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O-1 THE IMPACT OF HPV TRIAGE ON COLPOSCOPY SERVICES IN HULL. WILL HPV 16/18 VACCINATION HAVE A LONG TERM EFFECT ON HIGH GRADE DISEASE PREVALENCE?

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The North East Yorkshire and Humber Clinical Alliance has the highest incidence of invasive cervical cancer in England & Wales (NCIN, 2012). The city of Hull is the second most deprived borough in England & Wales. In Hull, HPV vaccination rates in the routine cohort are high, with 90% coverage over 3 doses. Cervical screening uptake however is low, at 75%.

Prospectively collected data from the Hull Royal Infirmary Cytology Laboratory and Colposcopy Clinic are presented from April to December 2012.

Results: 1168 cervical samples were tested for HRHPV (Cobas HPV, Roche).

Of the 792 screening samples tested, 750 were borderline nuclear abnormality (BNA), 42 mild dyskaryosis.

400/750 BNA samples were positive for HR HPV (53%). 34/42 Mild dyskaryosis samples were HR HRV positive (81%).

The overall HR HPV positive rate in 'screening' samples is 55% 376 'test of cure' samples were analysed. 80/376 (21%) were HR HPV positive.

Data will be presented on the colposcopic/biopsy findings in the HR HPV positive women referred to the colposcopy clinic.

HR HPV positive samples were further analysed for HPV 16/18 or other HR HPV types.

180/514 (35%) of samples were positive for HPV 16/18, 334/514 (65%) were positive for HR HPV types other than 16/18.

Conclusion: HPV prevalence in low grade cervical samples from our laboratory is in line with results from the Sentinel sites.

The relatively low incidence of HPV 16/18 in this cohort is a matter of interest. Further characterisation of the prevalent HPV types in this region may shed further light onto the high incidence of cervical cancer. Data on the cross protection afforded by HPV 16/18 vaccination is the subject of ongoing research.

More studies are needed on the HPV types in invasive cervical cancer diagnosed in women in the North East Yorkshire and Humber Clinical Alliance.

O-2 HPV TRIAGE IN WOMEN WITH BORDERLINE OR MILD DYSKARYOSIS ON CYTOLOGY. A SENTINEL SITE EXPERIENCE

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The sentinel sites study looked at HPV testing in 10,051 women as a triage for borderline or mild dyskaryosis. Northwick Park Hospital was one of the sentinel sites

1614 women were seen in colposcopy for the first time as part of the sentinel sites project between 2008-2012. According to national protocol, women with negative colposcopy, no CIN on biopsy, or no biopsy at first visit would have been discharged, but at Northwick Park hospital they were seen again 6, or 12 months later. No invasive cancers were identified in the group.

1327 biopsies were taken during the first visit. 348 (21%) were CIN1, and 119 (7%) were CIN2/3.

Women who were pregnant, or who had unsatisfactory colposcopy were excluded from this study. During subsequent visits a further 27 women had histologically confirmed high grade CIN. This group had negative colposcopy, no CIN on biopsy, or no biopsy during their first visit. These women would have already been discharged according to national protocol. 4 out of 27 women had a normal initial colposcopy, 23 had a low-grade colposcopic impression. 16 out of these 27 women had high grade CIN confirmed within 24 months of referral.

In this study, initial colposcopic assessment of low-grade HPV Positive cytology yielded 119 HGCIN, and an extra 27 (22.6%) HGCIN cases were identified later

All 27 would be eligible for cytology recall 3 years after the original referral, and may have been picked up assuming they attended.

O-3 AN UPDATE ON ALTERATIONS OF HPV-RELATED BIOMARKERS AFTER PROPHYLACTIC HPV VACCINATION

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Objectives: To investigate whether HPV vaccination can alter HPV-related biomarkers in women referred for colposcopic evaluation.

Material & Methods:

Design: prospective observational study.

Setting: University Hospital of Ioannina.

Population: Women attending colposcopy clinic for further assessment of abnormal cytology who were advised and accepted HPV vaccination, were compared with a similarly referred group without vaccination. Women requiring treatment were excluded.

Intervention: HPV vaccination (Cervarix or Gardasil). An LBC sample was obtained prior and after the completion of the vaccination regime that was tested for a number of HPV-related biomarkers including HPV typing and E6 & E7 mRNA (NASBA & flow cytometry) and p16INK4a.

Outcomes: Alterations of HPV-related biomarkers at 6m time visits after initial evaluation in both groups. Analysis: The p-values, Relative Risk (RR), Absolute Relative Risk (ARR), NNT and 95% Confidence Intervals for each group were assessed.
Results: A total of 425 women were included. Ninety-one women were vaccinated (Group A). HPV vaccination reduced statistically significant the HPV positivity rates for 16 and 18 subtypes (p=0.01) [RR=0.25: 95%CI (0.07 to 0.9), ARR=0.5: 95%CI(0.16 to 0.7), NNT=2], in women tested DNA positive for HPV infection 16 or 18 prior to the vaccine. The same significant reduction was shown for the women tested also positive for HPV DNA & mRNA E6 & E7 expression for the particular HPV subtypes (p=0.001) [RR=0.058: 95%CI (0.003 to 0.8), ARR=0.62: 95%CI(0.31 to 0.78), NNT=1: 95%CI(3to1)].
Implications and Impact: HPV vaccination appears to reduce significantly the rates of positivity for 16 & 18 HPV infections and possibly could enhance HPV clearance. The above findings need to be confirmed in larger cohorts.

O-4 THE IMPACT OF HPV GENOTYPES ON COLPOSCOPIC FEATURES IN WOMEN OFFERED HPV IMMUNISATION

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Background: In 2008, the HPV 16/18 vaccine was introduced to the UK immunisation programme as a primary preventative measure against cervical cancer. Given that HPV 16 is thought to be responsible for colposcopic features considered representative of high grade CIN, missed diagnoses of CIN may be more common in immunised women.

Aims: To determine if there is an association between HPV genotype and colposcopic features seen in women vaccinated against HPV who have an abnormal smear result.

Methods: This study is recruiting women aged 20-25 years in Aberdeen and Edinburgh referred for colposcopy with an abnormal cervical cytology test. Information is collected regarding referral cytology, parity and vaccination status. Colposcopic findings and Reid's Colposcopic Index are recorded and a cervical sample is obtained for HPV genotyping.

Results: Of the 23 women recruited so far, the mean age was 22.4 years and 35% had received the HPV vaccine, compared to 65% in the catch up programme. 9 women (39%) were referred with borderline changes, 5 (22%) with mild dyskaryosis, 7 (30%) with moderate dyskaryosis and 2 (9%) with severe dyskaryosis. None of the women referred with moderate or severe dyskaryosis had been vaccinated: of the vaccinated women, 3 (38%) were referred with mild dyskaryosis and 5 (62%) were referred with borderline changes. In the opinion of the colposcopists, 10 women (44%) had low grade CIN, 10 (44%) were high grade CIN and the remaining 3 were normal or had HPV/inflammatory/benign changes. Data on HPV genotypes and histology results are not yet available.

This study is ongoing. Further data and its analysis will be presented in April 2013.

O-5 HOW TO REDUCE THE CERVICAL SCREENING DEFAULTER RATES? EVIDENCE FROM MULTIPLE STUDIES CONDUCTED IN DUMFRIES AND GALLOWAY HEALTH BOARD

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Objectives: To explore the ways of improving the cervical screening attendance in UK.

Methods: Cervical screening defaulters in Dumfries and Galloway were identified from the Scottish Cervical Call-Recall System. Liquid based cytology was offered to defaulters through lunch time, evening and weekend clinics in addition to the routine way. Apart from cytology, women aged 30 years and older were given the option to self collect a vaginal sample with the Evelyn® device at home for human papillomavirus (HPV) screening. Hologic Cervista® HR HPV testing has been carried out at the Scottish HPV Reference Centre in Edinburgh. Whilst 1000 randomly picked women were sent an invitation letter to request a self sampling kit, 200 were sent a kit with the initial letter. HPV positives were cytology triaged for colposcopy. HPV negatives were advised to accept their next screening invitation. HPV positive but cytology negative women will be called for a repeat cervical sample in 12 months for co-testing. Women who declined any form of screening were asked to complete a questionnaire and to comment regarding their decision. Qualitative data has been collected from respondents.

Results: A total of 217 (22%) defaulters responded to the 1000 women cohort. It was 59 (30%) in the 200 women cohort. The cervical smear uptake rate at 1 month was 2%, 2% and 5% with no intervention, standard screening letter and multiple smear options letter; respectively. Screening defaulter rate has fallen by 733 (12%) from 6106 in 8 months. Practical reasons appear to be the main barrier to attend routine screening. Almost all respondents said that if they had the option of self sampling, they would regularly participate in future cervical screening.

Conclusions: Multiple screening options have been welcomed by screening programme defaulters in Dumfries and Galloway and they appear to reduce the defaulter rates.

O-6 PREVALENCE AND PREDICTORS OF ANXIETY AND WORRIES IN WOMEN FOLLOWING COLPOSCOPY: RESULTS FROM A LONGITUDINAL STUDY

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Background: Longitudinal data on the psychological after-effects of colposcopy and related procedures is limited. We investigated women's anxiety and worries at three time-points following colposcopy.

Methods: Questionnaires were mailed to women 4-, 8- and 12-months following an initial colposcopy at two large Dublin hospitals. Anxiety was assessed by the Hospital Anxiety and Depression Scale[1] and worries about cervical cancer, future fertility and having sex by the Process Outcome Specific Measure (POSM)[2]. Prevalence of significant anxiety (HADS anxiety score ≥11) and each worry was estimated at each time-point and multiple logistic regression used to identify factors associated with risk of anxiety or worry.

Results: 584 women were recruited (response rate=73%, 59% and 52% at 4, 8 and 12-months respectively). Prevalence of significant anxiety was steady over time (21%, 23% and 20% at 4, 8 and 12-months). The most common worry concerned future fertility; 56% were worried at 4-months, falling to 47% at 8-months and 39% at 12-months. Worries about cervical cancer fell from 36% at 4-months to 23% at 12-months. Worries about having sex were least frequent and also declined over time (from 29% at 4-months to 18% at 12-months). In adjusted models, nulliparity and age were significantly associated with worries about future fertility. Risk of cervical cancer worries was increased in women who had another abnormal smear before the one(s) which resulted in the recruitment colposcopy and who reporting ever having depression, and was reduced in women without children.

Conclusions: Significant proportions of women attending colposcopy report anxiety or worries afterwards. While worries declined over time, the proportions affected remain high at 12-months. Interventions are needed that effectively allay women's concerns thereby helping minimise the adverse (albeit unintended) effects of cervical screening.

[1]Snaith RP & Zigmond AS. *Acta Psychiatr Scand* 1983;**67:**361-70.

[2]Gray N et al. *Quality of Life Res* 2005;**14**:1553-62.

O-7 DOES RECEIVING HUMAN PAPILLOMAVIRUS (HPV) VACCINATION INFLUENCE WOMEN'S PLANS TO ATTEND CERVICAL SCREENING?

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Aim: To investigate if receiving HPV vaccination influences women's plans to attend cervical screening.

Methods: Young women aged 16 or over who were eligible for HPV vaccination in the UK vaccine programme were recruited from three genitourinary medicine clinics, five Brook centres and two schools to complete a written questionnaire measuring risk compensating behaviour. This was developed following preliminary work exploring the theoretical constructs of risk compensation theory. Logistic regression adjusting for vaccination cohort was used to compare participants.

Results: Of 822 participants 73.5% (n=604) had received at least one dose of the vaccine. 8.4% (49/584) of vaccinated women anticipated they would risk compensate by being less likely to attend cervical screening following vaccination. Risk compensating women were significantly more likely to: have had four or fewer sexual partners in their lifetime (AOR=2.75, 95%CI=1.00-7.50), not smoke at all (AOR=2.4, 95%CI=1.49-5.88), be more likely to worry about health (AOR=2.00, 95%CI= 1.03-3.84) and worship regularly (AOR=2.49, 95%CI=1.29-4.82). Conversely, 32.5% (190/584) expressed increased intention to attend cervical screening following vaccination. These women used alcohol once a week or less (AOR=1.75, 95%CI=1.03-2.95) and were drunk less often (AOR=1.93, 95%CI=1.01-3.69).

Conclusion: Receiving HPV vaccination leads some women to anticipate they will be less likely to attend cervical screening, but a larger number believed they would be more likely to attend.

O-8 HPV-RELATED ATTITUDES AND BEHAVIOURS OF GPS AND PRACTICE NURSES: PRELIMINARY SURVEY RESULTS FROM PHASE 2 OF ATHENS (A TRIAL OF HPV EDUCATION AND SUPPORT)

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Background: ATHENS is developing a practical, theory-based, resource to support primary care practitioners' HPV-related clinical practice. In this second phase, we conducted a survey to identify the: 1) frequency and distribution of HPV-related clinical behaviours which the resource will target; and 2) factors influencing these behaviours.

Methods: A survey, developed following in-depth interviews, was mailed to random samples of 880 GPs and 880 practice nurses. It included questions on HPV-related clinical behaviours and potential influences on these, following the domains of the Theoretical Domains Framework.

Results: 238 GPs (27%) and 459 practice nurses (53%) participated. Most GPs (80%) and practice nurses (85%) agreed that discussing HPV with patients is important. However, in practice, both GPs and practice nurses said they discussed HPV with approximately half of women attending for smears (median=4/5 out of 10 respectively). Support for vaccinating 12 year old girls was high (87% of GPs and practice nurses). In practice, GPs said they discussed HPV vaccination with only half (median=5 out of 10) of mothers with daughters of this age. Professionals' awareness of HPV testing was limited and 74% of practitioners said they did not have enough information about it. Nonetheless, 67% felt it would be useful in primary care.

Conclusions: These findings reveal an interesting contrast between the attitudes and behaviours of practitioners in relation to HPV. Further analysis will use multivariate models to explore other drivers of HPV-related behaviours. ATHENS will facilitate best practice and help ensure women receive up-to-date information and appropriate advice.

O-9 THE SATH STUDY: PRETERM DELIVERY RATES IN WOMEN FOLLOWING A FIRST AND SECOND LLETZ CONISATION FOR CIN PATHOLOGY

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Objectives: To investigate the preterm delivery (PTD) rate following LLETZ conisation.

Methods: Women with single and repeat LLETZ conisation for CIN pathology were identified from the colposcopy database of our hospital during a 14-year period (1998-2012). Obstetric data were also collected from the Medway® and CDS® database in our department. The relative risk (RR) for PTD after conisation was estimated.

Results: During the study period in our Trust, 5528 women had a single LLETZ conisation and 186 women had repeat conisation. There were 67979 singleton deliveries and 2448 spontaneous singleton preterm deliveries (PTD=3.6%). Inductions of labour and caesarean section deliveries at less than 37 weeks were excluded. In the cohort after single conisation, 1264 term deliveries and 99 spontaneous preterm deliveries were identified (PTD=7.26%). In the cohort with repeat conisation, 28 term deliveries and 7 spontaneous

preterm deliveries were identified (PTD=25%). After first conisation, women delivering preterm were younger to women delivering at term (29.4±4.7 vs 31.8±4.5; p<0.001). Smoking status and parity was similar between the two subgroups. After second conisation, the mean age, smoking status and parity of women with preterm deliveries was similar to that of women delivering at term. Pre-term premature rupture of membranes (PPROM) rate was 28.3% after single conisation and 42.8% after second conisation. In the cohort of women with repeat conisation, even though the cone depth was similar in the two subgroups, nevertheless a larger though non-significant (p=0.19) cone base was excised in women having repeat conisation and PTD. The relative risk for PTD following first conisation was RR=2.01 (95%CI: 1.66-2.44; p<0.0001) and following second conisation was RR=5.5 (95%CI: 2.85-10.78; p<0.0001).

Conclusions: Our study has shown that when using as control group the general population, the risk for spontaneous PTD following a single and second conisation increases two-fold and five-fold, respectively.

O-10 RISK OF PRETERM DELIVERY AFTER TREATMENT FOR CERVICAL INTRAEPITHELIAL NEOPLASIA IN ENGLAND

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Objectives: To estimate the association between treatment for cervical intraepithelial neoplasia (CIN) and the risk of preterm birth in England; specifically whether the depth of excision modifies the risk.

Methods: We carried out a cohort study (phase 1) with a nested case-control study (phase 2) using record linkage. We identified women with a histological sample taken at colposcopy between 1989 and 2011 who were then linked by HES (Hospital Episode Statistics) to hospital obstetric records to identify live births. The risk of preterm birth following excisional treatment for CIN was calculated. Using phase 2 data we consider the depth of excision and calculate absolute risks. Analyses were appropriately adjusted for confounders.

Results: Phase 1 included 18,441 singleton births, with a preterm birth rate of 8.8% compared to 6.7% for England. Phase 2 included 401 births before histology and 1590 after, with about half preterm (by design). Of those with a birth after histology 991 (49.5% preterm) had a single treatment and 519 (44.3% preterm) had a punch biopsy only. Compared to those with a punch, there was no excess risk of preterm delivery when the depth of excision was ≤14mm (risk ratio (RR) 1.27, 95% CI: 0.95–1.72), however the risk was doubled in women with multiple excisions or depth ≥15mm (RR 2.12, 95% CI: 1.46-3.10). The absolute risk of preterm delivery following a punch was 8.3%, 10.6% for excisions ≤14mm and 17.7% for multiple or large excisions.

Conclusions: The risk of preterm delivery in women treated in England was substantially less than in other studies. The increased risk was largely restricted to women with multiple or large excisions which carried double the risk when compared to those who receive a punch biopsy only.

O-11 THERMO-COAGULATION FOR THE TREATMENT OF CERVICAL INTRAEPITHELIAL NEOPLASIA: A SUCCESSFUL ALTERNATIVE TO CERVICAL EXCISION? TREATMENT SUCCESS RATES AND OBSTETRIC OUTCOMES

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Objectives: There is little current data relevant to UK practice establishing the "cure" rates of Thermo-coagulation (Thermo) for the treatment of cervical intra-epithelial neoplasia (CIN) and subsequent obstetric outcomes. The aim of this retrospective audit was to establish cure rates and preterm delivery rates (PTD) following Thermo.

Methods: Retrospective data collection of all patients (n=614) undergoing Thermo at the Shrewsbury and Telford Hospitals during the period of 2000-2012. Pre-treatment cytology and histology were collected with subsequent follow-up cytology for 558 (90.8%) patients. Fifty six patients had incomplete data. Data on additional treatments following the Thermo was also collected. Cure rate was taken as no dyskaryosis on cytology at ~12 months post treatment. The PTD rate was defined as spontaneous deliveries <37/40.

Results: We have complete data for 558 of 614 women who underwent Thermo. Median age was 27 years (range 18-57 years). Pre-treatment histology confirmed CIN2+ in 71% (398/558). The cure rate at ~12 months was 95.7% (534/558), with only four (0.7%) having high-grade dyskaryosis. Excisional treatment was required in 3.58% (20/558) of patients for persisting dyskaryosis, of which 55% (11/20) had CIN2+ and one had a 1b1 squamous cervical cancer not suspected on cytology, colposcopy or punch biopsy pre-treatment. Following thermo 126 deliveries occurred of which 11 (8%) were spontaneous prior to 37/40 (range 27^{+0} - 36^{+6}), which is similar to our own post LLETZ group who had PTD rate of 7.26% (99 of 1363 deliveries) but higher than our overall spontaneous PTD rate of 3.6% (2448 of 67979 deliveries).

Conclusion: Thermo has a cure rate of 95.7% at ~12 months post treatment, well in excess of the BSCCP standard of 90% and a PTD rate of 8%. Consideration should be given for a more widespread use of Thermo as part of the management of CIN.

OP-1/P-59 DOES ETHNICITY AND COUNTRY OF ORIGIN HAVE AN IMPACT ON STAGE AT DIAGNOSIS IN CERVICAL CANCER?

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Introduction: The impact of ethnicity on the stage at diagnosis of cervical cancer in the UK is unknown.

Methods: The ethnicity of women diagnosed with cervical cancer in the Pan-Birmingham network between 2005 and 2009 was investigated. Data on country of birth was acquired from Cancer Registry and hospital databases. Countries were categorised into high-, middle- and low-income according the World Bank country classification.

Results: In total 486 cases were identified. A country of birth data was available for 461 (94.9%) cases. Of the women born outside of the UK/Ireland, 40 (59.7%) originated from low-income, 23 (34.3%) from middle-income and 4 (6.0%) from high-income countries. There was no significant increase in the number of cervical cancer cases occurring in non-UK born women over the 5-year period. Women from middle-income countries were more likely to have been non-compliant with the screening programme compared to women from high- and low-income countries, 69.6% versus 47.0% and 32.5% respectively. However, women from low-income countries were more likely to be diagnosed with stage 2+ disease compared to high- and middle-income countries, 62.5% versus 37.4% and 17.4% respectively.

Conclusions: Patterns of migration, including country of origin data, need to be considered when planning cervical cancer treatment services. Increased awareness of the National Screening Programme amongst women recently moved to the UK may enable detection of cervical lesions at the pre-invasive stage, potentially reducing the number of cervical cancer cases diagnosed in this population.

OP-2/P-66 A MULTI CENTRE REVIEW OF COLPOSCOPY REFERRALS IN AGE GROUP UNDER 25 YEARS

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Introduction: Cervical screening in England starts at age 25. Screening has not shown to be effective in reducing the incidence of invasive cancer in women under 25 years old. Screening may lead to increased anxiety, overtreatment and a possible impact on premature delivery.

Objective: Main aim of the study is to assess referrals to colposcopy clinics in women aged less than 25 years and study the reasons for referral, findings and outcomes.

Methods: Data was collected from 12 London hospitals for the period of one year. Cases were identified by database of individual units and overall London data was obtained from Quality Assurance report. Anonymised data was entered onto a spreadsheet and analysed.

Results: Referrals in women aged under 25 years ranged from 0.4% to 8.7% of total referrals to the Units, average 4.2% of total referrals to colposcopy. 52% of women were aged between 16- 23 years and 48% of women were of age 24 years. Two thirds were referred for abnormal cytology, one third were for urgent/non urgent clinical indications. In the abnormal cytology group, 80% of them had low grade and 20% had high grade referral cytology. Post coital bleeding was the main clinical indication. One third women smoked in this age group. 70% of referrals for clinical indications had swabs for microbiology tests. 25% of women had high grade abnormality on biopsy and most of them underwent treatment.

Conclusions: We continue to get referrals for abnormal cytology in the age group less than 25 years. 25% of women get treated for biopsy confirmed high grade CIN. Hence, we recommend regular review of under 25'S referrals to Colposcopy with comparison of data from other units. It is prudent to consider conservative approach to CIN 2 in young women where appropriate.

OP-3/P-51 STANDARDISATION OF CERVICAL LARGE LOOP EXCISION BIOPSY PROCESSING: SURVEY OF HISTOPATHOLOGY LABORATORY PRACTICE IN THE NORTH OF ENGLAND

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Objective: To review current practice in the handling of cervical loop excision biopsy specimens and identify areas of good/poor practice. Recently, a trend towards managing small-volume cervical cancers with conservative surgery has emerged with encouraging results for recurrence-free survival and fertility preservation. In order to correctly select cases which may benefit from conservative management it is essential for pathologists to process cervical excisional material systematically to ensure accurate and reproducible determination of tumour dimensions.

Methods: Questionnaire survey of loop excision biopsy processing techniques sent to 23 histopathology laboratories, North East, Yorkshire & Humber Stategic Health Authority regions, England in 2009-2010. Outcome measures: 1) Indications for cutting levels, 2) Number of levels cut, 3) Technique of handling loop specimens

Results: In 22 of 23 laboratories cervical loop excision biopsy specimens were dissected by medical staff. In all laboratories specimens were divided into serial parasaggital blocks for production of histology slides. The practice of routinely cutting levels for loop specimens varied greatly amongst laboratories. Twelve did not cut levels, 10 cut some and of these 5 did so on all slices. Eleven out of 23 laboratories cut 3 levels on each slice, and one laboratory cut 6 levels. All laboratories would refer cancer diagnoses to a local MDT but only 18 would refer histology for cancer centre review.

Conclusion: Large variation in the processing of cervical loop excision biopsy specimens exists. A standardised approach to processing these specimens is advised in order to reliably select small volume cervical cancers for conservative management.

OP-4/P-64

DISEASE, TREATMENT, PATIENT WHAT DETERMINES HPV TEST OF CURE?

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Background: Lanarkshire has a high post treatment HPV positive rate of 30% but the abnormal cytology rate is within normal range at 6.2%. We analysed data to determine what factors could account for such a high rate.

HPV ‹Test of Cure› was introduced in Scotland from 30th April 2012. Data from the sentinel sites reported HPV positive rates of 18%. The HPV positive rate increased with age and decreased for higher grade lesions.

In Lanarkshire approximately 580 women are treated annually for CIN. There is a high rate of treatment by ablative rather than excisional methods with 52% treated with cold coagulation compared to 25% across Scotland.

We looked at factors to see if any could explain our high post treatment HPV rate.

Methods: Women who had a post treatment HPV test were identified from SCCRS, Scottish cervical screening system. Data for analysis was obtained from the Scottish colposcopy database in an excel spread sheet and analysed using SPSS. Data on patients' age , grade of CIN, method of treatment and deprivation index were analysed against post treatment HPV result.

Results: We have carried out a preliminary analysis on 209 women with HPV results up to mid-December. Analysis will be carried out on results up to end of March.

Low grade disease has a higher incidence of HPV positive compared with high grade.

Age: increased incidence of HPV positive in under 25s.

Treatment: There was no difference in women treated by ablative or excisional methods.

Deprivation index made no significant difference and HPV positive was more common in the least deprived quintile.

After data is complete we will perform a regression analysis.

Conclusion: We have not yet found a cause for our high rate of positive HPV results but differences may be more apparent with increased numbers.

OP-5/P-5

CERVICAL SMEAR FOLLOWING SUBTOTAL HYSTERECTOMY: RISK OF INAPPROPRIATE CESSATION FROM CERVICAL SCREENING PROGRAMMES

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Background: A potential pitfall of the increasing trend towards subtotal hysterectomies (STH) could be a miscommunication regarding the nature of the procedure leading to inappropriate cessation from cervical screening programmes (CSP).

Objective: To study 1. National /regional trends of STH 2.Smear follow up data of women undergoing STH in the region covered by NEYH QARC from 2000-2009.

Methods: Anonymous national and regional data for STH were obtained from www.hesonline.nhs.uk and direct contact with hospital data/ information managers. Data on cervical screening history were obtained from open Exeter system www.openexeter.nhs.uk and call/ recall screening offices.

Results: Nationally, the STH rate increased from 10.6% to 13.5% (2000 -9) (% of all hysterectomies; age 15-59 years) with a regional variation in this trend. In the NEYH region, smear follow up data was available for 1940/1996 women undergoing STH. 91.8% women had a negative smear history pre STH. 1083 women were CSP compliant pre STH; 81.4% of them were CSP compliant post STH. 28 women (1.4%) had abnormal smears (≥mild) following STH. 2 women were diagnosed of cervical cancer; 1 at the time of STH and 1 case after STH (0.05% of 1996 women). 517 women (26.7%) had no follow up smears. 465 women (24.05%) were ceased from CSP; 193 of them (~10% of STH) were ceased as having 'no cervix'. In the North East region, 150/1197 (12%) women who had STH, were inappropriately ceased from CSP as no longer having a cervix; 41 of them have been recalled back. 3/ 8 trusts in this region had significant increase in the STH rates; the rates of inappropriate smear cessation in these trusts were- 16.6%, 15.8% and 14% respectively.

Conclusion: Careful counselling and information must be given to the women and their GPs regarding the need for smear follow up if STH is offered.

OP-6/P-52 DIAGNOSIS HIDDEN UNDER AGUS ANS ITS RELATION TO HUMAN PAPILLOMAVIRUS (HPV) DETECTION

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Introduction: Atypical glandular cells of undetermined significance (AGUS) are an infrequent cytological report that can predict a variety of final diagnosis including cervical neoplasia.

Methods: A prospective and descriptive observational study between 2008 and 2012 of 55 patients with a report of AGUS in their cervical screening cytology who where referred to the colposcopy clinic.

All the patients underwent a colposcopy as well as a liquid based-cytology with HPV detection, an endocervical curettage and a gynaecological ultrasound. Depending on the diagnosis orientation a cervical and/or endometrial biopsy was performed, a hysteroscopy or a cervical conization.

Results: The final diagnosis where: 21 (38%) of Cervical Intraepithelial Neoplasia (CIN), in 5 cases a glandular neoplasia (3 of them AIS). One case was a cervical squamous cancer; another was an endometrial carcinoma and also one bladder squamous neoplasia. In 7 patients (13%) the only finding was an endocervial or endometrial benign polyp. In 19 cases (35%) no pathology was detected, the cytology was repeated at least twice within 6-12 months time, and the AGUS report did not appear again, those patients where considered as *normal*.

When relating the final diagnosis to HPV detection, it was positive for high risk HPV in 100% of CIN, AIS, and glandular neoplasia, as well as the patient with the cervical squamou cancer. Only 14% of the patients diagnosed of benign polyp where HPV positive and 21 % of the normal patients.

Conclusions: We found a high prevalence (58%) of CIN, AIS or uro-genital neoplasia under a cytology showing AGUS. All cervical or glandular intraepithelial lesions or neoplasia were HPV positive, therefore, HPV detection may have a high negative predictive value to discard those pathologies. The size of our study due to the low prevalence of AGUS requires additional studies to confirm this hypothesis.

P-1 MANAGEMENT OF WOMEN WITH INADEQUATE COLPOSCOPY DUE TO CERVICAL STENOSIS - DOES TESTING FOR HPV HR TYPES HELP?

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Introduction: inadequate colposcopy secondary to cervical stenosis occurs commonly following excisional treatment and in postmenopausal women. Clinical dilemmas arise in association with cytological abnormalities as women cannot be reassured that they are free of residual CIN. Management options range from hysterectomy to withdrawal from screening.

Aims: this audit examined the management of women with inadequate colposcopy secondary to cervical stenosis.

Methods: retrospective audit of women referred to the local colposcopy MDT with inadequate colposcopy due to cervical stenosis from November 2011 to October 2012. Standards were taken from NHSCSP document 20.

Results: 28 women were eligible, 4 required repeated MDT referrals. In 13 cervical stenosis occurred after excisional treatment.

HR HPV types were tested in 23 women and detected in 14. Women with HR HPV were more likely to be offered LLETZ or TAH (9/14) whilst women who tested negative for HR HPV were more likely to be returned to routine recall or withdrawn from screening (7/9). Of the 11 excisional treatments performed only one had high grade CIN on histology; this woman had HR HPV. In total 3 women were offered TAH, one woman who had no HR HPV but had previous incompletely excised CIN, one due to severe dyskariosis who had no HPV testing and a third who had HR HPV and persistent low grade cytology.

Conclusion: The detection of HR HPV types helped to direct clinical management but the pickup rate of CIN was low and it is difficult to extrapolate with these numbers. Other factors including comorbidity, cytology and histology must be taken into account and treatment must be individualised.

P-2 ARE WE PUTTING TOO MANY PATIENTS TO SLEEP? A COMPARATIVE AUDIT OF THE USE OF GENERAL ANAESTHESIA FOR LOOP CERVICAL EXCISIONS AT TWO NORTH-WEST LONDON HOSPITALS

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Background: The NHSCSP guideline *Colposcopy and Programme Management 2010* recommends that ≥ 80% of cervical excisions for CIN should be performed under local analgesia in outpatient. General anaesthesia should be used where appropriate and the indication clearly documented.

Objectives: To compare the use of general anaesthesia (GA) for loop cervical excisions (LLETZ) across two North-West London hospitals; Central Middlesex Hospital (CMH) and Northwick Park Hospital (NPH).

To evaluate the indications for the use of GA for LLETZ.

Methods: Data was generated from compuscope, a standardised colposcopy data management application used across both hospitals.

227 LLETZ procedures were performed: 171 at NPH and 56 at CMH. Study period was 01/04/2011 - 31/03/2012.

Results: The rate of use of GA for LLETZ was 29% at CMH and 44% at NPH.

The commonest indications were: patient request (50% at CMH, 48% at NPH), wide lesions (12.5% CMH, 21% NPH), patients requiring additional procedures (12.5% CMH, 12% NPH), mechanical difficulties (12.5% CMH, 5.5% NPH) and repeat LLETZ (6.3% CMH, 5.5% NPH).

In patients under 30 years, 31% of the LLETZ was done under GA at CMH, 36% at NPH. In this category, 'patient request' accounted for 50% of LLETZ at CMH and 59% at NPH.

Conclusions: Although the rate of GA use for LLETZ in both hospitals was above the NHSCSP recommendation, there were clear clinical indications in the majority. Patient request accounted for nearly half of LLETZ under GA, and efforts should be made to minimise this.

Recommendations: The local colposcopy multidisciplinary meeting should be utilised to minimise the number of GA LLETZ. Other recommendations include: ensuring appropriate patient information and counselling, special counselling sessions for certain patient groups (the anxious, needle-phobic), more 'wide-lesions' done under LA by suitably experienced colposcopists, consider offering 'LA LLETZ under sedation' in day-case theatre in selected cases.

P-3 ARE COLPOSCOPY REFERRALS FOR NON-CYTOLOGICAL PROBLEMS APPROPRIATE - AN AUDIT IN A DISTRICT GENERAL HOSPITAL

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Colposcopy clinic receives referral from direct and indirect sources. Any abnormal smear result which requires colposcopy assessment will be referred directly to clinic from the laboratory. Indirect referrals on the other hand, come from GP, Sexual Health Clinic and Gynaecology Clinic.

In recent years, there has been a gradual increase in the number of referrals to the colposcopy clinics for problems such as post coital bleeding, abnormal looking cervix and other problems unrelated to cervical cytological abnormalities.

From 1st of January 2011 to 31st of December 2011, Colposcopy Clinic in Scunthorpe received 164 indirect referrals which account for 38% of total referrals. 121 patients were included for the audit. Case notes were reviewed retrospectively.

Results are as follows:

Majority of the indirect referrals came from GP (80%)

Main reasons for referral are bleeding symptoms (61%) & cervical abnormality (27%).

74% of biopsies taken in clinic are normal. 13% resulted in CIN1. Up to 9 % involved CIN2. 4 % resulted in CIN 3.

Up to 57% of patients are suitable for treatment.

Potentially we can achieve 9% reduction in the number of indirect referral seen in clinic, if patients requiring cytology are seen in gynaecology clinic first.

We are hopeful that the audit result may guide us in managing future (indirect) referral to colposcopy clinic hence making the service more cost effective.

P-4 DEPTH OF LLETZ: DOES SIZE MATTER?

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There is still much controversy about the importance of incomplete excision margins in the treatment of high grade CIN by loop excision. Furthermore there is a wide variation between one operator and another in the size and depth of loop biopsy submitted for histology, despite the NHSCSP standard that depth should be greater than 7mm in 95% of cases.

This study describes an audit looking at the depth of excision of high grade disease by a variety of colposcopists in two hospital settings. The aim was to determine whether, by not meeting the standard, there is an adverse effect on clinical outcome in terms of abnormal follow up cytology.

A retrospective audit of 9 Teaching Hospital colposcopists and 5 District General Hospital colposcopists involving over 500 patients with high grade CIN was performed by recording the average LLETZ depth, rate of complete excision and rate of positive endocervical margins.The audit then examined whether a depth of less than 7mm had any effect on clinical outcome in terms of disease recurrence ie. abnormal follow up smears.

The colposcopy records of 550 women (excluding those with CGIN) were examined and demonstrated a variation in average depth of excision from one colposcopist to another with one particular colposcopist averaging less than 7 mm in both hospital settings.The remaining colposcopists easily cleared the standard with a mean of approximately 10 mm depth.

There was a marked difference in terms of completeness of excision in the two hospital settings (14% vs 42%) but this was not reflected in any difference in the frequency of negative cytology following treatment. In particular a depth of less than 7mm in the loop biopsy does not appear to increase the risk of abnormal follow up cytology.

This study suggests that by achieving the 7mm target in the vast majority of cases there is still a high frequency of positive margin involvement despite a low frequency of worrying positive follow up smears.

P-5 – see page 7

P-6 FOLLOW-UP AUDIT OF WOMEN ATTENDING FOR LLETZ TREATMENT AT SOUTHMEAD HOSPITAL

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Background: Women who have received treatment are more likely than the general population to develop cervical cancer, and previous case series have demonstrated that greater than 50% of cancers develop in women lost to follow-up. With a change in local policy to community rather than hospital follow-up, an audit was carried out to assess compliance with BSCCP guidelines for follow-up, cytology outcome and subsequent colposcopy management.

Aim: To ensure that women who remain at risk following treatment receive adequate follow-up within our colposcopy service.

Methods: A retrospective audit was carried out on 216 patients who had undergone LLETZ treatment between April and November 2010. Data was collected from the cytology department and colposcopy databases. Cytology results, colposcopy findings and histology were recorded and analysed.

Results: 84% (181/216) had cytology follow-up. Of the remaining 35 patients: 15 had repeat LLETZ, 3 had a hysterectomy for coincidental menstrual disorders, 1 was referred for gynaecological oncology management, but 12 (5%) had no evident follow-up.

90% (164/181) showed no evidence of dyskaryosis and 7% of these had high-risk HPV.

4.9% (9/181) had evidence of dyskaryosis: all were assessed in colposcopy, with only 2 requiring repeat treatment for TEM and CIN 3 respectively.

Conclusion: This audit indicates a minimal risk of treatment failure within our unit. Those with dyskaryosis at follow-up were appropriately assessed with further colposcopy, as recommended by BSCCP guidance.

Successful follow-up after treatment was 95% in total, with 70% meeting the BSCCP guideline of >90% at 6-8 months. Community follow-up therefore seems to be an accessible and effective method for patients, whilst also complying with national targets. This audit was disseminated to the department to ensure that patients and GPs are informed of the importance of prompt follow-up via consultations, information leaflets and results letters. Re-audit will be carried out in the next 12 months.

P-7 REVIEW OF WOMEN WITH BORDERLINE ENDOCERVICAL ABNORMALITIES ON LIQUID-BASED CERVICAL CYTOLOGY

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Background: Women with borderline endocervical cytology abnormalities continue to be a diagnostic challenge. BSCCP guidance recommends direct referral to colposcopy for appropriate cervical and endometrial biopsies. A recent regional meeting highlighting different management strategies encouraged review of cases to determine best practice.

Aim: To perform a pilot review of the management and outcome of women with borderline endocervical cytology.

Methods: A retrospective cohort of 25 patients with borderline endocervical cytology was identified from the Avon-wide Screening group Cytology database (Jan 2008- Jan 2010). Management and histology outcomes in 3 units were recorded and analysed.

Results: Of patients aged 25-50 years: 20 were referred for colposcopic investigation and 5 (HPV negative) were returned to routine recall.

3/20 patients had high grade colposcopy changes and histology confirmed CGIN and CIN2. 2/20 had "see and treat" with LLETZ, whilst the remaining patients and those with low grade changes had punch biopsies. 3 patients (symptomatic of irregular bleeding) had endometrial biopsies.

Histological outcomes were: normal/inflammatory changes (5/20), HG CGIN (6/20), HPV (3/20), CIN1(1/20), CIN2(2/20), CIN3(1/20), Invasive Cervical Adenocarcinoma (2/20) and Endometrial Cancer (1/20).

Conclusion: This pilot review yielded interesting results: 24% (6/25) patients with borderline endocervical changes on cytology had HG CGIN and 3/25 (12%) had HG CIN. 3 cases of cervical or endometrial cancer were identified.

Colposcopic impression seems reliable for high grade changes, but reveals under-estimates of histology for low-grade changes. We agree with previous case series recommending a 'see and treat' policy for patients with borderline endocervical changes. Suggested use of endometrial biopsies could be reserved for symptomatic patients, being diagnostic in one case for endometrial cancer.

With follow-up awaited for those on routine recall, it is unclear whether HPV negative patients require further investigation to exclude endometrial pathology outside of the new HPV Triage Protocol. Further regional review is planned.

P-8 COLPOSCOPY PRACTICE IN CALDERDALE ROYAL HOSPITAL AND COMPLIANCE WITH NATIONAL GUIDELINES

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Objectives: The aim of the audit was to check our compliance with national guidelines and propose methods of improving our practice.

Methods: Retrospective data collection from case notes of 87 patients who were referred to colposcopy services in Calderdale Royal Hospital between 01/10/2010-01/06/2011 was performed. Data underwent descriptive analysis and the results were compared with the NHSCSP guidelines (Publication 20).

Results: 32.2% of patients were referred with high grade cytological abnormalities, 31% with mild dyskaryosis and 31% with borderline changes. 90.7% of patients with low grade lesions were seen within 8 weeks as per guideline but the 4 weeks target was not achieved in 46.4% of those with high grade lesions. Biopsies were suitable for histological interpretation (98.4%), above the national standard. The recording of the findings was suboptimal as only in 73.4% of cases the term 'satisfactory' colposcopy was written in the notes. In 77.3% of cases the loop biopsy (LLETZ) was removed as a single sample, just short of the national standard of 80% but in 95.5% the depth was optimal. In 84.1% of cases the follow-up smear after treatment was within 8 months, again falling short of the national standard (90%).

Conclusion: The referral system for high grade lesions should be improved in order to achieve the 4 weeks standard. Better documentation of whether squamocolumnar junction was seen is imperative. LLETZ should be removed as a single sample, feedback to colposcopists who don't achieve targets as well as a reaudit in 6 months is needed.

P-9 REVIEW OF ?GLANDULAR NEOPLASIA OVER 5-YEARS IN EAST AND NORTH HERTFORDSHIRE NHS TRUST

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Background: Cervical screening with cytology can predict the presence of cervical glandular intraepithelial abnormalities, including cervical adenocarcinoma and high grade intraepithelial glandular neoplasia(CGIN).

The NHSCSP(May 2010) recommends that it is essential that all women with the presence of ?cytological glandular abnormality should have colposcopic assessment and referral as urgent within two week to exclude significant cervical and endometrial neoplasia.

Objectives: To evaluate the sensitivity of cytology, colposcopy and histology in detection of CGIN.

Methods: A retrospective study of 44 women with ?Glandular Neoplasia referred to colopscopy between 1.3.08 and 1.3.12. The data was collected from Infoflex. All women were seen at the East and North Hertfordshire NHS Trust.

Results: 44 women were found to have ?Glandular Neoplasia on their cytology reports. All patients attended colposcopy clinic for their first assessment (100%).

Colposcopy showed high grade lesions in 28(64%), Low grade lesions in 4(9%), unsatisfactory in 2(4.5%) and normal in 10(23%).

Forty women had biopsy (excisional/punch) done in their first colposcopy visit. Single punch performed in 6(13.6%), multiple punch in 10(22.7%) and excisional biopsy (LLETZ/Knife cone) in 24(54.5%). Only four (9%) had no biopsy at first visit.

First visit treatment with excisional biopsy given in 28/44(63%). Follow up visit treatment given in 8/44(18%), no treatment in eight (18%) cases. LLETZ performed in 29 cases while knife cone taken in five cases.

Histology confirmed cancer in 4(9%) cases only. High grade CIN II-CIN III found in 23(52.2%) meanwhile, low grade abnormality in 7(16%). No abnormality found in 7(16%) and no histology taken in three cases (7%). These case notes are being analysed for the reason and further follow-up data.

Conclusion: CGIN imposes challenges on the management in term of diagnosis and therapeutic options. Individual case reflection by the colposcopy service and MDT discussion should help to improve accuracy and avoid over-treatment.

P-9 SIGNIFICANCE OF BORDERLINE NUCLEAR CHANGES WITH HIGH GRADE DYSKARYOSIS (BNCHG) CAN NOT BE EXCLUDED ON CERVICAL SMEAR- 10 YEARS REVIEW

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Background: The diagnosis of borderline query high grade dyskaryosis (BNCHG) appeared to increase following the introduction of LBC in 2005 in our Unit.

BNCHG is a cytological diagnosis where cells are characterized by an increase in the nucleus - cytoplasmic diameter with nuclear membrane irregularity and slightly dense chromatin. These features however are not enough to be put into moderate dyskaryosis category. The result is coded with borderline changes (8) and thus there is difficulty in obtaining information about outcomes. Outcomes showing > CIN 2 is widely variable in the published literature - ranges from 12.2% to 68.2%.

Method: A retrospective 10 year analysis of patient referred with BNCHG from a single laboratory in a

London teaching hospital. Total number of patients referred to St. Mary's-**57**.

Results: Mean age of the patients was 35 (22-76). Referrals with BNCHG increased from 3 in 2004 to 10 in 2005 following introduction of LBC.

The percentage of women who had > CIN 2 tissue biopsy diagnosed at first Colposcopy visit was 45%.

3 patients had SCC of the cervix and one patient had SCC of the vulva.

38% of patient had CIN1 or HPV changes on the cervical biopsy.

Conclusion: A cytological diagnosis of borderline - high grade dyskaryosis cannot be excluded is more commonly reported in younger women and the rate of CIN2 or greater in our unit of 45% is reflective of the published literature, but this does suggest a high incidence of cervical disease in these patients.

References: 1.Quddus MR *et al*;, Atypical squamous metaplastic cells; reproducibility, outcome and diagnostic features on ThinPrep Pap test. *Cancer (Cytopathol).* 2001;93:16-22.

2.Saad RS. *et al*; Atypical squamous cells-cannot exclude high grade squamous intraepithelial lesion (ASC-H): diagnostic reproducibility, HPV positive rates and clinical implications [abstract].*Mod Pathol.* 2005;18(suppl):76A.

P-10 AUDIT OF CERVICAL CYTOLOGY/ HISTOLOGY DISCREPANCY AND COLPOSCOPY CORRELATION IN EAST AND NORTH HERTFORDSHIRE NHS TRUST

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Background: The introduction of cervical screening programme has arguably been one of the most successful cancer detection and prevention strategies. One of the many challenges is to ensure accurate reporting of cervical cytology and colposcopy assessment.

Objectives: To detect the proportion of low grade biopsy results which originate from high grade smears.

To observe the discrepancy between the cervical cytology and histology and to compare the Colposcopic/ Histologic outcomes of women referred to the colposcopy clinic with abnormal smears.

Method: A retrospective audit was conducted in East and North Hertfordshire NHS Trust. All new patients with cytological/histological discrepancy collected from 01/01/2011-31/12/2011. Data was retrieved from colposcopy database.

Results: A 677 women with colposcopy referrals from the above given period. 451(74%) were seen at colposcopy clinic. Of those, 277(60.5%) were high grade cases. A total 30(10.8%) cases of cytology/histology discrepancy identified. 28/30 were able to collect information from their medical records.

The age of those women range from 26-76(mean38.7). The referral cytology reports were 21(75%),6(21.4%) and1(3.5%) as moderate, severe and mild to moderate dyskaryosis respectively.

Colposcopy assessment showed 10(35.7%) high-grade, 14(50%) low-grade and 4(14.2%) normal. Colposcopy was satisfactory in 24(85.7%) and unsatisfactory in 4(14.2%).

Cervical biopsy (Punch/LLETZ) was performed in 26(92.8%). Single punch biopsy performed in 6(21.4%) of women, multiple biopsies done in 10(35.7%) and LLETZ given in 10(35.7%) of cases.

Histology outcomes showed high grade abnormality CIN II in 2(7%) only, low grade CIN 1/HPV in 21(75%) and 3(10.7%) were normal. LLETZ was performed in ten cases of which 1(10%) only histology showed CIN II, 7(70%) were CIN I/HPV and 2(20%) normal histology.

Conclusion: As significant discrepancy found between cytology and histology, case reflection and MDT discussion to improve reporting needed to reduce the risk of unnecessary intervention/treatment. Cytology/ Pathology services to reflect on data and implement necessary changes to improve reporting.

P-11 AUDIT OF COLPOSCOPY SERVICES AND PREVALENCE OF CIN IN THE UNDER 25 YEARS AGE GROUP

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Introduction: Guidelines for NHS cervical screening programme first published in 2004 suggested screening women under the age of 25 years may do more harm than good. However, with early coitarche, there is concern over persistent high risk HPV and subsequent CIN in women under 25 years.

Objectives: 1) To review our colposcopic attendances by women under 25 years.

2) To study the incidence of high grade smear abnormalities/ CIN in this group.

Study methodology: Retrospective review of under 25s to Colposcopy at New Cross Hospital, Wolverhampton from Jan 2010 to Dec2012. We collected data including referral indication, colposcopic opinion, histology, outcome and follow-up.

Results: We had a total of 4056 attendances and 4.9% of these were under 25 years and 0.5% under 20 years. Of those referred with suspicious symptoms, 28% had normal colposcopy and were discharged without any cytology or biopsy. 23% had smears taken and 46% had biopsies. The incidence of CIN2-3 in this group was 10% and CIN1 1%. Colposcopic opinion correlated with histology in 44%.

In the borderline or mildly dyskaryotic smears group, 68% had biopsies. The incidence of CIN2-3 was 22% and CIN1 16%. 2.7% had CGIN. Correlation of colposcopy with histology was 24% .

Among women with moderate and severe dyskaryosis, the incidence of CIN2-3 was 88%, CIN 1 in 8%, invasive cancer in 4% and CGIN in 4%. Colposcopic correlation with histology in this group was 72%.

The overall incidence of high grade CIN in our study of under 25s was 48% and low grade CIN 11%. CGIN was detected in 2.5% and Invasive cancer in 1.3%.

Conclusions: With the high incidence of CIN in under 25 years, we feel the need to reinforce the importance of cervical screening in high risk, vulnerable sexually active population under 25.

P-12 TWO YEARS FOLLOW-UP ANALYSIS OF WOMEN DIAGNOSED WITH LOW GRADE CIN

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Introduction: Most guidelines recommend expectant management of women with biopsy confirmed CIN 1. Follow-up of women with CIN 1 beyond 24 months has shown that spontaneous regression or progression can occur. Close clinical follow-up of a compliant patient with persistent CIN 1, with treatment planned if there is evidence of disease progression or if the women chooses to be treated is a reasonable way to go.

Study: We analysed the case notes for 101 women with a histological diagnosis of CIN1 during the period of Jan 2010 to Dec 2010 at New Cross Hospital. HPV testing was not in practice during this study period.

Results:

Demographics: 7% of women were referred following the first smear at 25 years. 4 % women were under the age of 25 years who were referred with suspicious symptoms. 5% of women were postmenopausal**.** 48% of women were smokers.

Referral indication: 8% were referred with suspicious clinical symptoms.19% were referred with borderline changes on smear, 63% with mild dyskaryosis and 10% with moderate dyskaryosis.

Colposcopic opinion: Of the women with borderline or mildly dyskaryotic smears, 43% had HPV/benign inflammatory changes, 86% CIN low grade and 11% CIN high grade changes. 50% of women referred with suspicious symptoms and 70% of women with moderate dyskaryotic smears were thought to have High grade abnormalities.

Number of clinic visits: 62% were discharged following histological diagnosis with community follow-up. 8% of these were returned with persistent abnormal smears. 28% had two follow-up visits and 10% had three follow-ups. 15% had repeat biopsies due to persistent abnormal smears. 10% had follow-up biopsies which confirmed progression of CIN to 2/3.

Conclusion: We intend to compare these results to when HPV testing comes into practice from 2013 to give us insight ito the financial and follow up implications.

P-13 EFFECT OF HPV TRIAGE ON SOUTH TEES HOSPITALS NHS FOUNDATION TRUST COLPOSCOPY SERVICE

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Background: Following the Sentinel Sites study, human papillomavirus (HPV) triage of women with borderline or mild cytological abnormalities has been introduced nationally (NHSCSP guidelines, 2011). Previously, women with low grade abnormalities underwent repeat cytology. Now, HPV testing is performed on all new low grade cytological abnormalities. HPV positive results are referred to colposcopy. Women testing negative for high risk HPV are returned to routine screening. We present the impact of this change on our colposcopy service.

Methods: A retrospective observational study was conducted using the computerised colposcopy database in the six months before and after HPV triage implementation. Referral numbers and detection of CIN 2 or worse were compared.

Results: Colposcopy referrals with low grade abnormalities increased by 90% from 202 to 384 after HPV triage implementation. There were no statistically significant differences in detection rates for CIN2 or worse after HPV triage (22.5% vs 25.4%, p=0.53) but the number of cases seen increased by 111% from 45 to 95. Biopsy and excisional treatment rates remained similar after HPV triage (72% vs. 72%, p=0.92 and 22% vs. 25%, p=0.53 respectively). Actual numbers of biopsies and treatments increased by 89% and 109% respectively.

Conclusion: Overall, colposcopy workload has increased with the new HPV triage protocol, beyond estimates by QARC, despite HPV rates being similar to predictions. There has been no statistically significant increase in the percentage of referrals found to have CIN2 or worse but the absolute number of cases has increased.

P-14 DO ALL BORDERLINE SMEARS NEED COLPOSCOPIC ASSESSMENT AND HISTOLOGY?

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Introduction of HPV screening is bringing about many changes to assessment of abnormal smears to our current practice. High grade CIN has well-established management pathways whereas low-grade CIN lead to repeated smears and anxiety to patient. High risk HPV testing has led to direct referral of mild dyskaryosis whereas borderline smears are still far from establishing a clear management pathway.

At present not all smears are being tested for HPV neither are all borderline smears being referred for colposcopy.

We reviewed borderline smears referred to colposcopy unit in our hospital over 3-year period. The colposcopic impression was normal or low grade in 64% and high grade in 21%. Histology revealed that 50% cases were high grade, CGIN or invasive adenocarcinoma.

Optimum management for borderline smears is still a dilemma and in need of clear guideline. Not only patients are subjected to repeat smears but it has the psychological impact on women while waiting for conclusive result and leads to financial implications for the NHS. We suggest that till HPV testing is universally available to all women, all borderline smears should be referred to colposcopic assessment and biopsy.

In conclusion

1. It decreases default which is common in policy of repeat smears
2. Underlying high grade CIN & invasive cancers will be detected earlier
3. Financially less expensive
4. Decreases anxiety for women with abnormal smears.

P-15 DISPOSABLE PLASTIC CERVICAL BIOPSY FORCEPS VERSUS TISCHLER METAL FORCEPS: A SURVEY OF THE COST COMPARISON AND CLINICAL EFFICACY IN AN OUTPATIENT COLPOSCOPY SETTING

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We compare the two different biopsy forceps for colposcopy. Results are to follow shortly.

P-16 AUDIT RE-AUDIT CYCLE IMPACTS POSITIVELY ON STANDARDS OF PATIENT CARE FOR WOMEN REFERRED WITH HIGH GRADE SMEAR ABNORMALITY

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Background: NHS Cervical Screening Programme(NHSCSP Publication20) outlines standards for management of women referred with high grade smear abnormality. Compliance with these key performance indicators (KPI) &monitoring local practice ensures improvement in quality of patient care.

Initial audit: Local audit(July2010-June2011) revealed room for improvement in management of women referred with high grade smear abnormality.

Re-Audit Aims: To ensure continuous quality improvement in patient care through monitoring KPI, &action plans from initial audit.

Re- Audit Methodology: Prospective audit over 3month from July 2011 on women referred with high grade smear(N=46).

Results of Re-Audit: 62%referred with severe dyskaryosis,36%with moderate dyskaryosis &2%with ?glandular/?neoplasia. Referral to offered appointment interval improved significantly from 88% to 98% in referrals with moderate/severe dyskaryosis(NHSCSP Standard 90% <4 weeks), and from66% to 100% in referrals with ?glandular/?neoplasia (NHSCSP Standard 100%< 2weeks)when compared to initial audit.

See &Treat rates improved from 17% to 80% at first visit and overall 92% as out patient including subsequent visits. Only 2.1% of patients had a LETZ procedure under general anaesthetic compared to 2.5% in the previous audit. Consent was sought in 100% with written consent in 75% and verbal consent in 25%. 85% women recalled having received LETZleaflet although standard practice within unit is to send information leaflet to all.

Conclusion: Significant improvement in standards of care was achieved through audit/re-audit cycle.Raising awareness among colposcopists towards embracing See&Treat whenever appropriate in consenting women was action plan recommended from first audit. Project was implemented to raise awareness among booking clerks to capture the first appointment offered over telephone which in past was not captured. Funding was successfully secured for compuscope report writer to analyse KPI data periodically for sustainable improvements. Written consent for LETZ has been implemented.

P-17 NEW MODEL OF CARE FOR PATIENTS REFERRED FOR LLETZ UNDER GENERAL ANAESTHETIC: EVALUATION OF SERVICE

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Aim: To provide a safe timely service for the women receiving Large Loop Excision of Transformation Zone(LLETZ) under general anaesthetic(GA) for cervical intraepithelial neoplasia(CIN).

Methods: A database was developed specifically for all women requiring GA for LLETZ at University Hospital Llandough. Women were identified at initial colposcopy visit. Once definitive results were available, they were referred directly to the one stop clinic for discussion of results and preoperative assessment.

Analysis of the database was performed from 1st July 2012 to 31st December 2012 to assess the impact of the one stop clinic and ensure maintenance of BSCCP standards. The database was cross referenced with the hospital theatre system to ensure validity of data.

Results: Of 381 women who required LLETZ, 68(17.8%) women had the procedure under general anaesthetic. The mean age of women was 27 years (range 21 - 55). Results regarding referral smear, correlation with biopsy results, time between initial biopsy and treatment,

indications for treatment under GA and acceptance of the service (attendance at clinic) are currently under analysis and will be presented at the meeting.

Conclusion: Our audit conforms to the BSCCP guidance (LLETZ under GA rates <20%). By introducing the one stop clinic, we have improved the capacity in colposcopy clinics making them more cost effective. It has improved service provision and communication as all needs prior to the procedure can be met in this clinic rather than repeated visits. The service is well accepted. It has improved patient safety by ensuring that all colposcopy/treatment under GA are systematically managed.

P-18 CYTOLOGICAL FOLLOW UP AFTER HYSTERECTOMY: A CLINICAL GOVERNANCE ISSUE

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Background: Vaginal vault cytology following hysterectomy is recommended for specific indications and is a potential clinical governance problem.

Objectives: To quantify how many patients undergoing hysterectomy for endometrial cancer under the care of the gynaecological oncology team at UHNS had vault cytology advice in their histology report and how if indicated the follow-up was arranged. To devise a vault cytology protocol based on local experience and national guidance.

Methods: The local cancer registry was searched clinical, clerical and histological data for all patients undergoing hysterectomy for endometrial cancer over one year was collected.

Results: 65 patients were identified with a mean age of 69 years. 92% had histology reports containing advice about vault smears. 83% of patients did not require a follow up smear. Of those patients who required vault cytology 33% had one performed.

Discussion: A high proportion of cases complied with the national guidance. However, the ambiguity about which clinician is responsible for ensuring adequate on-going care can lead to patients not having adequate follow-up. We think this is likely due to the complex guidance that is not well understood in both primary and secondary care.

Conclusion: The vault follow up of patients having had a hysterectomy should rest with the team performing the surgery, appropriate communication with primary care and the patient should occur. The vault cytology sample if indicated should be performed in secondary care and on-going management planned. The protocol set out in this paper should be followed to avoid unnecessary clinical governance failings.

P-19 ACCURACY OF COLPOSCOPY IN PREDICTING HIGH GRADE DISEASE, SHOULD WE BOTHER?

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Background: Colposcopic prediction of high grade disease (cervical intra epithelial neoplasia, CIN 2 or worse) is expected to be at least 65% when colposcopic examination is satisfactory. It is important to be able to distinguish high from low grade CIN, in order not to miss invasive lesions. Accurate prediction allows appropriate treatment of high grade lesion and expectant management of low grade lesion given the obstetric impact of cervical treatment. However the presence of warts, inflammation, ectopy and contact bleeding confound colposcopic impression and not all CIN lesions are seen at colposcopy.

The histological presence or absence of high grade CIN seems the most valid way of assessing the performance of colposcopic diagnosis (colposcopic impression). More over there is less disagreement among both colposcopists and histopathologists with high grade lesions.

Standard: Colposcopic accuracy should be atleast 65% in predicting high grade disease when colposcopy satisfactory,NHSCSP guideline 20,

Aim: To identify the positive predictive value (PPV) of colposcopic impression of high grade CIN II or worse.

Methods: Retrospective audit of all new referrals ,935 women (excluding 58 DNA's and 36 with unsatisfactory colposcopy)Lewisham Hospital and 187 women (excluding 17 DNA'S and 1 unsatisfactory colposcopy),to outreach colposcopy clinic, Barring Road, Lewisham,01/01/2011-31/12/2011

Results: Positive predictive value (PPV) was 74.62% and negative predictive value (NPV) 80.17%, Colposcopy Units, University Hospital Lewisham (Outreach Clinic and Lewisham Hospital),with a positive predictive value of 57.14% when analysed for the outreach clinic separately.The presence of co existent inflammation and warts seem to affect the predictive accuracy in these women.

Conclusions: Colposcopic impression is confounded by the presence of inflammation and warts.Lack of gold standard tests,colposcopic features or scoring systems in improving colposcopic accuracy of high grade disease confound the management and surveillance options of CIN II or worse.

P-20 HPV TEST OF CURE PROTOCOL IN ACTION

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Introduction: Prior to HPV testing, women having LLETZ treatment returned for cytological follow up 6 months after treatment and then annual cytological follow up for 5 or 10 years.

In the HPV Test of Cure Protocol, women treated for CIN return at 6 months for combined cytology and high risk HPV testing. If the result is Negative / HR HPV negative, their next invitation will be after 3 years for cytology only.

Four sentinel HPV sites in England have piloted the Test of Cure protocol since 2008

Methods: In the East of England, Trusts upload colposcopy and cytology data to a regional database.

Data for women having LLETZ treatment between October and December 2008 was extracted for a regional sentinel site and other Trusts.

Results: 84 women had LLETZ excision for CIN at the sentinel site.

76 returned for Test of Cure within 12 months of treatment. Of these, 59 had negative cytology/negative HR HPV, 5 had negative cytology only, and 12 had abnormal cytology so returned to colposcopy.

52 of 59 have since returned for 3 year cytology follow-up. All those tested had a negative result.

Women having LLETZ treatment at the sentinel site had an average of 2.6 follow up cytology samples, against 4.3 at a non-HPV site.

Conclusions: HPV Test of Cure is new to the screening programme; however this limited audit supports the protocol as an indicator that women are clear from disease. The reduction in follow-up cytology also brings a financial benefit to the programme.

P-21 DOES COLPOSCOPY KNOW WHAT TO DO WITH REFERRALS FOR URGENT CLINICAL INDICATION

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Introduction: Women with symptoms of cervical cancer should be referred for gynaecological examination with onward referral for colposcopy if cancer is suspected (*NHSCSP 20*), and recorded as Urgent Clinical Indication (UCI) on the KC65.

However, it is unclear whether there is consistent triage and recording of UCIs.

Methods: In the East of England, Trusts upload colposcopy and cytology data to a regional database. The database was searched for Urgent Clinical Indication referrals with a first appointment between July and December 2011, and subsequent biopsy / treatment information for these women.

A simple questionnaire was sent to the regional colposcopy clinics asking about triage and recording of UCIs.

Results: Of 7802 colposcopy referrals, 533 (7%) were UCIs. The percentage by Trust ranged from 0% to 19%. Only 69% were seen within 2 weeks, as required by NHSCSP 20, with one Trust managing just 25%. From subsequent appointments, 53% had no biopsy record and 79% no treatment record.

Triage varied between Trusts, either taking place in colposcopy or gynaecology. Some Trusts saw more UCIs in gynaecology. Completeness of data recording was variable.

Conclusions: The data showed varying reported rates of urgent clinical referrals and biopsy / treatment across Trusts, however differences in triage / recording makes the data unreliable and suggest including UCIs on the KC65 may not provide useful data.

Data from non-cervical urgent clinical referrals seen in colposcopy, should be excluded from the KC65 for quality reasons. Colposcopists in the East of England now have this facility in local data systems.

P-22 AUDITING REPEAT CYTOLOGY AT THE FIRST COLPOSCOPY APPOINTMENT

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Introduction: Cervical cytology should not be repeated at first colposcopy following referral for cytological abnormality, unless referral is for repeat Inadequate (*NHSCSP 20*).

At BSCCP 2007, an East of England QARC poster showed 6% of women referred with an adequate abnormal screening sample having repeat cytology at their first appointment though it was shown to have little clinical value and delayed treatment. QA repeated the audit in 2012 to assess current practice.

Methods: In the East of England, Trusts upload colposcopy and cytology data to a regional database. Referral / outcome data was extracted for women having cytology taken at a first colposcopy appointment between July 2011 and June 2012.

Results: 495 of 11494 women referred following an abnormal screening sample had cytology taken at first appointment. Excluding Inadequate referrals, 333 of 11252 (3.0%) breached the standard. One Trust took cytology from 24% of adequate abnormal cytology referrals so was responsible for half the regional total. The other 17 Trusts had a breach rate of 1.4%.

For the 333 women, poor agreement was found between the referral and colposcopy cytology with only 50% of results matching, possibly confusing management. At first appointment, only 33% had biopsies taken and 4% had treatment, so delaying diagnosis for many.

Conclusions: The 2012 audit showed 17 of 18 Trusts close to the standard, but identified one outlier Trust

who has agreed to cease this practice. ESQA will continue to audit the standard, as taking cytology at first appointment means extra appointments with no discernible benefit.

P-23 RISK OF PRETERM BIRTH AFTER LARGE LOOP EXCISION OF TRANSFORMATION ZONE (LLETZ) IN WOMEN LESS THAN 40 YEARS OF AGE

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Objectives: To determine the rates of preterm delivery, in women less than 40 years of age, in subsequent pregnancy after large loop excision of transformation zone (LLETZ) in our unit.

Methods: Women who had delivery between 2009 and August 2012 with LLETZ treatment in past were evaluated for preterm delivery rates, perinatal morbidity and its association to depth of LLETZ specimen.

There were total of 51 women who delivered between 2009 and August 2012, following LLETZ procedure. 50 notes were retrieved from the medical records and analysed by simple statistics.

Results: Out of 51 women who delivered, 50 notes were obtained.

23/50(46%) women had depth of excision more than 10 mm. 5/23 (21.7%) had preterm birth. However, only one 1/23 (4.3%) went to SCBU. One was stillborn. 21/23(91.3%) babies had good perinatal outcome.

In the remaining 27/50(54%) women who had depth of excision less than 10mm, risk of PTL was 3/27.Out of these three patients, 1 patient had previous preterm birth.

There was no association between the grade of CIN (cervical intraepithelial neoplasia) and risk of preterm labour.

Conclusions: LLETZ significantly increases the risk of preterm delivery in women who have depth of excised transformation zone more than 10mm.

P-24 SAFTEY OF LASER ABLATION IN THE TREATMENT OF VAGINAL INTRAEPITHELIAL NEOPLASIA

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Background: Because of recent popularity of LLETZ (large loop excision of transformation zone) procedures and unpopularity of laser, there have not been many recent studies that evaluated laser with the same sophistication as studies on LLETZ. LLETZ has superseded laser ablation as treatment for cervical intraepithelial neoplasia and over the years colposcopists have been rendered deskilled with laser vaporization technique.

In instances where the transformation zone or cervical lesion extends deep into the canal and out onto the portio, some have advocated doing a combination excision /laser vaporisation. This procedure uses aspects of both procedures. The central portion of TZ is excised as a LLETZ or laser cone and outer portion of the lesion or TZ is vaporized. This minimizes the amount of tissue lost in the procedure.

The immediate post op complication seen with laser ablation is same as with LLETZ including bleeding and infection. This technique helps minimize the extent to which therapy may compromise future sexual function. When lesion is multifocal and invasion not suspected, treatment of VaIN may be successfully performed by laser vaporization of the epithelium.

We report our experience for 10 patients being treated with laser ablation of VAIN with no major complications.

We report on safety and efficacy of this treatment.

P-25 HISTOLOGICAL DIAGNOSIS IN WOMEN WITH BORDERLINE GLANDULAR SMEARS

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Objective: To audit the histological diagnosis in women presenting with borderline glandular smears.

Design: Retrospective review

Population: 113 women referred to the Rotunda Hospital Colposcopy Clinic with borderline glandular smears between January 2011 and December 2011

Methods: Review of the colposcopy database (mediscan) for the patients' demographic data, colposcopy findings, diagnostic/excisional procedures and histological diagnosis

Results: The median age was 37 years (range 25-57).

Colposcopic impression was unsatisfactory in 4 (3.5%), normal in 39 (34.5 %), low grade in 49 (43%), high grade in 10 (9 %) and glandular lesion in 11 (10%).

Histological information was available in 100 women (88.5%). Of these, 49 had a punch biopsy and 51 had a LLETZ. In addition, endometrial histology was available for 55 women.

Histological diagnosis in the 100 women who had either a punch biopsy or a LLETZ was as follows: normal - 26, Viral - 10 , CIN1 - 27 , CIN2 - 16 , CIN3 - 13, CGIN - 1 and unsatisfactory - 7.

None of the 55 endometrial samples detected an abnormality.

Conclusion: We found histological evidence of CIN in 56 of 100 women referred with borderline glandular smears. Of these, 29 had CIN2/CIN3 - high grade squamous lesion, whereas only one woman had histological evidence of a glandular abnormality.

It would appear that borderline glandular smears are a surrogate marker for CIN.

We believe that the cytology lab is undercalling the abnormality in women who are reported as having

borderline smears.

In our experience, endometrial sampling would appear to be of no value in women with borderline glandular smears.

P-26 MANAGEMENT AND FOLLOW UP OF WOMEN WITH CERVICAL SMEARS REPORTED AS GLANDULAR ABNORMALITIES IN THE WEST OF SCOTLAND - FROM 2007 TO 2011

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Aim: The aim of our study was to review the diagnostic pathway, management and follow up of women with smears reported as glandular abnormalities.

Design: It was a retrospective study of glandular abnormalities of cervical smears for a 5 year period from 2007 to 2011. The data was collected from the Scottish screening call recall system of The West of Scotland. A total of 145 women were identified over the 5-years.

Method: A pro forma was designed to collect information on age, parity, smoking, contraception, previous smear history, previous cervical biopsy and/or treatment, time from the date of smear result to the colposcopy clinic visit, histology findings, final diagnosis, treatment and follow up.

Results: The total number of smears in this 5 years were 560,252 and the percentage of glandular abnormalities was 0.026%.

The average age was 36.7 56(39%). (31_40years old)

Of the 145 patients 92(63%) of the women had normal previous smear results.

The time interval in days from the cytology result to the colposcopy visit was more than 70 days but, this has improved in the last 2years .

92(63%) had a LLETZ done, 29(20%) had a hysterectomy with or without pelvic node sampling.

The number of women with negative smear results after LLETZ was 83(57%).

The follow up were according to national guidelines, (6month /12month) 124(85.5%) .

Conclusion: Of 145 smears reported as glandular abnormality 63(43%) had cervical glandular intra -epithelial neoplasia (CGIN), 11(7%) had cervical adenocarcinoma, 1(1%) had endometrial adenocarcinoma and 1(1%) cervical squamous cell carcinoma (Which is unusual but this patient also had HGCGIN).

From our audit we have noticed that the referral time has improved in the last 2 years and also there's a change in the method of treatment .Comparing the histology results after the LLETZ and the follow up smear results, we noticed LLETZ to be an effective treatment for glandular abnormalities. Follow up is consistent to the national guideline in most of the patient.

P-27 HR-HPV + LOW GRADE DYSKARYOSIS + NEGATIVE COLPOSCOPY = DISCHARGE TO ROUTINE SCREENING OR NOT?

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Objective: To assess the management of patients with mild or borderline dyskaryosis, positive HR-HPV and negative colposcopy.

Background: There has been much debate nationally regarding recommendation that women with low grade cytology and HR-HPV positivity but negative colposcopy should be referred back to routine screening cytology in 3 or 5 years' time. As one of the sentinel sites for the HPV-triage study, we would expect our colposcopists to comply with this management guideline. The HPV-triage management guideline is leading to increased colposcopy referrals for mild and borderline dyskaryotic cytology. The reduction of the follow ups and subsequent reduced failed attendances, are expected to ensure the cost-effectiveness of HPV-triage.

Methods: Retrospective review of the management of women attended to Liverpool Women's Hospital with positive HR-HPV and Mild or Borderline dyskaryosis and negative colposcopy, over a period of 4 years.

Results: From June 2008 to June 2012, 1924 women with low grade cytology and HR-HPV, (625 with borderline and 1289 with mild dyskaryosis), referred for colposcopy. In 569 women colposcopy was negative. Only 91women (15.9%), subsequently discharged to routine screening. Discharge rate was 11.4% the first year, increasing to 23% during the fourth year. In follow up group, findings were normal in 76.5% of cases while no invasive cancer was documented.

Conclusions: Compliance with the nationally suggested management algorithm was poor. Successful implementation of this guideline would require prompt educational support for practicing colposcopists.

P-28 VAGINAL VAULT CYTOLOGY: FOLLOW-UP OF PATIENTS AFTER HYSTERECTOMY FOR BENIGN INDICATION, AN AUDIT OF LOCAL PRACTICE AND MANAGEMENT CONSIDERATIONS

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Objective: Audit of practice against NHSCSP Guideline 20.

Background: Presence of CIN in the hysterectomy specimen or past cervical cytology of dyskaryosis is considered a risk for subsequent development of vaginal intraepithelial neoplasia (VaIN) and invasive disease. As these women have no cervix, are no longer eligible for recall within the NHS Cervical Screening Programme.

Methods: Retrospective electronic data retrieval of benign hysterectomies performed at Liverpool Women's Hospital within 2008 and 24 month follow up.

Results: 330 patients had hysterectomy with a histology result of no cancer. 273 did not require vault cytology, but 57 did. Only 9 of 57 patients (or 15.7%), had vault cytology within 24 months of follow-up. 1 case of VaIN3 was diagnosed but no cases of vaginal cancer found.

Conclusions: Vaginal vault cytology follow-up, compliance with NHSCSP guideline 20 was poor. Complexity of suggested management and patient noncompliance may be contributing factors. Auditing of practice is challenging since relevant data are not centralised. Local mechanisms to ensure compliance with guidance are required.

Recent studies question the value of vault cytology for women with no history of high grade CIN. In expectance of the new NHSCSP guideline 20, we should consider simplification of management. That may include a cytology ± HPV test, targeted at patients with recent history of high grade CIN/dyskaryosis or high grade CIN in the hysterectomy specimen.

P-29 AUDIT OF CONE BIOPSIES SHOWING CIN1 OR LESS AFTER HIGH GRADE CERVICAL PUNCH BIOPSY

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Background: The use of colposcopically directed biopsy prior to excisional treatment is controversial.

It has been suggested that colposcopically directed punch biopsies might help improve detection rate of Cervical Intraepithelial Neoplasia 2 (CIN 2).

Aim of study: To Audit the following -

(a) How many of all high grade punch biopsies have </= low grade histology on cone biopsy?

(b) Analyse factors including age, smoking, deprivation index, transformation zone type, referring cytology, size of lesion etc that could have suggested that a low grade cone biopsy would have resulted after the high grade punch biopsy.

(c) If there are factors that would lead to a more conservative management, then potentially this could decrease risk of premature delivery in future and allow spontaneous resolution of disease.

Methods: Retrospective study over a 5 year, period from October 2006 until September 2011.

Results: Preliminary results showed the following:

Referral smears: 53% were referred with mild dyskaryosis, 25% with high grade and the remaining 22% were either borderline or negative (following clinical indications).

Age distribution: 37% were less than 30 years old, 27% were over 40 and the rest were between 30-40 years of age.

90 % had no previous history of treatment on the cervix.

90% of patients were non smokers.

On colposcopy examination 70% were type 1 transformation zone (TZ), 25% were type 2 and 5% were type 3 TZ.

The colposcopic impression was of a high grade lesion in 34% of cases and low grade lesion in 62 % of cases. In 4% of cases the impression was of a glandular lesion

In 93% of excisions the margins were clear.

Conclusion: The percent of low grade cone biopsy following high grade punch biopsy is low at 7.1%.

Colposcopic impression indicating a low grade abnormality (p-0.005) was only statistically significant factor.

P-30 REVIEW OF CONFIRMED HISTOLOGICAL TREATMENT FAILURE

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Introduction: The proportion of confirmed histological treatment failures should not exceed 5% within 12 months of treatment (*NHSCSP 20*), where treatment failure means later recurrence of CIN.

East of England QARC reviews this data with Trusts at QA Visits.

Methods: In the East of England, Trusts upload colposcopy and cytology data to a regional database. Automatic reports are produced for QA visits, calculating various parameters including treatment failure.

Trusts were asked for further appointment / follow-up information on women later flagged as confirmed histological failures, where their original LLETZ treatment was between July 2010 and June 2011.

Results: Of 5580 treatments, 262 (4.7%) were flagged as treatment failures with Trusts having rates up to 8.9%.

On checking, 35 were double treatments or data entry errors and could be excluded, leaving 227 (4.1% of 5580). Trusts had rates of 0.4 to 8.9%.

Some Trusts also wished to exclude recurrence of CIN1 as these women would only have surveillance.

89 (1.6% of 5580) had recurrence of CIN2 or worse, with Trust rates of 0% to 3.4%. 67% had post treatment follow up in Colposcopy. Colposcopists reported that 65% of original excisions were incomplete and 45% were probably not large enough.

Conclusions: Trusts reported failure rates of up to 9%, with most recurrences being CIN1.

Given that a high percentage of CIN2+ failures occurred in women with incomplete excision and specimens of questionable size the audit results suggest that these women should be discussed in MDT and consideration given to re-excision if appropriate.

P-31 A REVIEW OF THE COLPOSCOPY MULTIDISCIPLINARY MEETINGS AT STAFFORD HOSPITAL

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The NHS Cervical Screening Programme (NHSCSP) guidelines recommend that multidisciplinary team meetings (MDT) should be part of patient management to ensure high quality care and local peer review of the screening programme.

We conducted a retrospective review of the colposcopy MDT at Stafford Hospital between October 2011 and October 2012. There were a total of eleven meetings during this time with a total of 120 case discussions. 19 % (23/120) of cases were referred due to a discrepancy between cytology and colposcopy, 18% (21/120) due to a discrepancy between cytology and punch biopsy, 8%(10/120) due to a discrepancy between cytology and loop/knife cone biopsy result. 27% (32/120) were for discussion of further management with the rest for review of the cytology or biopsy result. As a result of the MDT discussions 22% (20/94) of the cytology grading and 6% (3/48) of the histology grading were downgraded and 14% (13/94) of the cytology and 8% (4/48) of the histology were upgraded.

MDT discussions can help in the management of cases where there is a mismatch between colposcopy, cytology and histopathology to avoid both over-treatment and under-treatment of the patients.

P-32 AN AUDIT TO INVESTIGATE THE OUTCOME OF REFERRALS IN WOMEN WHO HAVE NON-DYSKARYOTIC SMEARS OR ARE REFERRED WITH OTHER CLINICAL FEATURES

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Objective: To review primary outcome measures, histopathology of cervical biopsy, and recommended further management for women referred with non-dyskaryotic smears since the North West introduced HPV triage.

Standards: NHSCP Colposcopy and Programme Management Guidelines, North West HPV Triage in Primary Screening and HPV 'Test of Cure' standards.

Methods: A retrospective audit of patients attending the Morecambe Bay Trust University Hospitals between 1/3/2012-30/6/2012, identified from electronic patient records in the Trust's Colposcopy database.

Results: Of 129 referrals, 32 were for an abnormal-looking cervix, 45 for post-coital bleeding, 31 for high-risk HPV on smear and 21 for miscellaneous reasons (e.g. suspected VIN).

82 referrals had normal colposcopy findings so no biopsy was taken, 33 biopsies had normal histology, 9 cases of CIN1 were identified and 1 of CIN2. The histology information for 4 women was not included.

83 women required no further treatment so were discharged to GP for routine recall, 27 were offered a follow-up Colposcopy appointment after which no further management was required and only 3 patients (2.3%) received LLETZ. Of the remaining 16 women, 10 were discharged back to GP after being offered additional treatment, 3 were awaiting further input before planning their management and 2 were discharged to Gynaecology clinic. No information was noted regarding plans for future management for one woman.

Conclusion: Whilst HPV screening displays long-term preventative benefits, Colposcopy referral changed the management for only 2% of women with a non-dyskaryotic smear. Gynaecology referral alone is considered safe and appropriate in women with these clinical features.

P-33 KNOWLEDGE AND ATTITUDES OF WOMEN TOWARDS TRADITIONAL PAP SMEAR AND THE NEW ALTERNATIVE SELF-SAMPLING FOR CERVICAL CANCER SCREENING

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Introduction: Self-testing is a valuable option for women who do not attend cervical screening. The relevance of self-testing is further accelerated by the incorporation of HPV- testing in the NHS Cervical Screening Programme. This aim of the study was to assess i)Women's knowledge and attitude towards cervical screening and ii)seek their opinion on self-sampling, either with a swab for HPV-testing or self-insertion of a speculum for obtaining a cervical smear at home.

Methods: A questionnaire was used to collect information about knowledge and attitudes regarding Pap-smear screening; willingness and acceptability of self-sampling and the perceived barriers to self-sampling.

Results: 104 women (median age 33[25-58]) attending for colposcopy or the contraception/sexual health service participated.

Most women (88%) comprehended that Pap smears detect precancerous cells on the cervix. Routine cervical screening was acceptable to 58% of women who would always prefer a health professional to take their smear. Overall 50%, 29% and 27% of women reported cervical screening to be unpleasant, embarrassing and painful experience respectively.

70% of women expressed interest in self-sampling. The perceived benefits of self-sampling were: avoidance to book clinic-appointment(39%), more in control(34%) and more acceptable and less intrusive (21%). 34% expressed preference to use a swab for HPV-testing and

15% for self-insertion of a speculum. 50% of the women would be comfortable with written instructions whilst the remaining prefer to have a demonstration in the clinic initially. 74% had concerns about self-sampling with the ability to collect a reliable sample being the commonest concern across all groups.

Discussion: We are currently conducting a feasibility study where women attempt self-insertion and self-sampling using a specially designed speculum in a clinical setting, funded by the O'Brien group. Such data is important to inform programmes planning self-sampling of specific concerns addressed by women regarding self-sampling.

P-34 PATIENT SATISFACTION SURVEY OF DIRECT REFERRAL TO COLPOSCOPY PATHWAY IN A LARGE INNER CITY SPECIALIST HOSPITAL

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Objective: To qualitatively assess the satisfaction of women referred for colposcopy at the Liverpool Women's Hospital by direct referral from the cytology laboratory to the cytology unit introduced in 2009.

Method: A month long qualitative study of the satisfaction of patients referred to colposcopy following positive cervical screening tests was undertaken in October 2012. Patients were offered a copy of the survey after receiving their treatment. A total of 70 surveys were distributed with a response rate of 80%.

Results: The results show that the great majority of patients received their smear results in less than 2 weeks and that the median time to appointment was 14 days post receipt of an abnormal smear results.

91% of patients received information prior to attending clinic and the majority found it useful. 98% of women felt they received adequate information and were adequately involved in decision making at the time of treatment. Of the patients who had fears or worries, 92% were able to discuss these with a member of staff.

51 patients had positive comments about their experience at the Liverpool Women's Hospital.100% of patients would recommend the Liverpool Women's Hospital to their friends and relatives.

Limitations of the study

Data collected from patients with respect to length of time may not be reported accurately from memory, not all patients gave numerical answers to timeliness questions.

Conclusion: This survey had a good response rate and was designed to assess the whole patient experience from results to treatment. Qualitative studies of patient satisfaction are important, unbiased methods of evaluating the effectiveness of a service. The results from this survey should be evaluated alongside a clinical audit to ensure the NHS Cervical Screening Programme targets are being achieved.

P-35 HOW SURE IS THE TEST OF CURE?

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Background: HPV testing was rolled out in the trust on 1st April 2012 and has two arms, triage and test of cure (TOC). A test of cure is carried out as an adjunct to the first follow-up cervical smear sample post treatment. The treatment method performed in the colposcopy unit is large loop excision of the transformation zone (LLETZ). HPV testing was done using a hybrid capture assay, detecting 13 high risk HPV types.

Objective: To assess whether TOC rates should be used as a measure of the quality of an excisional biopsy. The guidelines state patients are re-triaged if HRHPV is detected post treatment.

Method: A retrospective audit of two quarters (01/04/12-30/09/12). Data was retrieved from cytology laboratory database. Histology reports on samples which failed TOC were examined to ascertain size of LLETZ and margin clearance.

Results: 140 LLETZ performed during this period underwent TOC. 17 (12.1%) samples were reported as HRHPV positive. Original LLETZ results - 7 (41.1%) of the "failed TOC" had all margins clear. A further 7 patients had only ectocervical involvement. 3 of these patients had biopsies in colposcopy, which proved negative.14 patients (82.4%) showed no abnormality upon re-triage to colposcopy. One failed TOC had endocervical involvement. Only 3 of the 17 "failed" TOCS showed abnormal pathology after biopsy. This resulted in a true TOC failure rate of 2.1%.

Conclusion: Test of cure rates are not an indicator of successful treatment. The three "true TOC failures" were shallow samples, which emphasises adequate sized excisional biopsies. The validity and reliability of the HPV testing was robust. Negative biopsies taken from re-triaged patients, support the TOC protocol of 3 year recall if no abnormality seen. The possibility of re-triage should be included in counselling patients by colposcopists.

P-36 QUALITY IN IRISH COLPOSCOPY SERVICES - THE RESULTS OF A NATIONAL QUALITY IMPROVEMENT PLAN

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In Ireland, the provision of high quality colposcopy services has been a key priority for the CervicalCheck programme since it commenced in 2008. Fifteen colposcopy services nationwide work with the programme to nationally agreed standards. Each service collects information electronically and a centralised data extraction facilitates calculation of key performance indicators. Here national information is reported for clinical quality indices for the third year of

the programme (September 2010 to August 2011) when 17,437 women attended colposcopy for the first time representing sustained growth year on year.

Where an abnormality is suspected at colposcopy it is good practice to perform a biopsy. The target of >95% was achieved in ten services with rates of over 85% in a further three. Two services had relatively low biopsy rates of 59 and 66% respectively.

Treatment was performed under local anaesthetic more than 90% of the time in eleven services with rates of 89% obtained in two. The rates for the two remaining services were 75% and 78%. Treatment at first visit for women with low-grade cytological abnormalities was below the 10% rate in all services. CIN was detected in more than 80% of all excisional treatments in thirteen centres with rates for the remaining two being 77% and 63% respectively. For treatments at the first visit, the detection rate of CIN was in excess of 90% in eleven services with rates of between 85% and 90% in two and rates of 72% and 65% in the remaining two. The positive predictive value for a colposcopic suspicion of high grade CIN exceeded the target of 65% in fourteen centres with a level of 64% in the remaining centre. In thirteen services this figure was in excess of 70%.

We conclude that Irish colposcopy services are making good progress in meeting CervicalCheck clinical targets.

P-37 IT AND THE BSCCP - AN EVOLUTION OF THE SOCIETY

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BSCCP, Birmingham, UK

When the BSCCP started in 1972 the membership included four Colposcopists operating in three centres in the UK. The goals of the society were fourfold - education, advocacy, the development of new technology and research. During the last forty years the membership has grown to over 3000 Colposcopists in over 210 centres operating in five different organised cervical screening programmes in the British Isles. The functions of the society have become increasingly complex with Certification, Recertification, Training including the OSCE assessment, Basic advanced and Pre OSCE courses and Trainers meetings. Other crucial roles include provision of Information for Women and Healthcare professionals as well as international collaboration in supporting the development of the IFCPC and EFC.

The society website aims to support these evolving objectives of the society. The current site dates from 2004 (the year Facebook was first made available to college students in the US) and currently is undergoing a major rebuild. The potential is significant – in the first eighteen months since the launch of the BSCCP Vimeo channel the videos from the annual scientific meetings prove to be successful with over 13,000 views worldwide. The provision of a virtual “office on line” should facilitate many of the organizational tasks regarding management of membership, recertification and training, as well as enhanced social networking potential. This presentation aims to provide information on these developments charting where we have come from and discussing new directions for the future.

P-38 PROVIDING A QUALITY SERVICE WITHIN TREATMENT GUARANTEE TIMES IN A COLPOSCOPY CLINIC

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Aim: To study the impact of changes in colposcopy clinic management in Stobhill Hospital in quality service delivery

Background: NHSCSP advises that women are seen within 40 working days with low grade smears and 20 working days for high grade smears. NHS Greater Glasgow and Clyde required that women with moderate or severe smears are seen within 14 days from January 2010.

There was a temporary increase in workload to 180% as extra women were screened between mid-2008 and mid-2009, the period when Jade Goody effect was diagnosed and died of cervical cancer.

Due to the increase in workload and shortened referral to treatment guarantee time, pressures of capacity operated in our clinic. We describe how we met these challenges by changing aspects of clinical practice.

Methodology: Quality improvement meetings with two monthly service providers group and two monthly clinical pathological correlation group were held. Changes in local protocols were made and implemented through these groups meetings. Changes to practice included discharge of women after one DNA, an increase in the see and treat activity in the clinic, and discharge of women treated for high grade CIN to community after treatment.

Regular NCCIAS and patient satisfaction audits supported the changes.

Results: NCCIAS database of women seen in the colposcopy unit of Stobhill Hospital was analysed. A retrospective review of cases between 31st March and 1st April over 5 years was done.

There has been a year on year increase in the ratio of new to returns.

Patients are seen with guaranteed waiting times.

Conclusion: The study has demonstrated that the colposcopy services can be improved to manage appointment pressures. Changing the local management protocols will help in improving the clinical workload. For the client, it is easier to attend fewer colposcopy appointments and the psychosexual impact is minimized as well.

P-39 MANAGEMENT OF HIGH GRADE SMEARS IN WOMEN OVER 45 YEARS

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Barnsley Hospital, Barnsley, UK

Aim: To study management of high grade smears in women over 45 years in Barnsley Hospital

Standards: Guidelines for the NHS Cervical Screening Program- NHSCSP 20

Methodology: Data was collected retrospectively from women over 45 years attending the unit between 31/03/2009 and 31/03/2011

Results: 50 women attended accounting for 9.8% of high grade smears.

45 women were asymptomatic and 14 were smokers. 15 had previous abnormal smears out which 7 had treatment.

On colposcopy 30 women had high grade, 9 low grade, 6 unsatisfactory and 5 normal examinations.

49 women had histologic diagnosis, including 46 LLETZ.

Out of 36 LLETZ treatments in high grade and unsatisfactory colposcopic lesions, 23(63.9%) were CIN2/3 and 3(8.3%) were CGIN. The excisions were complete in 14/26 (53.8%) cases.

We had 2 cases of invasive cancers both of which were excised completely.

Out of 10 LLETZ following low grade/normal examinations, CIN2/3 was found in 5 on histology.

Follow up smears in 23/26 (76.9%) were normal. 1 woman of CGIN finally had hysterectomy due to persistent abnormal smears.

Conclusion: Women over 45 years referred to colposcopy are mostly asymptomatic. There is a high association with smoking as is the case with the younger women. Previous smear abnormalities have a significant association with high grade smears later in life.

Regarding the management of these cases our unit is doing well with positive predictive value of 77.8%. Excisions were complete only in over half of the cases but we included unclear margins histology in the incomplete excision group for the study.

We would conclude that LLETZ or at least a biopsy at minimum should be considered even with a low grade colposcopy in woman over 45 years. If the colposcopy is unsatisfactory it is better to do a LLETZ to treat any abnormality and also to obtain a histological specimen.

P-40 SELECT & TREAT AT ST GEORGE'S HOSPITAL

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Aim: The NHSCSP state that 90% of histology must indicate high grade CIN or cGIN for women treated at their first appointment. Our data shows that with careful selection and information given prior to the colposcopic examination this can be achieved.

Design: Retrospective study of 157 women (April 2010 – March 2011) directly referred to the colposcopy clinic with moderate or severe cytology results. Women received an information leaflet explaining the colposcopic examination and LLETZ procedure with their appointment letter, therefore allowing informed consent prior to the procedure.

Results: Cytology: severe dyskaryosis 118 (75.2%), moderate dyskaryosis 31(19.7%), glandular 5(3.18%) and adenocarcinoma 3(1.9%)

Colposcopic impression: high grade 87.8%

91.7% of LLETZ histology had high grade CIN or more. 78% of post LLETZ cytology was negative at 6 months.

P-41 COLPOSCOPY 'CLINIC SESSIONS' SURVEY

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St George's Hospital, London, UK

Aim: To provide a patient centred care which is flexible

Background: Like most NHS outpatient service, colposcopy clinics operate Monday – Friday, 9am-5pm. The Colposcopy Unit looks for ways to improve the service we provide.

Design: Questionnaires were given to women in the colposcopy waiting-room during the morning and afternoon clinics. They were asked which clinic they were currently attending, which clinic they would prefer in future and asked what was the most important factor influencing their appointment time.

Results: There were 104 respondents. 39 women would prefer a morning appointment, 15, an afternoon and 38 would prefer an evening appointment and 12 did not mind.

In the majority of women (82) work commitments was the most important factor influencing their choice. Other factors included an attending female colposcopist, childcare, and travel.

Discussion: As a result of the survey we have be able successfully negotiate funding for two evening clinics per month.

P-42 AUDIT OF HPV TRIAGE ACROSS EAST KENT HOSPITAL TRUST (EKHT) FOLLOWING THE INTRODUCTION OF HPV TESTING IN ENGLAND

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Introduction: The introduction of the NHS cervical screening programme in the UK in 1988 has led directly to declining numbers of cervical cancer cases. Infection with high risk human papillomavirus (HPV) is now known to be necessary for the development of cervical cancer.

The NHS cervical screening programme introduced

HPV testing in England from April 2011, to triage women with their first cervical liquid based cytology (LBC) demonstrating borderline changes or mild dyskaryosis.

The Sentinel Sites study (SSS) evaluating HPV triage for low grade abnormalities, concluded that HPV triage allowed a third of women to be discharged back to routine screening, and a 'substantial proportion referred for colposcopy without repeat cytology.'

Objectives: Outcome of HPV results following the introduction of HPV triage in EKHT in March 2012

Compare our results with the SSS guidance and NHS screening recommendations

Methods: Prospective 6 month audit of HPV testing of LBC samples demonstrating first low grade abnormality in women aged 25-64 years. Samples were tested using polymerase chain reaction, and followed up on the colposcopy database to ensure correct management in accordance with screening recommendations.

Results: 22510 LBC samples were screened in total between March - September 2012. 601 samples (68.4 %) showed borderline changes and 31.6 % were reported as mild dyskaryosis. HPV positive rates were 57.8% in women with borderline changes and 81.8% in women with mild dyskaryosis. All of these women were referred to colposcopy services.

HPV negative rates were 31% for low grade abnormalities. 100% of women were discharged back to routine screening without repeat cytology.

Conclusion: HPV triage is a useful risk assessment tool for managing low grade abnormalities. It allowed 31% of women with negative HPV results to be returned back to routine screening without repeat cytology. Our results compare to SSS. There was 100% compliance to NHS screening recommendations.

P-43 AUDIT OF HPV TEST OF CURE ON COLPOSCOPY WORKLOAD IN A DISTRICT GENERAL HOSPITAL (DGH), UK

Naila Khan, Naheed Tahir, Diane Miles, Jonathan Learmont
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Introduction: Following the publication of the NHS Operating Framework in 2011/2012 from the department of health, the NHS cervical screening programme in England implemented high risk human papillomavirus (HPV) test of cure from April 2011.

The HPV test of cure is performed on the first liquid based cytology (LBC) for low grade abnormalities or negative following treatment for cervical intraepithelial neoplasia (CIN).

Sentinel Sites Study evaluating test of cure found women with HPV negative tests were returned back to routine recall, avoiding long management and reducing demand on colposcopy services.

Objectives: Impact of HPV test of cure on colposcopy services in a DGH following implementation in March 2012

Compliance to NHS screening recommendations

Methods: Prospective 6 month audit of 254 women with their first LBC showing low grade abnormalities or negative cytology after treatment for CIN. LBC samples were HPV tested using polymerase chain reaction and followed up on national colposcopy database evaluating management and compliance to screening recommendations.

Results: 254 samples were reported as negative or showing low grade cytology (Borderline and Mild dyskaryosis).

85.8% of LBC samples were reported as negative, 5.5% as borderline and 1.2% as mild dyskaryosis. 46.15% of samples reported as borderline changes, 50% of samples reported as mild dyskaryosis and 19.27% of samples reported as negative had a positive HPV test after treatment for CIN by large loop excision of transformation zone. 79% of women were negative for HPV test of cure and were discharged to routine screening.

Conclusions: 79% of women treated for CIN avoided having unnecessary referral tests as a result of the test of cure. There was 100% compliance to NHS screening recommendations. HPV testing is useful to determine if women treated for high grade CIN harbour residual disease and allows women with negative tests to be discharged back to routine screening. Therefore reducing the burden on colposcopy services.

P-44 AUDIT OF THE IMPACT OF HPV TESTING IN A DISTRICT GENERAL HOSPITAL (DGH) ON COLPOSCOPY WORKLOAD AND ADHERENCE TO NEW NHS SCREENING RECOMMENDATIONS

Naila Khan, Naheed Tahir, Diane Miles, Jonathan Learmont
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Introduction: The NHS Cervical screening programme introduced in 1988 has reduced numbers of cervical cancer cases. High risk Human Papillomavirus (HPV) is necessary for the development of cervical cancer.

In 2001, HPV pilot studies of HPV triage commenced concluding that introducing HPV triage decreased repeat cytology testing, reduced discharge time but increased referrals to colposcopy.

Six 'Sentinel sites' study was established to follow agreed protocols for the use of HPV triage for women with borderline or mild dyskaryosis, and HPV testing as a test of cure for women with treated CIN.

Objectives: Outcome of HPV testing following introduction of HPV triage in DGH in March 2012

Impact of HPV triage testing on colposcopy workload

Compare our results with NHS screening recommendations

Methods: Retrospective audit from October 2011-March 2012, analysing low grade abnormalities referred to colposcopy services before HPV testing, using national colposcopy database. Prospective audit from April 2012-September 2012 of all new referrals to colposcopy

with low grade abnormalities and HPV testing.

Results: Retrospective data: 183 patients referred to colposcopy with low grade abnormalities, aged between 25-66 years. 50% of these were borderline changes (59.7% first borderline) and 49.7% mild dyskaryosis. Colposcopy findings: 11% ectopy, 3.2% high grade abnormalities, 35% HPV inflammation and 63% patients had 6 month follow up. 10% discharged.

Prospective data: 61 patients referred with first low grade abnormalities aged 25-65 years. 64% were borderline changes, 35% mild dyskaryosis and 1% negative. 42% patients were HPV positive. Colposcopy findings: 38% HPV inflammation, 15% high grade abnormalities and 10% ectopy. 8% were discharged.

Conclusions: In our unit we are not complying to NHS Screening recommendations. 85% patients were not discharged to routine screening following normal colposcopy findings. There is no consistency in the length of follow up time. All negative HPV results were discharged back to routine screening.

P-45 THE TRUE VALUE OF DYSIS-AN AUDIT OF CONCORDANCE OF COLPOSCOPIST IMPRESSION AND HISTOLOGICAL DIAGNOSIS IN THE NORTH WEST OF ENGLAND

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The recently published National Institute for Health and Clinical Excellence (NICE) report recommending the use of DySIS as a clinical and cost-effective option for the management of women with abnormal smears has important implications for hospital trusts in the UK. Implementation would involve not only an initial increase in costs in purchasing new equipment but also investment in time in re-training colposcopists. NICE based their analysis on sensitivity data from a single Dutch study with differing inclusion criteria and lower conventional colposcopy results than those stipulated in the NHS cervical screening programme. An audit was, therefore, undertaken across a four site acute trust in the North West of England from 1/10/2011 to 31/09/2012 to determine the degree of concordance between colposcopist impression of cervical intraepithelial neoplasia (CIN) and subsequent histology for 669 women attending for the first time with an abnormal smear. Overall there was 76% concordance between colposcopist opinion and biopsy result with 88% and 69% concordance for high grade and low grade lesions, respectively. The reliability of colposcopist assessment was statistically significant with a kappa value = 0.521. The introduction of HPV testing on referral pathways did not have a significant effect on the reliability of assessment (kappa=0.530 pre April 2012, kappa=0.513 post April 2012). This complies with the NHS cervical screening programme standard of a predictive value of colposcopic diagnosis for CIN2 or worse of >65%. The additional value of DySIS should be calculated by each unit individually.

P-46 LOCAL REVIEW OF MANAGEMENT OF INVASIVE CERVICAL CANCER THROUGH IMPLEMENTATION OF A STRUCTURED AUDIT PROCESS AS PART OF ORGANISATIONAL CLINICAL GOVERNANCE ARRANGEMENTS

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Background: NHSCSP Publication 28, Audit of Invasive Cervical Cancers (ICC) recommends that cervical cancer audit is taken on as part of organisational clinical governance arrangements in each Trust, &reporting results of audit &learning local lessons should be incorporated into clinical audit framework. A structured audit process for local review of ICC was implemented besides local network MDT process in July 2011.

Audit Aims: To ensure continuous quality improvement in management of women diagnosed with ICC.

Methodology: Retrospective June 2010- June 2011 and Prospective from July 2011-Dec 2011. (N=34)

Audit Results: 100% ICC cases were discussed at local/network MDT meeting as per locally agreed policies.47% were screen detected as referred with abnormal smear. 24% were under age 30, 44% were under age 32, and 8.8% outside screening age of 65.

Commonest referral was to Colposcopy clinic with abnormal smear 47% followed by to Gynaecology clinic with Post-menopausal bleeding(PMB) 24%, post coital(PCB)/ intermenstrual(IMB)/or abnormal menstrual bleeding(AMB) 21%, other indications 8%. Carcinoma type in 74% was Squamous, 13.5% adenocarcinoma , 8.3% small cell, &3.1% Mixed adenosquamous . 55.5% were stage 1, 14.5% stage 2, 5.8% stage 3, &14.5% were stage 4.

Conclusion & Recommendations: Implementation of a structured approach to local review of ICC highlighted that 47% were screen detected, 24% under age 30, & 44% under age 32 in our local population. It is recommended that this key information is used in public health campaign strategies for increasing uptake of cervical screening among younger women, as screening uptake in this group in the Northwest is lowest Nationally.

Commonest presentation of ICC for our local population was an abnormal high grade smear abnormality followed by PMB and abnormal vaginal bleeding (PCB/ IMB/AMB). This needs to be incorporated into sample taker training sessions as well as update training to raise awareness.

P-47 AUDIT REPORT: RATES OF NEGATIVE HISTOLOGY AFTER LARGE LOOP EXCISION OF THE TRANSFORMATION ZONE. COULD THEY HAVE BEEN PREVENTED?

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Introduction: LLETZ is one of the most commonly used methods of investigation and treatment for CIN. Many women are treated who potentially may not develop cancer. There is concern with the advent of 'see and treat', that clinics may be over treating women. Negative LLETZ rates range from 4.7-41%. We wanted to investigate whether our rates were comparable and if they could have been prevented.

Method: Retrospective analysis of 469 patients over a 6 month period.

Results: 28/469 (5.9%) had negative LLETZ histology. 94/469 (20%) were 'see and treat', of which 5 (5.3%) contained no CIN. 7/28 (25%) of negative LLETZ samples were less than 7mm deep and 1 patient had TEM in their histology. 4 patients (14%) seemingly did not meet national criteria for a LLETZ (incomplete endocervical margins and <50 years old). 7/28 (25%) had low grade cytology, 11/28 (39%) had negative colposcopy findings and 4/28 (14%) were >50 years old.

Conclusions: Our rate of negative LLETZ (5.9%) compared favourably with published rates. The department was a Sentinel Study Site at the time of this audit. Our department meets criteria for a 'see and treat' policy with CIN found at LLETZ in 94.7% (standard >90%). 2/28 patients had low grade cytology and colposcopy but CIN2 proven at biopsy - evidence suggests these findings are associated with regression and negative LLETZ. National protocols advise retreatment if HGcGIN or Stage 1a1 cervical cancer with CIN involving the margins are present, therefore negative LLETZ could not have been prevented. Although our rates are reassuring a more conservative approach for the management of CIN2, low grade cytology with low grade findings at colposcopy and adherence to national recommendations could result in reductions in the number of negative LLETZ. The results of the audit were shared with the department.

P-48 ENDOCERVICAL CRYPT INVOLVEMENT BY HIGH-GRADE CERVICAL INTRAEPITHELIAL NEOPLASIA AFTER LLETZ: IS IT A PREDICTOR OF RECURRENCE?

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Introduction: Since its introduction in 1988, the cervical screening programme had led to a reduction in the incidence of cervical cancer.

Most high grade lesions are treated using a variety of treatment methods usually excisional. Predictors for recurrence lack high sensitivity and specificity.

A potential additional predictor of recurrence is consideration of those women who had crypt involvement of their CIN.

Study design: Retrospective observational controlled study

Method: Inclusion criteria - Women who had an excisional cervical treatment in the years 2003 and 2004 for high grade cervical intraepithelial neoplasia (HGCIN) in two London Teaching Hospitals Colposcopy Units.Only those with complete excision were included.

All patients had been followed for at least 6 years.

Women who had cervical crypt involvement with CIN were compared to women with no crypt involvement. Outcomes assessed were subsequent abnormal cytology, histology and repeat treatment.

Results: 588 women had complete excision of their CIN on histology.

No significant difference in age between groups with (30.2) and without (29.7) crypt involvement ($P < 0.25$).

There was a significant difference in the prevalence of post-treatment abnormal cytology in the two groups ($P = 0.043$).

The odds ratio for repeat treatment with crypt involvement was 2.67 (confidence interval, 1.27-5.64).

Conclusion: There appears to be a significantly increased risk of recurrence of CIN in those who had complete excision of their HGCIN, when histology showed crypt involvement.

It would be interesting to assess regionally/nationally whether these patients with endocervical crypt involvment are more likely to be HPV positive post-treatment and whether this is the reason for increased risk of recurrence.

P-50 EARLY AND LATE VULVAL CANCER RECURRENCES: ARE THEY DIFFERENT?

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Aim: To compare clinical and histological features of early versus late vulval cancer recurrences and to identify factors predictive of early recurrence.

Material and Methods: Vulval cancer recurrences between January 2000 and December 2010 (n=85) were identified from cancer centre database. Hospital notes, histology reports and multi-disciplinary team meeting minutes were referred to collect clinical information and histology.

Results: 50% of women in late recurrence group were < 70 years when primary vulval cancer was diagnosed compared to 37% of women in early recurrence group.

Primary tumour was squamous cell carcinoma in 93% and 100% in early and late groups. Well differentiated and early stage primary tumours were less prevalent

in early (67% and 30%) compared to late recurrence group (79% and 83%).

Resection margins were free in 92% women in both groups. Closest disease free margin was <1cm in 92% and 71% in the early and late group. Depth of invasion of primary was < 1 cm in 88% and 84% of early and late recurrence groups.

Primary tumour was confined to a single compartment in 78% and 87% of early and late recurrence groups. In the latter none of the primary tumours occupied all three compartments contrary to 8% tumours in early recurrence group. Site of recurrence in early group was local in 87%, groin in 11% and distant metastasis in 2% women. In the late group, the recurrences were entirely local.

Conclusions: Late vulval cancer recurrence is a distinct entity. Well differentiated, early stage vulval cancers confined to single vulval compartment in younger women are more likely to recur five years after recognition of primary tumour and the recurrence is more local than distant metastasis. This could translate to better survival rates for such tumours. Furthermore, such recurrences could be offered local excisions rather than radical procedures.

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P-53 WHAT DO SPANISH ADOLESCENTS KNOW ABOUT HUMAN PAPILLOMAVIRUS?

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Objective: Assess the level of awareness of Human Papillomavirus (HPV) infection among the population at risk of primary infection and susceptible of vaccination.

Methods: Observational cross study of 216 students aged 14 to 19. Data were obtained through an anonymous survey consisting of 11 multiple choice questions.

Results: 69% of the students have heard of HPV and the girls (62%) are the most informed. Just over half (61%) know that the infection can cause cervical cancer but causes warts. Up to 74% of the students know that HPV is sexually transmitted but up to 31% do not know how much protection the condom confers. The majority (69%) do not know that this infection is easily and frequently spread and only 4% know it is usually transient. The girls that have been vaccinated (16%) against HPV know better than unvaccinated that HPV causes cervical cancer, warts and that transmission is primarily sexual. 38% of vaccinated girls know that condoms only partially protects against the infection (15% of the unvaccinated). There are no significant differences in condom use among women vaccinated (59%) and those who have not been vaccinated (63%). The information about HPV has been mainly received from their parents (22%), the school (21%) and physicians (13%).

Conclusions: Most of the adolescents surveyed have heard of HPV, its relation to cervical cancer and that it is a sexually transmitted disease. By contrary they are unaware that it can also cause warts and that the natural tendency of the infection is self-limiting. There are also unaware of the protection provided by condoms and that therefore transmission is easy and frequent.

The girls vaccinated against HPV have a greater knowledge of papillomavirus and the usefulness of the vaccine than non-vaccinated, but there is not a greater use of condoms among these girls.

P-54 SMILE HISOLOGICAL AND MANAGEMENT DILEMMA

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Introduction: 32 years old nulliparous non smoker on Microgynon presented with borderline changes of LBC cervical smear. Punch biopsy from acetowhite area of the cervix revealed CIN3 with SMILE morphology (Fig 1). She had LLETZ procedure. Histopathogical examination of specimen showed CIN3, CGIN and a focus of intestinal metaplasia (Fig 2). There was CGIN present at the ectocervical excision margin. Following discussion in colposcopy MDT meeting she was offered hysteroscopy D&C and another LLETZ . Histology of cervical tissue revealed complete excision of CIN 1 while CGIN was not seen. Endometrial curettings were normal .

Discussion: SMILEs, squamous mucin producing intraepithelial lesions, are characterised by presence of mucin throughout the epithelium including lower and middle epithelial layers varying from indistinct cytoplasmic clearing to discrete vacuoles. SMILE is a rare variant of endocervical columnar epithelium and is thought to arise from the reserve cells in the transformation zone. . Intestinal metaplasia is rarely seen in absence of CGIN (Trowell 1985). The association of SMILE with a wide range of coexisting epithelial differentiation suggests that they can be a marker for phenotypic instability. SMILE can be associated with a high incidence of squamous carcinoma, adenocarcinoma and adenosquamous carcinoma (Colan et al. 1993)

Conclusion: The presence of intracellular mucin in the squamous cell carcinoma of the cervix (25%) significantly reduces the 3 years survival rate. There are no national guidelines on the management of SMILE. Whether it is best treated by hysterectomy or local excision only remains unresolved. We highlight the need for further studies on the condition to optimise its management and follow up.

References: Colgan TJ, Auger M , McLaughlin JR, 1993

Histopathologic classification of cervical carcinomas and recognition of mucin -secreting squamous carcinomas. Int J Gynaecol Pathol;12:64-9

Trowell JE 1985 Intestinal metaplasia with argentaffin cells in the uterine cervix. Histopathology 9:551-559

P-55 HPV TEST OF CURE RATES SIX MONTHS POST TREATMENT

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Background: Test of cure is a smear test and HPV test for treated women of cervical intraepithelial neoplasia (CIN). It is now know that women who have negative or low grade cytology (borderline and mild) with high risk HPV not detected six months post treatment are at very low risk of residual or recurrent disease, within the next screening interval.

Pilot studies have shown HPV test of cure enables 75% of women to be discharged back to primary care at six months post treatment for three years cytology follow up.

Methods: A sample of 165 women all six months post treatment having a test of cure cytology and HPV between 09/07/2012 to 09/10/2012. Data taken from results received back following post treatment appointment, identified from clinic failsafe records.

Results: 79% of patients were high risk HPV negative, 20% were high risk HPV positive and 1% was unable to have HPV process.

Out of the 163 patients that were high risk HPV tested, 33 were positive. Out of these 24 were reported as negative, 8 were borderline and 1 was mild. 126 tests were high risk HPV negative. Most of the cytology was negative out of the 163 patients tested, 8 reported as borderline and none were reported as mild. So over all 163 patients were HPV tested. 126 were high risk HPV negative, 33 were high risk HPV positive and 4 were unable to have HPV process.

Conclusion: Our audit has shown that 79% of our patients have been discharged to their GPs.

Reference: Kitchener HC, Walker PG, Nelson L et al. HPV testing as an adjunct to cytology in the follow up of women treated for cervical intraepithelial neoplasia. BJOG, **2008, 115(8): 1001-1007**).

P-56 PATIENT SATISFACTION SURVEY OF THE PROVISION OF LARGE LOOP EXCISION (LLETZ) UNDER LOCAL ANAESTHETIC

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Objectives: NHSCSP guidelines suggest that treatment should be performed with adequate pain control and should be offered under local anaesthetic ≥80%.

Aim of this study is to gain patients feedback and comments about having the treatment under local anaesthetic in a clinical outpatients setting.

Methods: The information was gathered by a questionnaire. This questionnaire contained 10 questions asking the patients about their experience.

We sent this questionnaire to 120 ladies over a 4 month period at the beginning of 2011. We received back 64 questionnaires from the patients, gives us a response of 53.3%.

The questionnaires were posted to the ladies 4 weeks after having their treatment. This gave enough time to find out if the ladies had any post treatment bleeding or infections.

Results: 98% of respondents were satisfied that the information they received was adequate prior to treatment. Only 2% indicated they were not sure. Our post treatment infection results were shown as 92% didn't need any antibiotics, where 8% did, but a few commented that they had thrush so this percent may not be a true result as the patients didn't have true infections. 3% of patients were admitted with post treatment bleeding. The final result will be presented at the congress.

Conclusion: The results gained from patients show that we are meeting the NHSCSP standards. Most of LLETZ were performed under local anaesthetic and were done with adequate pain control.

Reference: NHSCSP publication no 20 may 2010 Colposcopy and programme management

P-57 REVIEW OF MICROINVASIVE CANCER OVER A PERIOD OF 5 YEARS IN EAST AND NORTH HERTFORDSHIRE NHS TRUST

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Introduction: This is a review of women diagnosed with microinasive cervical cancer over a period of 5 years in East and North Hertfordshire.

Objectives: The review is looking at the age group, cervical history and long term outcome of these patients.

Methods: Patients are audited by the East and Hertfordshire pathology department continuously ,and all patient details are kept on an excel sheet. We looked at the details of 39 patients diagnosed with micro invasive cancer during the period 09/2007-12/2012 .We reviewed their management and cervical history by checking Info Flex, Open Exeter and the audit excel sheath.

Results: The total number of patients diagnosed with micro invasive cervical cancer over that period of time was 39 patients. The age group ranged between 25-62 years .The number of patients with a history of abnormal cervical smear (mild, moderate and borderline) was 4 (10%).The referral cervical smear to all the patients was severe dyskaryosis in (100%) of the cases .1 (3%) of the patients had more than FIGO 1A.

2 (5%) had a diagnosis of FIGO 1A2 36 (92%) had a diagnosis of FIGO 1A1.

1(3%) had chemotherapy and radiotherapy, 2(5%) had trachelectomy, 2(5%) had radical hysterectomy and bilateral salphingoophorectomy and 34 (87%) had LLETZ and regular colposcopy follow up.

Conclusion: All patients presented to the colposcopy clinic were referred with severe dyskaryosis and a diagnosis of micro invasive cancer was confirmed in all, 4(10%) of them had a past history of abnormal cervical smear we look at their cervical smear history and the follow up arrangementsThis concludes that the pick up rate was 100% in all patients coming throught to colposcopy with severe dyskaryosis.

P-58 THE IDENTIFICATION OF POTENTIAL PROGNOSTIC IMMUNOHISTOCHEMICAL MARKERS FOR NEUROENDOCRINE CERVICAL CANCER

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Background: Neuroendocrine cervical (NEC) cancer is associated with a poor long-term prognosis despite multimodal treatment.

Methods: The expression of a panel of immunohistochemical (IHC) markers was investigated in 41 NEC cancers registered with the West Midlands Cancer Registry.

Results: Expert pathological review confirmed 31/41 cases to be NEC cancers with positive staining for one or more of the NEC markers chromogranin, synaptophysin, CD56. Of the 31 cases, 16 were pure small cell, 8 were large cell and 7 were mixed small cell and adeno- or squamous carcinoma. There was no significant association between the levels or intensity of expression of Ki67, p63, TTF1 or p16 and overall survival. The expression of the cytokeratin marker CAM5.2 had a significant positive association with overall survival (log rank p=0.0118), median survival for negative expression was 8.1 months versus 19.8 months for >50% expression in the NEC cases. The expression of C-kit and platelet-derived growth factor receptor alpha (PDGFRA) were very low in the NEC carcinomas with 22/31 and 20/31 respectively being negative on IHC. Expression of the epithelial cell adhesion molecule EpCAM was greater in the NEC cases compared to the non-NEC cases, >50% expression in 17/31 (54.8%) versus to 3/10 (30%) cases but did not have an association with survival.

Conclusions: We have identified CAM5.2 as being a potential prognostic indicator for NEC cancers. The high expression of EpCAM raises the possibility of using monoclonal antibodies to EpCAM in addition to conventional chemotherapy in the treatment of these tumours.

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P-60 FIRST PRESENTATION OF CERVICAL CANCER AMONG SOUTH LONDON POPULATION,UNIVERSITY HOSPITAL LEWISHAM, 2002-2012

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Background: Cervical cancer annual incidence is about 2000[1], accounting for 2% of all new[2] cancers among women. The introduction of cervical cancer screening brought down its incidence,which was further accelerated with the establishment of routine recall since 1988.The 5 year screening coverage has been around 80% since 1993[3].Despite this women continue to develop cervical cancer and some of these are occuring among screened women.This may probably be due to non compliance with smears,inadequate treatment of CIN or misinterpretation of cytology.

Aim: To establish the proportion of cervical cancer detected on routine screening

To establish the proportion of screen detected cervical cancers among women on short recall

Standard: NHSCSP, audit of invasive cervical cancer

national report, 2007-2011, published May 2012

Methods: 99 cases of cervical cancer were identified from the cancer registry, diagnosed at University Hospital Lewisham from 01/01/2002 to 31/12/2012. Data collected on demographics, referral indication -abnormal smear ,abnormal bleeding, symptoms of advanced stage disease, smear interval and treatment.

Results: 40 % of these women were diagnosed with cervical cancer either by opportunistic screening when investigating for menstrual irregularities or post coital bleeding, or when they presented with advanced stage disease. The remaining 60% were screen detected*. Amongst the screen detected women at least 40% were on short recall.

Conclusions: Cervical cancer screening is an effective tool in diagnosing pre invasive disease and every opportunity to be utilised to promote smear tests. There is a need to identify ways to reach the population that needs screening most but whom the existing system fails to reach. Cervical cancer incidence is anticipated to come further down with HPV vaccination of school girls,however cancer caused by other HPV oncogenes may still continue to occur.

References:

- 1) a Source: ONS MB1 38, MB1 39 and MB1 40
- 2) http://www.cancerresearchuk.org/cancer-help/type/cervical-cancer/about/cervical-cancer-risks-and-causes
  3) NHSCSP Audit of Cervical Cancer, 2012.

P-61 APPLICATION OF IR SPECTROSCOPY AS A NOVEL TOOL TO IDENTIFY PROGRESSION OF CIN: A REVOLUTION IN CERVICAL SCREENING!

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Introduction: Cervical cancer is the second most common cancer in women worldwide. The current method of screening for cervical cancer in the UK and Ireland is cervical cytology. The published literature would suggest that only 11% of CIN1 lesions would progress to higher-grade disease. Women with CIN2 and those with persistent CIN1 are often treated by a LLETZ procedure. The risk of preterm labour increases with the size of the excision. We are in search of a test that will predict progression to avoid unnecessary treatments and reduce the need for over-surveillance of certain cases.

Aim: There is a suggestion that biospectroscopy is able to detect disease better than cytology because it produces a 'biochemical-cell fingerprint'. This study aims to test the potential of IR spectroscopy as a tool to predict progression as well as to identify wavenumbers, which assist in predicting disease progression.

Methods: This study was conducted over a period of one year. All samples were collected in Thin-Prep® as per routine practice in the two centres. A total of 67 samples were collected. Each sample was then analysed using ATR-FTIR spectroscopy. A Tensor 27 FTIR Spectrometer with Helios ATR attachment (Bruker Optik GmbH) was used. Instrument settings were 32 scans, wavenumber spacing 8 cm^{-1}, and interferogram zero-filling 2´.

Results: Using multivariate analysis on the derived dataset from IR spectroscopy, we were able to objectively identify samples with the ability to give rise to progressive disease. The discriminating biomarkers underlying progression could also be isolated in loadings plots. IR spectroscopy is currently unable to differentiate between regressive and static disease.

Discussion: The application of IR spectroscopy appears to be a novel and inexpensive approach towards objectively identifying the potential to develop invasive disease.

P-62 HUMAN PAPILLOMA VIRUS (HPV) AND THE NEOVAGINA – ADVICE FOR PATIENTS

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Objectives: Our team was contacted by a patient with Rokitansky syndrome worried by a scientific paper reporting sequelae from infection with HPV for women with a neovagina. She asked should she have a smear test even though she did not have a cervix. Clearly, she could not have a cervical smear but pilot sites are moving to screening for high risk HPV prior to cervical smears in the future. We reviewed the evidence available to help us advise this woman.

Methods: A review of the relevant literature was performed using Medline.

Results: Women with a neovagina are sexually active and at risk of infection with HPV. They can develop genital warts, vaginal intraepithelial neoplasia (VAIN) and cancers.

Neovaginal tissues are exposed to stresses such as dilatation, intercourse and semen.

Cancer of the neovagina occurs at a younger age than cancer of the native vagina.

Adenocarcinomas occur in vaginas made of bowel and squamous carcinomas in those made of skin grafts or flaps.

The first symptoms are bloody or clear discharge and post-coital bleeding.

The Vecchietti technique results in epithelium similar to native vaginal epithelium and no neoplastic lesions were found in one study over 2–12 years. However, infection with HPV was detected.

Vaginal dilatation results in epithelium similar to native epithelium.

There is no proven method of surveillance for identifying

neoplastic change in the neovagina.

Conclusions: We recommend vaccination against HPV in women with absent vagina and cervix. Women who declined HPV vaccination because of a lack of cervix should be offered it.

We recommend long-term follow up in patients with neovagina and education regarding suspicious symptoms.

Women with neovaginas made of vaginal epithelium may have less sequelae from HPV infection.

Studies are needed to determine the best methods and medical staff to undertake surveillance for neoplastic change.

P-63 BILHARZIASIS OF THE CERVIX AND PERSISTENT GLANDULAR ABNORMALITIES IN A HIV POSITIVE WOMAN – A CASE STUDY

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Background: Genital schistosomiasis not only causes pelvic pain and infertility but also predisposes to STDs like HIV and is well associated with squamous cell carcinoma of bladder. There have been reports on the presence of schistosomiasis and squamous abnormalities of cervix but not of glandular abnormalities.

Case: A 45 year old, para 3, lady from Botswana, HIV positive on antiretroviral therapy was referred with a glandular smear. She had a LLETZ in 2003 for high grade CIN. She also suffered from chronic pelvic pain and vaginal discharge and routine PID management failed to relieve symptoms. At colposcopy the squamocolumnar junction was not visualised. An endometrial biopsy and pelvic ultrasound scan revealed no abnormalities. A LLETZ biopsy was performed. On histological examination, the transformation zone was not well represented, and there was no CIN or HPV. A repeat colposcopy and LLETZ biopsy were done 2 months later. The transformation zone was sampled , and no glandular abnormality, CIN or HPV were identified , however schistosome ova were noted. She remembers playing in ponds in Botswana until she was about 15 years. She was treated with Praziquantel and this has resolved her chronic pelvic pain. A repeat smear shows borderline glandular abnormalities. Clinicopathological conference review has recommended repeat smear in six months.

Conclusion: This appears to be the first report of an association between glandular abnormality of the cervix and Bilharziasis. It adds to the known associations between Bilharziasis and bladder neoplasia.

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P-65 HPV VARIATION - MYTH OR MIGRATION?

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Aim: There are around 20 high-risk types of HPV that are responsible for 99.7% of all cervical cancers. Within the high-risk group, types 16 and 18 are the most prevalent and are responsible for 70% of cervical cancers. Our aim was to determine the prevalence of different types of HPV in the HPV triaged patients since the national introduction of HPV testing in the West Yorkshire region.

Method: All women aged 25 to 65 years who underwent HPV testing as a result of triage in Leeds, Bradford and Airedale, between April 2012 to Oct 2012, were identified from the Cytology database in Leeds. We looked at their cytology results, HPV results and prevalence of certain HPV types in different areas of West Yorkshire.

Results: A total of 736 patients were identified. Cytology of 604 showed Borderline smear, 59 showed mild dyskaryosis, 63 showed Borderline high grade and 10 showed borderline glandular smear. Of the 736 women who underwent HPV testing, 22(3%)had HPV 18 , 68(9%) had HPV 16,155(21%) had no HPV and 348(47%) were affected by other types of HPV. Of these 348 women, 220(63%) were from Leeds, 97(28%) were from Bradford and 29(8%) were from Airedale.

Conclusion: In the UK immunisation is currently provided against HPV types 16 and 18. However, our data from West Yorkshire suggests that the majority of women are infected with other types of HPV. Therefore we suggest further evaluation of the efficacy of the current bivalent vaccine against other HPV types and also there is a role to develop a vaccine with wider HPV coverage.

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P-67 COLPOSCOPY OUTCOME AND FOLLOW UP OF WOMEN LESS THAN 25 YEAR OLD: A RETROSPECTIVE STUDY OVER LAST 11 YEARS

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Introduction: The NHSCSP invites women at 25 for their first cervical smear. In our unit about 10% of women are seen in colposcopy that is less than 25 years old.

Objectives: The study was aimed to identify the Colposcopic impression, incidence of cervical dysplasia and invasive disease in women under 25 years of age and their follow up.

Methods: The study analysed the infoflex generated data between 2002-2012. Out of 10880 patients 1077 were under 25 of which 670 were new referral. It was further analysed to achieve our objectives.

Results: 90% cases were referred by GPs, 72% of which were due to abnormal cervical smears (42% were moderate/severe dyskaryosis) and 28% due to NHSCSP referral criteria which includes persistent PCB with or without IMB and suspicious looking cervix.

29% women had High grade lesions on Colposcopy.

49% of the patients had CIN (30%CIN2/3 and 19%CIN1).The prevalence of HPV associated cervical changes was 8%.

Among CIN 2/3 group, 64% were referred with Moderate/ severe dyskaryosis, 25% had Mild dyskaryosis and 7% cases were clinically indicated.

One case of adenocarcinoma-in-situ was found who was referred with suspected Glandular neoplasia.

No cases of squamous cell carcinoma was found.

50% women were discharged to GP follow-up and 34% were recalled to the colposcopy unit.

Conclusion: 49% of the women, referred for Colposcopy had cervical dysplasia, 30% of which were high grade lesions. The prevalence of HPV/CIN1 in our group was 27%. Our Colposcopy followup rate is 34% which is likely to reduce in coming years as HPV-test of cure has been introduced since June 2012. This study supports the practice that if clinically indicated, women less than 25 years of age requires prompt referral for Colposcopic assessment, however indications for requesting cervical smears under 25 outside NHSCSP program needs further analysis and GP re-education.

P-68 INFORMATION, ADVICE AND PRACTICES OF COLPOSCOPISTS IN THE WEST OF SCOTLAND

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Background: As a trainee you aspire to learn the best practices and techniques, however it can be confusing as practices appear to vary widely in different units. We wanted to see if this was purely perception or whether a consensus could be sought.

Method: A short internet survey was e-mailed to all colposcopists registered with the BSCCP in the West of Scotland. Questions were asked involving post treatment advice and how local anaesthetic (LA) was administered prior to treatment.

Results: There were 23 of a possible 42 respondents. Fifty three percent recommend showers following treatment but 43% gave no specific advice. A range of advice was given regarding resuming sexual activity with 38% saying 4 weeks post treatment. The majority (43%) advised tampon use only when the discharge stopped with a further 28% advising after 4 weeks. Physical activity could be recommenced when comfortable was advised by 45%.

Local anaesthetic is given either sometimes or never in approximately even percentages for biopsy but always given for a LLETZ. Fifty percent used 2 vials for cold coagulation and 52% used more than two vials for a LLETZ. Seventy percent infiltrated at 3, 6, 9 and 12 o clock.

Conclusion: There are a wide variety of practices performed in Western Scotland, which can be confusing for both patients & trainees. Some advice such as waiting 4 weeks could be argued as the same as waiting until the discharge stops as this is an equivalent time period. Most felt that no LA was required for biopsy unless for patient request which is appropriate given the ectocervix has few sensory nerve endings. Could it be argued that only 2 areas require infiltration of LA prior to LLETZ as the nerves run at 3 & 9 o clock? Should we question the validity of our practices: if there is no consensus is there an evidence base?

P-69 WOMEN'S EXPECTED ADVERSE EMOTIONAL REACTIONS TO TESTING HPV POSITIVE: RESULTS FROM A NATIONAL POPULATION SURVEY IN IRELAND

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Background: HPV testing is transforming cervical cancer screening. Undergoing a HPV test may provoke adverse emotional reactions for women. In a population survey, we investigated women's expected responses to testing HPV positive.

Methods: A questionnaire was mailed to 5,553 women aged 20-64 years recruited through primary care. Women were asked to imagine that they had tested positive for HPV. Outcome measures were expected worry, stigma, shame, and anxiety[1]. Mean scores for each outcome were compared by age, awareness of HPV, HPV knowledge score (based on 10 factual questions about HPV infection), and perceived risk of contracting a HPV infection.

Results: 3,470 women participated (response rate=62%). 54% had not previously heard of HPV. Of those answering the HPV knowledge questions, 29% answered ≤ 4 correctly, 36% answered 5-6 correctly and 35% answered 7-10 correctly. The mean worry score was significantly higher in younger (<38) than older (>48) women ($p<0.001$). Younger women also had higher levels of shame ($p<0.001$), but not stigma or anxiety.Women with no prior awareness of HPV had significant higher levels of worry, stigma, shame and anxiety (all $p<0.001$). A low HPV knowledge score was associated with higher levels of stigma ($p=0.006$) and anxiety ($p=0.009$), but not shame or worry. Women who perceived they had a higher risk of contracting HPV than other women their own age had higher levels of shame ($p=0.012$), anxiety ($p=0.002$) and worry ($p=0.003$).

Conclusions: Adverse emotional reactions to testing

HPV positive may be more frequent in younger women, those unaware of HPV or with low HPV knowledge, and those with higher perceived infection risk. Improving women's knowledge about the facts surrounding HPV could help minimise distress in those who test positive.

[1]Waller J, Marlow LA, Wardle J. The association between knowledge of HPV and feelings of stigma, shame and anxiety. *Sex Transm Infect.* 2007;**83**:155-9.

P-70 REPORTING OF ATYPICAL SQUAMOUS CELLS OF UNDETERMINED SIGNIFICANCE ARE WE OVER DIAGNOSING?

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The entity of atypical squamous cells of undetermined significance (ASCUS) most common abnormal result on cytology in The Bethesda System for reporting is characterized by equivocal diagnosis, poor reproducibility and debatable management. It is no doubt a great challenge to the pathologist and clinician alike. One cannot deny the importance of diagnostic accuracy therefore it is critical that patients with the ASCUS smear be properly evaluated and triaged, since ASCUS smear may be a manifestation of high-grade disease.

This retrospective study was done in Al Qasimi Hospital to analyze the possible reasons for over diagnosing ASCUS. The data analyzed showed an unexpected high number of atypical squamous cells of undetermined significance) were reported in previous 2 years (2011-2012). The cytological and histological results were reviewed in order to detect a possible cause for this increase. The main causes of over use of ASCUS diagnosis were inadequate smears and cellular changes associated with vaginal infections, atrophy and squamous metaplasia. Infections such as trichomonas, candida, bacterial vaginosis or viral infection can cause transient mild nuclear atypia in cervical cells. Similarly post menopausal women, post natal women and women with prolonged use of hormones can show atrophic pattern on the smear leading to over diagnosis of ASCUS. ASCUS interpretation of reparative epithelial changes (immature squamous metaplasia) is also a known pitfall. The results of this study suggest that diligent screening can maximize identification of high-grade dysplastic lesions while *minimizing* unnecessary colposcopy and overtreatment of lesions that would otherwise resolve and thereby reducing the referrals and follow ups.

Not only the proper technique of smear taking is necessary, clinicians should also write adequate information on the request forms. Other influences such as pressure of litigation should be avoided to reduce cytological over diagnoses as a result of an unnecessary 'fear-factor'.

P-71 PREDICTORS OF HPV KNOWLEDGE AMONG GPS AND PRACTICE NURSES: RESULTS FROM ATHENS (A TRIAL OF HPV EDUCATION AND SUPPORT) STUDY

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[1]National Cancer Registry Ireland, Cork, Ireland, [2]Institute of Health and Society, Medical Faculty, Newcastle University, Newcastle, UK, [3]School of Health Sciences, City University London, London, UK, [4]Coombe Women and Infants University Hospital, Dublin, Ireland

Background: HPV testing and vaccination are changing the landscape of cervical cancer prevention. Practitioners increasingly need to be able to deal with questions about HPV in their practice. We investigated HPV knowledge among GPs and practice nurses.

Methods: The study setting was Ireland which has a mixed public-private healthcare system. As part of the ATHENS study, a survey was mailed to random samples of 880 GPs and 880 practice nurses. Practitioners were asked 11 factual questions on HPV infection and 10 factual questions on HPV vaccination. The number of questions answered correctly was used to generate two "knowledge scores" for each participant. Logistic regression was used to identify predictors of low knowledge.

Results: 241 GPs (27%) and 459 practice nurses (53%) participated. As regards HPV infection, 36% of female GPs, 23% of male GPs and 16% of practice nurses correctly answered ≥10 questions. Significant predictors of low (score ≤5) HPV infection knowledge were: being a male GP/practice nurse; not having public patients, and having never taken a smear. For HPV vaccination, 10% of female GPs, 32% of male GPs and 20% of practice nurses correctly answered ≤4 questions. Other significant predictors of low knowledge (score ≤4) were: working in a smaller practice; not specialising in women's health; and having never taken a smear.

Conclusions: These findings highlight important gaps in HPV infection and vaccination knowledge among some GPs and practice nurses. Further professional education initiatives are needed to ensure that women have access to uniformly high quality information and advice.

P-72 LEUKOCYTOCLASTIC VASCULITIS: AN INCIDENTAL FINDING ON ROUTINE SMEAR

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A 51 year old lady was referred for a smear test as the GP had difficulty visualizing her cervix. She offered no symptoms. Smear was taken and was reported as negative,routine repeat.

Incidentally, she was found to have an extensive leukoplakia on the anterior vulva with clitoral and labial

fusion. (Fig.1) Biopsy was difficult as she has a needle phobia.

Her medical history includes, alopecia areata which progressed to total alopecia in spite of intralesional Triamcinolone, steroid injections, UVB therapy and massage. She is an ex radiographer and has recently developed an eczematous reaction at the site of adhesive used on one of her wigs.

She appears systemically well although has mild arthralgia with morning stiffness.

Histology: Showed a small vessel vasculitis associated with "nuclear dust" typical of leukocytoclastic vasculitis. There was mild hyperkeratosis of the epidermis, unrelated to the vasculitis.(Fig 2)

Discussion: LV is presumed an uncommon condition and is usually mediated by deposition of immune complexes in small vessels resulting in inflammation. A wide variety of aetiology can be responsible, including infections, medications, chemicals, underlying disorders like connective tissue disease or malignancy.

The cause can be unknown in more than 50% of cases and can be localized to the skin or may involve other systems. It can either be acute or chronic and can affect both sexes equally.

Prognosis depends on the underlying cause.

Management: She was referred to Dermatology. Serology for ANA,ANCA and Rh factors were all negative.

Clinical presentation resembles lichen sclerosus but the difficulty is the correlation of clinical and pathological features.

She was prescribed Betnovate/Clotrimazole preparation and emollients and is being followed up by Dermatology.

P-73 IS CYTOLOGICAL FOLLOW-UP ADEQUATE IN ADOLESCENT FEMALES DIAGNOSED WITH CIN III?

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Introduction: Cervical intraepithelial neoplasia (CIN III) is a precursor to developing invasive cervical cancer. However, due to its rarity and high regression rate in the adolescent group, studies have suggested that cytological follow up for young women is sufficient and that colposcopy should be avoided[1].

Aim: We examined the frequency of CIN lesions of different degrees in women below 25 years old, and correlated between the cytological, colposcopic and histological diagnoses. The aim of this study is to ascertain the optimum follow up for young females diagnosed with CIN III.

Method: Cytological, colposcopic and histologic findings were analysed retrospectively for all women aged <25 at the time of referral over the period of 12 months (01/04/2011 to 31/03/2012).

Results: 37 females aged 16-24 were referred to the colposcopy clinic during this period indicated by abnormal cytology (94.5%) and clinical symptoms. 5.4% (2/37) had a histological diagnosis of CIN III. Out of the 27 females referred as 'Mild dyskaryosis', colposcopy showed 29.6% with CIN 1(8/27) and 37% CIN III (10/27), with the remaining colposcopic findings of HPV or normal. However, those with cytology of 'severe dyskaryosis' (n=4), 100% were consistent with both colposcopy (CIN III) and repeat cytology. Cervical biopsy of 13 females with suspected CIN III, based on abnormal colposcopic findings confirmed the diagnosis in 15.3% (2/13). CIN I & II in 53.8% (7/13), and HPV in 23% (3/13).

Conclusion: CIN III is rare in <25 year old. Subjective colposcopic images may be an overestimation of the degree of the cervical lesion leading to unnecessary intervention. However, severe dyskaryosis on PAP smear is often consistent with colposcopic findings and biopsy. This supports that cytological follow up for young women is sufficient and that colposcopy may be unnecessary and should be avoided where possible.

P-74 USE OF COLD COAGULATOR IN MANAGEMENT OF CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)

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Introduction: Visual Inspection of Cervix with Acetic Acid (VIA) for cervical cancer screening is adopted within the existing government infrastructure with support of UNFPA and Bangabandhu Sheikh Mujib Medical University (BSMMU). Nurses, paramedics and doctors of different centers of 64 districts received training and offering VIA test to married, non pregnant women 30 years and above. VIA+ve women are referred to BSMMU and 14 medical college hospitals for colposcopic evaluation and management.

Objective: To evaluate the use of cold coagulation in management of cervical intraepithelial neoplasia in the department of obstetrics and gynaecology of BSMMU.

Methods: Retrospective study was conducted among the patients undergoing "cold coagulation" of the CIN patients following colposcopic assessment from January 2010 to August 2012.

Results: 2200 women were detected as having colposcopy diagnosed CIN at the colposcopy clinic. Among 2200 women, 1674 (76.1%) had CIN I, 468 (21.3%) had CIN II and 58 (2.6%) had CIN III. Among them, 681 (31.0%) were managed by cold coagulation and 812 (36.9%) were managed by LEEP. Histopathology findings revealed 1034 (47.0%) had CIN I, 352 (16.0%) had CIN II and 99 (24.5%) had CIN III, 10 (0.4%) had cancer cervix, 2 (0.1%) had tuberculosis, 539 (24.5%) had normal and 2 (0.1%) had unsatisfactory result.

Among 812 women who had LEEP, 235 had come for follow-up and among them 6.8% had histology proven persisted CIN-II/III. Among 681 women who had cold coagulation, 163 had come for follow-up within 6 to 12 months and among them 2.5% had persisted histology proven CIN-II/III.

Conclusion: Cold coagulation has the advantage of being an inexpensive outpatient procedure with less electricity, less complication and no anaesthesia. Higher failure rate of treatment by LEEP was probably related to treatment of more high grade CIN cases by LEEP.

P-75 DOES THE NUMBER OF CONE FRAGMENTS (SINGLE VERSUS MULTIPLE) AFFECT THE MARGIN POSITIVITY AND RECURRENCE RATE AFTER LLETZ CONISATION?

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Objectives: To determine whether the number of cone fragments affects the margin positivity rate and 6 and 12 month recurrence rate after LLETZ conisation.

Methods: Data was collected from the colposcopy database of our hospital for women with single LLETZ conisation for CIN pathology over the time period of January 2010-November 2011. Women with previous conisation were excluded from our study.

Results: n=265 women had a LLETZ conisation over this two-year time period. Mean age was 35.5±8.9 years and mean cone depth was 12.2±3.3 mm. Single cone fragments represented 63.4% of cone specimens, whereas 2 cone fragments represented 21.3% and ≥3 fragments were 15% (range: 1-6 fragments). Positive excision margins on cone histology were 39.1% and involved the endocervical margin in 40.3% of all positive cone margin cases. The recurrence rate at 6 and 12 months post-LLETZ defined as dyskaryosis (mild/moderate/severe) on follow-up cytology was 5.2% and 3.5%, respectively. The number of cone fragments did not correlate with margin positivity (p=0.08) or with the 6 and 12 month recurrence rate (p=0.41; p=0.56). Nevertheless, the number of cone fragments did correlate with cone depth (r=0,145; p=0.01). Women with ≥2 cone specimen fragments had a greater cone depth versus those with one cone fragment (13±3.3 versus 11.8±3.3 mm, p=0.006). In 76.5% of cases where the histopathologist could not confirm completeness of excision, this involved multiple fragment cones (≥2 fragments).

Conclusions: Conisation with multiple passes and fragmentation of the cone specimen does not provide any benefit in removing more disease and leading to less recurrence rates. On the contrary, it leads to a greater cone depth which may expose the patient to adverse obstetric outcomes in future pregnancies as reported in literature. Moreover, it may lead to a high rate of cases where complete excision of disease cannot be excluded by the histopathologist.

P-76 DOES MODE OF ANAESTHESIA (GA VS LA) IN LLETZ CONISATION FOR CIN PATHOLOGY AFFECT THE COMPLETENESS OF EXCISION AND PERSISTENCE OF DISEASE? RETROSPECTIVE DATA ANALYSIS

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Objectives: To investigate whether women taken to theatre for LLETZ conisation under general anaesthetic (GA) have different demographic features, lesion size, conisation features, and margin positivity/recurrence rates at follow-up, in comparison to women treated as outpatients with LLETZ under local anaesthetic (LA).

Methods: Data was collected from the colposcopy database of our hospital for women with single LLETZ conisation during a 2 year period (2010-2011). 81 cases of LLETZ conisation under GA were identified, which represented 15.7% of all LLETZ conisations in the same time period. These cases were matched with n=184 cases of LLETZ conisation under LA in outpatient settings over the same time period.

Results: Women having LLETZ under GA were younger in comparison to women having LLETZ under LA (32.2±7.5 vs 37.1±9.2; p<0.001). Referral cytology, pre-LLETZ cervical biopsies and the mean cone depth (12.2±3 mm) were similar in both groups. However, the cone base surface was larger in the GA group versus the LA group (p=0.02), which reflects the greater lesion size in these women. Positive excision margins and positive endocervical margin involvement were similar in both groups. The cone specimen was received as a single fragment in 65% of cases. Recurrence rates at 6 and 12 months post-LLETZ were similar between the two groups (3% and 2.5%, respectively). Malignancy found on cone histology was 4.9% in the GA group versus 1.1% in the LA group.

Conclusions: Women referred to having LLETZ under GA are younger in age and have a larger lesion size. In theatre, conisation is performed in a manner that yields the same mean cone depth, a greater cone base surface, similar margin positivity, similar endocervical margin involvement and similar recurrence rates at 6 and 12 months cytology follow-up. Finally, malignancy cases are more frequently picked up in the GA group of women.

P-77 LONG-TERM DATA ON THE TREND OF HPV-RELATED BIOMARKERS POST-TREATMENT FOR CIN

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Objective: To assess the long-term alterations in HPV related biomarkers pre- and post- treatment for CIN and to verify their role as a prediction tool for recurrent disease

Material and Methods:

Design: Prospective observational study

Setting: University Hospital of Ioannina

Population: Women planned to undergo LLETZ for CIN

Intervention: An LBC sample was obtained prior to treatment (time 0) and was repeated at 6,12,18,24,30,36 and 48 months after treatment. This was tested for HPV-related biomarkers.

Outcomes: We calculated trend of positivity of HPV-related biomarkers after CIN treatment. Biomarkers' Sensitivity (S) , specificity (Sp), PPV and NPV were also assessed.

Analysis: We calculated expression rates for each one of the HPV-related biomarkers prior to the treatment and at follow-up visits.

Results: Of 389 women included, histology showed CIN2+ in 284 cases. Twenty six individuals underwent second treatment. HPV-DNA appeared to be positive in 37.1% at the second follow-up visit and in 28.4% of the cases 2 years post-operatively. The NASBA test was positive prior to the treatment in 47% of the cases, and 5% at the 7th follow up visit. Flow cytometric evaluation of mRNA E6&E7 appeared to be positive in 33% at the 24months visit. The best sensitivity for the prediction of treatment failures was performed by HPV-DNA (68%) with PPV=96.7%. The NASBA test appeared to have the best specificity (94%) in identifying women with < CIN2 lesions.

Conclusion: CIN treatment leads to a significant reduction in positivity for all HPV-related biomarkers. It appears that this is reduced due to the treatment itself. The application of HPV-related biomarkers (single or combinations) during follow-up, could enhance early prediction of recurrent disease.

P-78 INCREASE RATE OF ANAL INTRAEPHITELIAL NEOPLASIA IN WOMEN WITH GENITAL INTRAEPHITELIAL NEOPLASIA

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Background: Human papilloma virus (HPV) is known to cause intraepithelial neoplasia of the female genital tract. Although genital intraepithelial neoplasia may be multicentric, few studies have investigated the prevalence of anal intraepithelial neoplasia (AIN) in women with multifocal genital intraepithelial neoplasia

Methods: This is a retrospective study of women attending the colposcopy service at St Mary's Hospital in London between 2007 and 2011. Patients with a confirmed diagnosis of genital intraepithelial neoplasia by colposcopy examination and biopsies of the cervix, vagina or vulva were selected. For these patients

histopathological evidence of anal intraepithelial neoplasia (AIN) and anal squamous cell carcinoma (SCC) in their medical records were evaluated.

Results: Thirty-three patients with lower genital tract neoplasia were identified. The median age was 50 (range 27 to 77). Only 2 patients were HIV infected, both stable on ART.CIN was present in 21 patients (63%), VIN in 11 (33%) and VAIN in one. Multicentric disease (in more than one site) was identified in 7 patients (21%). Of the 33 patients with any lower genital tract neoplasia, 11 patients (25%) had biopsy-proven evidence of AIN, and 4 patients (12%) developed anal SCC. From the 11 patients with AIN, 8 (72%) had AIN3 and of these 3 developed anal SCC.

Conclusion: In this study, patients with cervical, vulval and vaginal intraepithelial neoplasia had an increased rate of AIN. AIN should be considered as part of multicentric disease of the lower genital tract caused by HPV infection

P-79 PREGNANCY OUTCOME AFTER ELECTROSURGICAL CONE BIOPSY OF CERVIX USING STRAIGHT WIRE ELECTRODE

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Electrosurgical cone biopsy is performed using a straight wire electrode to fashion a cylindrical cone of cervix with an aim to remove transformation zone(TZ) and 20-25 mm length of endocervical epithelium . Alternatives to LLETZ, such as knife or electrosurgical cone biopsy are recommended in patients with Type 3 TZ especially with glandular abnormalities. Published data on Knife cone biopsy suggested association with preterm delivery, low birth weight and caesarean section. Data on electrosurgical cone biopsy using straight wire electrode is sparse.

Aim: To evaluate the pregnancy outcome of all patients who underwent electrosurgical cone biopsy of cervix using straight wire electrode between January 2000 to December 2011 and subsequently became pregnant.

Methods: This retrospective observational study was performed in Diana Princes of Wales Hospital Grimsby. Patients were identified from local colposcopy and maternity data system.

Data was collected on proforma with two sections.

Treatment section: Year and Indication of treatment,

volume of cervix removed, histological results and marginal status of specimen were documented.

Pregnancy section: Recorded time interval between treatment and pregnancy, pre-treatment obstetric history including parity and gestation in previous pregnancies .The data on use of cervical length measurement, cervical suture, gestation and mode of delivery and neonatal outcome were also documented.

Results: 27 patients and 30 pregnancies were identified after five years colposcopy data review. Data collection is still ongoing and will be analyzed using SPSS .Results will be available to present in the meeting.

P-80 AN AUDIT OF CERVICAL CANCER CASES FOR THE YEAR 2012 AT THE ROYAL SHREWSBURY HOSPITAL

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Objectives: To identify the number of patients with cervical cancer over a 1 year period and to present our local data.

Methods: Data was retrospectively collected for patients diagnosed with cervical cancer in the year 2012. Comparisons to previous years are recorded.

Results: During the study period, n=30 patients were identified. At time of diagnosis the mean age of women was 49.2±17.5 years (range: 25-83), with 33.3% being post-menopasual. Suspicion of disease was due to an abnormal smear in 15/30 (50%) cases without any symptoms, the presence of symptoms such as post-coital bleeding 15/30 (50%), or by a clinically suspicious cervix combined with irregular bleeding in 3/30 (10%). The abnormal referral smears involved severe dyskaryosis (5/15=33.3%), suspicion of invasion (4/15=26.6%), borderline changes (3/15=20%), abnormal endocervical cells (2/15=13.3%) and suspected cGIN (1/15=6.6%). In 17/30(56.6%) of patients a cervical biopsy was taken during colposcopy and 12/30(40%) had a LLETZ cone performed as see-and-treat management at first visit. Histological type was SCC in 21/30(70%) of patients, with 5/30 (16.7%) of cases being microinvasive (stage 1A1), 1/30(3.3%) stage 1A2, 7/30(23.3%) stage 1B1, 2/30(6.7%) stage 1B2, and 15/30(50%) being ≥stage 2B. Also, 2/30(6.6%) of patients had a previous breast cancer. In comparison to previous years (2009-2011) in our hospital, there seems to be a rise in the number of cervical cancers recorded as there were 15, 22 and 23 cervical cases per year, respectively.

Conclusions: There seems to be a gradual increase in the number of patients that present with cervical cancer over the years. This however could merely reflect the fact that we are seeing a greater number of referrals in our unit. Future audits will investigate whether this is a true increase and whether there is a change in the patients' demographics and risk factors that account for this increase

P-81 AN UPDATE ON PREGNANCY OUTCOMES AFTER LLETZ FOR CIN

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Objective: To determine how the proportion of the cervical volume/length excised affects cervical regeneration and pregnancy outcomes.

Material & Methods:

Design: Prospective observational study.

Setting: University Hospital of Ioannina (from 1-2009)

Population: Women planned to undergo LLETZ for CIN who wish future fertility.

Interventions: The cervical volume&dimensions was calculated with MRI,3D-TVS or 2D-TVS before treatment. The volume&dimensions of the cone was assessed before fixation by a volumetric tube and a ruler; the percentage of excision was computed. Cervical regeneration was estimated by repeat MRI/3D-TVS/2D-TVS at 6months.

Outcomes: Cervical regeneration in relation to proportion of excision–Pregnancy outcomes.

Results: A total of 198 women have been recruited (MRI:62, 3D-TVS:101, 2D-TVS:35); 176 completed 6months follow-up. Both the total cervical volume before treatment and the volume of the excised cone varied substantially. The estimated proportion of excision varied significantly between 4.7-41% (median 12.7%). Multivariate linear regression revealed that the proportional deficit at 6 months was determined mainly by the proportion of the excised volume. Subgroup analysis revealed similar findings for each imaging technique. Nine women have conceived following treatment. Twenty-six have already delivered, 19 at term, five at 35 and 2 at 32weeks of gestation. Both preterm births were observed in women with large proportions of excision. Detailed data on outcomes of the pregnancies will be presented.

Conclusions: Careful assessment of risks and benefits of treatment is essential when deciding to treat women who wish to have future pregnancies. All three imaging modalities appear to be equivalent in cervical volume measurements. Assessment of the cervical volume proportion and length excised might identify those that need further surveillance during future pregnancy.

P-82 THE IMPACT OF VULVAL INTRAEPITHELIAL NEOPLASIA (VIN) USING A VIN SPECIFIC QUESTIONNAIRE

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Background: The incidence of VIN, particularly in young women is increasing. Symptoms, diagnosis, treatment and follow up of VIN can negatively affect women's quality of life. No single existing VIN specific questionnaire measures the impact of VIN on women's lives and the effect of therapies

Objectives: To assess the impact of the diagnosis, symptoms, management and follow-up on women with VIN using a condition-specific questionnaire.

Methods: A VIN specific questionnaire was developed and rigorously assessed for acceptability, intrusiveness, comprehensiveness and women's understanding of the questions. The questionnaire was sent to 147 women with a diagnosis of VIN resident in the Grampian region, together with other relevant questionnaires, to test for validity and test-retest reliability.

Results: 58 women completed the questionnaire. Twenty-five women (42%) had experienced symptoms of VIN in the last month, however, most women (90%) had not experienced any interference with their daily activities. Of the 22 women (38%) who were sexually active, 10 reported a decrease in sexual activity because of VIN. Overall total VIN score was low mean = 28.6 (SD = 13.8), median = 24.5 (IQR = 19 - 34).There was no significant difference in total VIN score across different treatment modalities (p =0.09).

Conclusion: The majority of women scored low in the VIN questionnaire, which may indicate they had not experienced some of the problems highlighted in the questionnaire. For those who were sexually active, VIN had a detrimental effect on frequency of sexual activity. This questionnaire could be used to assess or monitor the impact of care, or to compare new and existing treatments for women with VIN.

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