screening programme in Ireland, CervicalCheck. We selected a purposive sample from the screening register, stratified by age-group (younger (<50) / older (50+ years)) and screening history (adequate (attended all routine screening tests) / inadequate (attended none/some screening tests)). Interview transcripts were analysed using a combination of inductive thematic and deductive framework analysis informed by an established psychological framework of influences on health behaviours.

Results

48 women were interviewed (<50, 17; 50+, 31; adequate, 34; inadequate, 14). All interviewees found smear tests unpleasant, but those with adequate screening histories used coping strategies (e.g. breathing techniques) to reduce discomfort. Most interviewees reported that a competent smeartaker could reduce their anxiety. Many older women revealed negative attitudes towards screening, and reported age-related barriers (e.g. embarrassment about their ageing body, vaginal discomfort, considered screening as 'irrelevant' because of their age or lack of sexual activity). In contrast, younger women identified practical barriers to screening participation (e.g. childcare). Younger women were encouraged to attend screening by family members. Older women reported the positive influence of health professionals, who took opportunities afforded by routine appointments to encourage them to attend screening. Women with inadequate screening histories viewed HPV self-sampling kits positively and indicated they would use them if offered.

Conclusions

Strategies to increase screening uptake should acknowledge age-related differences in influences on screening participation. Our findings suggest age-specific information campaigns, HPV self-sampling kits and health professional screening advocates could be valuable in increasing screening uptake in older women.

Using Technology to Harmonise Treatment Approaches in Colposcopy in the Face of a Changing Environment

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[1]University Hospitals Of North Midlands NHS Trust, [2]Birmingham Women's Hospital NHS Trust, [3]Cambridge Universities NHS Foundation Trust, [4]Betsi Cadwaladr University Health Board, [5] Royal Hallamshire Hospital

Introduction / Background

The overall numbers of precancerous lesions are expected to progressively fall as HPV vaccinated women enter the cervical screening programme. Juxtaposed against an increase in referrals from the introduction of primary high-risk human papillomavirus (hrHPV) screening, colposcopists expect to see a decreasing incidence of high grade cervical intraepithelial neoplasia (HGCIN). The challenge will be to correctly identify high grade lesions as conventional colposcopy performs less well when the prevalence of the target lesion is low. It is widely accepted that the diagnostic accuracy of colposcopy needs to be improved and will continue to decline as CIN2 and CIN3 become less prevalent as a result of HPV vaccination and primary HPV screening. In this changing clinical environment adjunct technologies have proved to be a cost-effective method of assessment and reassurance of the patient and colposcopist. Adjunct technology can aid patient management, support colposcopist decision making and facilitate more personalised treatment plans, especially for those cases where conservative management is being considered. We explore the scenarios where adjunct technologies could support colposcopist decision making to aid patient management and facilitate more personalised treatment plans.

What are the indications for LLETZ under general anaesthesia?

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Introduction / Background

The UK national screening programme recommends that >80% of LLETZ's be performed under local anaesthetic. No difference has been found in the quality of specimens taken either under general or local anaesthetic. We have audited the reasons for LLETZ under general anaesthesia to better understand why this procedure is not universally undertaken under local anaesthesia.

Aims / Methodology

All LLETZ performed under general anaesthesia (GA) between the 1st January 2019 and the 31st December 2019 were included (n=70). Data was extracted from electronic theatre records (TheatreMan) and electronic patient records (EPRO/Minestrone). Age, reason for general anaesthesia, histology and LLETZ margin status was recorded.

Results

70 LLETZ were performed under GA out of a total of 507 performed during the study period. Age range was 24-73 years (S.D – 10.7 years/median=35 years). The commonest reason for GA was patient request (n=30/43%), followed by staging for cervical cancer requiring concurrent cystoscopy (n=15/21%). Other reasons: Repeat LLETZ for 1a1 cervical cancer with clinical decision for GA (n=6/9%), colposcopist anticipated difficulty with the procedure and advises GA (n=7/10%), patient requires an additional procedure at the same time (n=1/1%), patient has medical problems necessitating GA (n=5/7%), reason for GA not documented (n=6/9%). Overall, 22 (31%) LLETZ showed malignancy (squamous cell carcinoma n=18, adenocarcinoma n=4). Other histology: CIN2/3 (n=31/44%), CIN1 (n=6), CIN3/CGIN (n=2), CGIN only (n=1), no abnormality (n=8). Margins were negative in 34 (49%) specimens.

The most common indication for a GA was patient request (43%), often due to pain or anxiety. Focusing on ways to make colposcopy less frightening or uncomfortable for the women may decrease the number of LLETZ performed under GA. The other reasons for GA may be less amenable to altering as only a few women were advised by the colposcopist to have a GA due to anticipated difficulty.

Age and hrHPV genotype impact on the prevalence and detection of CIN2+ in hrHPV positive cytology negative samples

Tidy J[1], Lyon R[1], Macdonald M[1], Palmer J[1]
[1]*Sheffield Treaching Hospitals Nhs Foundation Trust*

Introduction / Background
Establish the prevalence of CIN2+ in women referred to colposcopy with persistent hrHPV but negative cytology, according to hrHPV genotype, age at referral colposcopic performance with and without electrical impedance spectroscopy (ZedScan).

Aims / Methodology
Prospective study with descriptive statistics from a single colposcopy unit between June 2014 and July 2019 of women referred with persistent hrHPV but cytology negative routine screening samples. The main outcome measures were; prevalence of hrHPV genotypes and CIN2+, positive predictive value for colposcopic impression, inadequate colposcopic examinations.

Results
3107 women were referred including 1168 who also had a ZedScan examination. Prevalence of CIN2+ was highest for persistent HPV16 infections (10.7%) compared with HPV18 (3.6%) or HPVO (4.7%). Prevalence of CIN2+ declined with age (25-34yrs 14.2% to 55-64yrs 1.1%) whereas the percentage of women with an inadequate colposcopic examination increased (25-34yrs 0.9% to 55-64yrs 29.5%). High grade colposcopic impression fell over time during the study from 16.1% to 5.1%. The PPV for colposcopic impression of CIN2+ was affected by hrHPV genotype (57.3% for HPV16 *vs* 32.1% for nonHPV16). The PPV to detect CIN2+ for all biopsies was 22.8% but when a biopsy was taken and the colposcopic impression was <CIN2+ it fell to 13.7%. The adjunctive use of ZedScan detected an extra 42 cases of CIN2+ which was irrespective of hrHPV genotype (62.9% HPV16, 76.2% nonHPV16). The PPV for a ZedScan directed biopsy was 21.7%.

Conclusions
Primary hrHPV cervical screening increases detection of CIN2+, however, low specificity results in more women being referred to colposcopy with a low prevalence of CIN2+. Colposcopy performs poorly in some groups, particularly with HPVO infections and women over 50 years. The use of adjunctive technology increases detection of CIN2+ irrespective of hrHPV genotype. An appropriate threshold for referral to colposcopy in primary hrHPV screening has not been established.

CGIN - referrals, treatment and outcomes - a 5 year London review

Lyons D[1], Folayan O[2], Zamblera D[2], Rains J[4], Llahi J[5], Smith W[5], Cherfan L[6], Mohan S[6], Evans H[7], Boyle D[7], Osborn A[7], Housni L[7], Jackson A[7], Shah S[7], Harper S[7], Burnham L[7], Majeed G[8], Founta C[8], Marcus N[9], Shutt S[15], Leitch-Devlin L[10], Parberry A[10], Hollebrand E[10], Silva S[10], Prasopkumar P[10], Saravanamuthu J[10], Rosenthal A[11], Sarhanis P[12], Patel C[12], Fadairo O[13], Maheshwari M[13], Freeman-Wang T[14], Raslan F[16], Wood M[17], Carter P[17], Jedrzejak P[18], Bowring J[18], Nyarko E[18], Prashad A[19], Dobson A[19], Wong P[19], Marin J[20], Narine S[20], Green T[21], Bolandi E[21]

[1]Imperial College Healthcare Nhs Trust, [2]University Hospital Lewisham, [3]Queen Elizabeth Hospital, [4]Queen's Hospital, [5]North Middlesex Hospital, [6]Hillingdon Hospital, [7]Royal Free Hospitals NHS Trust - Royal Free, Chase Farm and Barnet Hospitals , [8]Guy's & St. Thomas' NHS Foundation Trust, [9]King's College Hospital, [10]Bart's Health NHS Trust - The London Hospital, Whipp's Cross and Newham Hospital, [11]University College London Hospitals, [12]North West London Hospitals NHS Trust, [13]Epsom & St. Helier NHS Trust, [14]Whittington Hospitals NHS Trust, [15]Princess Royal University Hospital , [16]West Middlesex University Hospital, [17]St. George's Hospital, [18]Homerton Hospital , [19]Croydon University Hospital, [20]PHE SQAS , [21]Cyres Ltd

Introduction / Background

Assessment and Management of High Grade Cervical Glandular Intraepithelial Neoplasia (HGCGIN) across London Units – 5 year review

Publications on management of HGCGIN demonstrate 19.4% developed recurrent in-situ disease and 6% diagnosed with invasive disease, whereas with negative margins, risk of subsequent invasive disease was 0.35% and the risk of recurrent CGIN was 2.6%.

From National statistics - 2.9% Colposcopy outcomes show HGCGIN**.**

Aims / Methodology

Assessment from London Units looked at outcomes in terms of age demographic, contraception, cytology at referral, incidence per year, number of excisions to clearance, subsequent cytology and HPV testing outcomes and number of invasive carcinomas diagnosed.

Query for CGIN outcome published to all London Units via Cyres. Time period for study – 2015 – 2019 inclusive (5 years)

Anonymised excel spreadsheet sent to lead author for collation and assessment from Units.

Overall London data from National statistics publications

Results

19 out of 26 London Units provided data for analysis

Attended referrals to London Units over time period was 189,157. Outcomes with HGCGIN are 812* over 5 year time period. For 19 London Units – **570** patients had a diagnosis of HGCGIN

Most were referred with cytology suggestive of query glandular neoplasia – 313 (55%), the next highest referral group were HG moderate+.

Smoking status was consistent with previous studies with 25% smokers

Age demographic varied between the Units, most women were in 30-40 year old age group.

Excision was mainly LETZ, although some Units used knife cone and NETZ. Most Units adhered to the guidelines of 10mm depth for under 36 there were more second excisions for over 36 years old.

Incomplete or equivocal margins varied between Units and most adhered to second excision/ hysterectomy if persistent positive margins. I patient had 4 cervical excisions (declined hysterectomy) to clearance.

Effectiveness of Cold Coagulation in treating High Grade Cervical Intra epithelial Neoplasia (HGCIN)

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[1]*ABMU University Health Board*

Introduction / Background
To assess the use of the SEMM cold coagulator as an option for treating HGCIN

Aims / Methodology
Design
Analysis of prospective collected of data of all patients treated with cold coagulator for biopsy proven HGCIN at the Singleton Colposcopy Unit between 2016- 2019.

Material and Methods
Patients who have never had any previous treatments for CIN, satisfactory colposcopy at assessment and biopsy proven CIN2-3 with no glandular crypt involvement and treated with Cold Coagulation were included in the study. Demographic data, smoking status, consent for procedure and complications such as bleeding and pain were recorded at the time of treatment. Patient records were also accessed to complete any missing data. Statistical analysis was performed using IBM SPPS software.

Results
The study was carried out over a 40 month period from September 2016 to December 2019. The total sample was 176 women, of which 98 were nulliparous, 61 had less than 2 children and 17 women had more than 2 children. Smoking status was recorded, 110 women were non-smokers and 66 were smokers. The age range of the women sampled was 24-45, mean 31 years. Treatment involved using the SEMM cold coagulator at 100 degree C with multiple applications to cover the AWE areas each application lasting 20 secs under local anaesthetic. Outcomes of treatment were assessed in terms of negative HPV for test of cure at 6 months. 140 patients (85%) were HPV negative at TOC 6 months post treatment. The Odds Ratio (OR) for a negative TOC for a nulliparous women was 1.005 (0.9.1.14), OR for a women <30 yrs for negative TOC was 1.04(0.9-1.02).
13 (8%) were HPV positive cytology negative. 12 (7%) had low grade cytology (2 borderline and 10 low grade). High grade cytology was seen in 2 (1.2%) patients. Patient's needing further treatment for persistence of CIN was also recorded, biopsy proven high grade CIN being detected in 4(3%) of women, 4 of which received a LLETZ treatment. Invasive disease was found in 1 patient. None of the women experienced complications during or after treatment.

Conclusion
Cold coagulation is an effective treatment of HG CIN for women who meet criteria as above and would appear as effective as the commonly used excisional treatments like loop biopsy.

EVALUATION OF THE INCIDENCE OF THERMAL INJURY, TECHNICAL DIFFICULTIES AND PATIENTS SATISFACTION WITH THE USE OF NON-INSULATED INSRTUMENTS FOR LOOP EXCISION IN LOW RESOURCE SETTING

Gahlot V[1], Gupta D, Choubey S
[1]*Yatharth Clinic*

Setting
A case series of 50 patients between 2017 to 2019 in the City Hospital and Research Center in Jabalpur, Madhya Pradesh in India.

Objective
To offer the patients an alternative excisional treatment to hysterectomy for cervical intraepithelial lesions

Background
Loop electrosurgical excision procedure is the standard surgical treatment for cervical dysplasia. It is advised to be performed in majority of the cases under local anesthesia with the use of insulated instruments with the provision of smoke extraction. How ever in this part of the India due to the lack of training, nonavailability of insulated instruments and patients fear of cancer have led to them to choose the hysterectomy as their preferred treatment of choice in cases of dysplasia. On the other hand, women who were desirous of more children went for cryocauterization in few centers. These both are not the standard treatment for cervical dysplasia except in few cases. In this series, all cases were performed under General anesthetic without ETT. All patients were discharged on the same day. No one sustained any thermal injury. The most difficult part of the procedure was smoke extraction during the procedure. The Test of cure was done with HPVDNA in few cases and by conventional smears in others. The Patient satisfaction was measured by their response to follow up. In this series 2 patients since then delivered vaginally a healthy full-term baby.

Conclusion
The loop excision can be performed without the insulated instruments and without any increase in the incidence of thermal injury. It is exceedingly difficult to measure the patient's satisfaction in absence of any other alternative procedure for local treatment.

Longitudinal study of women discharged from colposcopy with a colposcopic impression and or biopsy of CIN1 or less and ZedScan examination confirms low prevalence of CIN2+

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Introduction / Background
To assess the prevalence and risk of developing CIN2+ over a 3 year follow up in women referred with either, low grade cytology or less and a normal colposcopic examination or, CIN1 or less on biopsy who have also been examined using ZedScan.

Aims / Methodology
Prospective cohort study of women referred with low grade cytology, hrHPV positive cytology negative or clinical indication and a normal or LSIL colposcopic examination or CIN1 or less on biopsy from a single colposcopy unit between December 2013 and July 2018 to assess the prevalence and risk of developing high grade CIN during 3 years follow up with follow up cytology.

Results
913 women were eligible; the initial referral result was 579(63.4%) low grade cytology, 268(29.3%) hrHPV-positive /cytology negative and 66(7.2%) clinical referrals or follow up colposcopy. Median follow up was 35 months (range 6 to 60+ months) representing 2399 woman years of follow up. 41 women developed CIN2+ within 36 months, prevalence 4.5% (95%CI 3.3-6.1) and risk of 1.85 (95%CI 1.3-2.5) per 100 woman years. For 430 women who had a colposcopic opinion <CIN2 and ZedScan negative examination the prevalence of CIN2+ was 3.5% (95%CI 2.1-5.8) and risk of CIN2+ over the 3 years was 1.29 (95%CI 0.8-2.1) per 100 women years. For 383 women who had a normal colposcopic opinion and ZedScan negative examination the prevalence of CIN2+ was 3.1% (95%CI 1.7-5.5) and risk of CIN2+ over the 3 years was 1.14 (95%CI 0.6-2.0) per 100 women years.

Conclusions
Women with low grade cytology or less are at low risk of CIN2+ and reverting to 3 yearly screening is indicated within organised cervical screening programmes. The combination of a normal colposcopy and negative ZedScan examination is highly reassuring with a lower prevalence or risk when compared to previous UK studies.

Management of inadequate Colposcopy, is it a challenge for the colposcopists? – An Audit

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Introduction / Background
The colposcopy is termed inadequate (unsatisfactory) when the cells of interest are not visible in women with a positive cervical Screening test. Inadequate colposcopy is a common area of clinical uncertainty due to the lack of clear evidence and guidance.

Aims / Methodology
To evaluate the management of women referred after positive cervical screening with inadequate colposcopy.
Retrospective audit on 222 women referred with abnormal cytology to colposcopy units at WSHFT identified to have had inadequate colposcopy during 2015 & 2018.

Results
Management involved cytology surveillance at colposcopy or in the community, diagnostic loop excision, cervical biopsies & excisional treatment when the biopsy showed HG CIN (high grade cervical intraepithelial neoplasia) and hysterectomy (usually after discussion at colposcopy Multidisciplinary Team -MDT meetings). Excisional treatment was a preferred method of management for women referred with HG cytology & inadequate colposcopy (N=39). 56% of them had confirmed CIN 2+ on histology of Loop excision specimens. Cytology surveillance either at colposcopy clinic or in the community was chosen method of management in those referred with LG cytology/ Positive HR-HPV & inadequate colposcopy (N=183). 9 women in this group had excisional treatment on their first visit; all of them were multiparous, mean age of 44 years, 5 of them had previous cervical treatment, 2 of them were smokers. Hysterectomy (N=8) confirmed CIN2+ in 5 women (62.5%). None developed cervical cancer in cytology surveillance group until the end of the study period.

Conclusions
Colposcopy management of the inadequate colposcopy in women referred with positive cervical screening is still a challenging scenario for all practising colposcopists. Involvement of MDT is important. Recent National guidelines for HPV primary testing comprises colposcopy management on inadequate colposcopy depends on the index referral cytology may help in bench marking of the colposcopists' management on these cases.

N-GYN, Early results of a novel AI image recognition system

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Introduction / Background

Dramatic improvements in camera sensory acuity and computational power have coincided to produce clinically useful image recognition systems. NSV has developed a device to collect and interpret colposcopic images and to discriminate reliably between high grade and low grade (or normal) cervical epithelium.

Aims / Methodology

Using cervical images acquired by the National Cancer Institute (USA) from four different studies we have developed discriminatory algorithms of cervical epithelium. Images that were used to train and test models have associated histopathological data as ground truth. Around 90% of the images with histology were used to train a model while the remaining 10% were set aside to test the model. The values of sensitivity and specificity were arrived at for a model that was trained on 21,000 unique images, augmented to about twice this size, and tested on a smaller set unseen by the model.

Table Characteristics of a trained model comparing predictions from a set of known histopathology

	Trial 1	Trial 2	Trial 3	Trial 4
# of images in training set	**6,534**	**950**	**31,320**	**3,264**
# of images in test set	**728**	**106**	**3,490**	**364**
Sensitivity	78%	70%	66%	62%
Specificity	83%	68%	84%	75%
Accuracy	81%	69%	75%	68%

A future aim is to incorporate n-Gyn's images and determine if this can generate a model with improved test characteristics.

Conclusion

It is now possible train a discriminatory model that correlates the ground truth to a captured image. If we expand this to multiple images acquired with different modalities, we can potentially achieve similar or better test characteristics. This approach has significant advantages over current tests, particularly in low- and middle-income countries.

PATIENT ENTRAPMENT IN THE HPV TRIAGE PATHWAY. WHAT IS THE SCALE OF THE PROBLEM AND IS THERE A SOLUTION?

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Introduction / Background

The HPV Triage Pathway for managing low grade smear abnormalities is ill equipped for dealing with patients with unsatisfactory colposcopy as the clinician is unable to confidently make a colposcopic diagnosis. This leads to patients with scarred or stenotic cervices being trapped in the colposcopy clinic if they keep having low grade cytological abnormality, inadequate smears and/or testing positive for HPV. This study aimed at evaluating the extent of this problem with a view to offering a solution for distressed patients wishing to be discharged.

Aims / Methodology

The colposcopy data base for Darent Valley Hospital provided a list of all patients with unsatisfactory colposcopy over a 5 year period to date, of which a proportion of patients were still unable to leave the HPV Triage pathway. We looked at the final outcome of all these patients in terms of developing serious disease and number of hospital visits.

Results

Out of 4845 women 397 had a record of unsatisfactory colposcopy and of these only 24 (all over age 52) had not been able to leave the Triage pathway because of persistent cytological , HPV abnormality or inadequate smears occurring over at least 5 colposcopy visits. 5 patients had opted not to have further cytological surveillance but still attend for colposcopy.
No patients had gone on to develop histologically confirmed high grade disease but one patient developed moderate dyskaryosis with negative histology on subsequent LLETZ.
Patients trapped in the Triage pathway are not in danger of developing high grade CIN and should be given the option of being discharged if they find the repeat colposcopy and cervical screening visits too distressing.

Review of Colposcopy MDT Meetings at Western Sussex Hospitals NHS Foundation Trust - An Audit

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Background

The role of the MDT of specialists is to discuss individual patient cases and determine the consensus management plans. The primary purpose of the colposcopy MDT meeting is to plan the management of patients with discordant histology, cytology and colposcopic findings.

Aim

To evaluate the quality and compliance of colposcopy MDT meetings at WSHFT with the NHS CSP colposcopy management guidance updated in February 2020.

Methodology

Local SOP for colposcopy MDT meetings & National guidance (both colposcopy & histology) on colposcopy MDT meetings were reviewed. Data collected over one year from January to December 2020. Other resources included regional colposcopy database, Hospital electronic data information system (SemaHelix/Evolve) and MDT outcomes from the minutes of MDT meetings distributed.

Results

Total colposcopy numbers of 13 meetings were carried out at 4 weekly colposcopy MDT meetings at WSHFT during 2020. Total of 125 cases with an average of 9.6 cases per meeting were discussed. The main indication for MDT discussion was discordant between cytology and histology. (N=43), followed by glandular & borderline in endocervical cells/invasive cervical cancer (N=28).

Cytology overcall 10.4%, cytology under call = 2.4% which was re-assuring. Histology overcall was only 0.8%, whereas 12% of the cases were under call, 9% being upgraded to CIN2 or CIN 3 from original report of no CIN or CIN 1. Good MDT attendance with achievement of ≥ 50%. The outcomes of the MDT discussion were recorded and formal minutes distributed to the team and also communicated to the patients and the GP. Appropriate management was carried out as per MDT decision.

Conclusions

Regular audit of MDT case selection and outcomes of MDT meetings should be carried out.

The care and outcomes of women with possible glandular neoplasms detected in cervical smears in Glasgow, Scotland

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Introduction / Background
New terminology for reporting glandular neoplasms detected in cervical smears was adopted in 2013, which divided this group into non-cervical and endocervical groups (NC and EC). Most existing studies reported the care and outcomes of glandular neoplasms without distinguishing between these two groups.

Aims / Methodology
The aim was to review the care and outcomes of women with their first possible glandular neoplasms detected in cervical smears within NHS Greater Glasgow and Clyde.
Women were identified by requesting a Business Objects Number 11 report via the prospectively collated Scottish Cervical Call Recall System. Clinical details were collected retrospectively by digital notes review. SPSS version 20 was used for statistical analyses.

Results
We identified 230 women (NC=41; EC=189) with new possible glandular neoplasm from 486240 smears between 2013-2017. The incidence was 1.7/100,000 and 7.8/100,000 smears per year for NC and EC, respectively. The median follow-up was 4.5 years (IQR: 3.3-5.8).
Compared to women in EC, women in NC were significantly older (median 55 vs 34; $p<0.0001$), more likely to be symptomatic at first review (58.5% vs 10.5%; $p<0.0001$) and more likely to have gynaecological malignancies at presentation (20/41, 48.8% vs 30/189, 15.9%; $p<0.0001$). Women in NC were therefore more likely to have hysterectomies (19/41, 46.3% vs 41/189, 21.7%; $p=0.001$) and die from cancers (4/41, 9.8% vs 1/189, 0.5%; $p<0.0001$) than women in EC. Most women reviewed required surgical gynaecological treatments (196/230; 85.2%).
Moreover, women with abnormal symptoms at presentation were significantly associated with higher risks of endometrial cancer than asymptomatic women in NC (14/41, 58.3% vs 4/41, 23.5%; $p<0.0001$).

Conclusion
Although the incidence of possible glandular neoplasms in cervical smears is low, these women had high probability of significant cervical pathologies and gynaecological malignancies, even if they were asymptomatic. Prompt and thorough treatments and investigations are required to prevent and treat malignancies in these women.

THE ROLE OF AN IUCD IN MANAGING PATIENTS WITH POST-LLETZ CERVICAL STENOSIS

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Introduction / Background

Large Loop Excision of Transformation Zone (LLETZ) is a fertility sparing treatment in women with high-grade cervical intraepithelial neoplasia (HGCIN), however this procedure is known to increase the risk of post-operative cervical stenosis by 1.3-5.2% (1). Despite this, our literature review showed existing case reports were scarce on how to effectively manage these patients when further examination is required.
A 33-year old woman presented to colposcopy clinic in early 2017 after her most recent smear showed severe dyskaryosis. She previously had LLETZ in 2008 for HGCIN. Colposcopy was suggestive of a high-grade abnormality and punch biopsies confirmed CGIN. She underwent 2 LLETZ procedures to ensure complete excision of CGIN and HGCIN. Unfortunately, the follow-up smears (6) were unsatisfactory despite several attempts at dilatation of the cervical os under local anaesthesia.

Aims / Methodology

To describe the use of intra-uterine contraceptive device (IUCD) as a method of ensuring cervical canal patency and enabling adequate smears.
Following multiple attempts at cervical dilatation including cold incision of the scarred os, there was failure to harvest endocervical cells. Of the few case reports published, medicated vascular tents, luminaria tents and contraceptive devices were suggested as treatment.

Results

Since the woman is nulliparous, we chose to adopt the method with least risk of infection and opted for the IUCD. She consented, and under general anaesthesia and scan guidance the os was dilated to size 6 Hegar. A Copper IUCD was inserted and she returned a week later for a smear which came back satisfactory and was reported as negative.
A systematic approach to managing these patients is required to minimise patient distress and provide efficient care when complications post-LLETZ do arise. The use of an IUCD was effective in facilitating smear-taking in this patient with post-LLETZ cervical stenosis and would be an appropriate addition to future guidance on this topic.

References

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Using population health analytics to improve Colposcopy service attendance and outcomes

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Introduction / Background

Using population health analytics to improve Colposcopy service outcomes
Colposcopy clinics in the UK are required to report on 'DNA' outcomes both in terms of new and follow-up patients. Targets are set at <15% DNA's for each group.
Many clinics have challenges with DNA's. This costs any health service time and money. A number of initiatives have looked at methods to reduce these. However these have not been evaluated in different income settings and are applied to all patients.
One method is including Index of Multiple Deprivation (IMD) which is "A relative measure of multiple deprivation expressed at small area level and covering an entire country". The UK reports on this every 3 years and there are also examples from other countries. Little has been done in Colposcopy to include these statistics when designing interventions.

Aims / Methodology

In this paper –

- Look at Colposcopy patients in terms of Attendances and DNA's
- Look at their Deprivation Index Status for each parameter
- Use analysis to review health inequalities
- Consider options to improve attendance incorporating analytics

Results

Deprivation Index for 'attended' patients
Most Colposcopy 'attended' patients are in the lower deciles (most deprived), with most in the 3rd decile.
62% colposcopy 'attended' patients were in the lower 5 deciles.
67% DNA patients were in lower 5 deciles, most again in decile 3.
Patients in less deprived areas are more likely to cancel their appointments than DNA (significant for Decile 10 versus 1)

Conclusion

Use of IMD along with other demographic factors can educate targeted health interventions to improve patient compliance and attendance at colposcopy.
Can review most appropriate contact for patients within different declies and implement different modalities of 'reminders'
Can also review outcomes per decile of deprivation, leading to informed analytics in future targeted interventions

Using Training and Exam Outcomes to inform areas for national audit and improvement in training

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Introduction
BSCCP OSCE exam - exit exam that allows colposcopists to enter independent practice.

Aim of the Training Programme
- Enables students to obtain the core knowledge
- Develop necessary skills
- Gain professional attributes to enable competency in Colposcopy
- OSCE Exit exam

Examination statistics are undertaken after every examination to review the performance of the exam overall and the individual questions.
Previous statistics have shown challenges for candidates in terms of questions related to the management of glandular disease.
The BSCCP Certification and Training committee (CTC) have reviewed the glandular questions in the question bank and deemed them suitable for examination in terms of management of glandular disease.

Methods
Detailed analysis after each examination has shown that candidates are challenged when undertaking written questions and also questions looking at management of glandular disease
The CTC review and update any questions that have shown a consistently high failure rate.
The data outcomes are publicised at BSCCP Training the Trainers Meetings as part of informing trainers to ensure their trainees are informed of the correct management.

Results
Through reviewing detailed examination statistics the CTC have demonstrated that candidates still have challenges with written questions, especially glandular disease management.
To address this the CTC has developed example written questions for trainees and will also hold workshops at BSCCP Training the Trainers Meetings to help trainers with written question completion and also glandular disease management.

Conclusions of your study/research
Use of detailed examination statistics can indicate areas of difficulty in practice and allow the CTC to create solutions to improve performance.