



BSCCP2012

Annual Scientific Meeting

18th - 20th April. The Sage, Gateshead



Book of Abstracts



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O-1

IS A NORMAL COLPOSCOPY RESULT REASSURING FOR WOMEN? RESULTS FROM THE UK TOMBOLA TRIAL

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Background: Approximately one-third of women with low-grade cytology referred to colposcopy have a normal transformation zone. Risk of progression is low (in recent studies <5% develop CIN2/3 over 3-years). Receipt of an abnormal cytology result and attending colposcopy can engender considerable anxiety but whether women feel reassured by “normal” colposcopy findings in the longer-term is uncertain. We investigated prevalence of adverse psychosocial outcomes over 3 years following a normal colposcopy.

Methods: We included 727 women aged 20-59 years with recent low-grade cytology who were randomised to colposcopy, and found to have a normal transformation zone. For most, follow-up was annual cytology in primary care. Women completed questionnaires (including the Hospital Anxiety and Depression Scale, and questions on specific worries) at recruitment and at 12, 18, 24 and 30 months.

Results: All psychological outcomes had high prevalence at recruitment, falling substantially by 12-months. During follow-up (12-30 months), cumulative prevalence of clinically significant anxiety was 23% and depression 18%. The most frequently reported worry concerned the result of the next smear (>50% at 12- and 18-months). At 12-months, 19% were worried about cervical cancer, falling to 14% by 30-months. Throughout follow-up 9-11% were worried about having sex and 7-11% about future fertility.

Discussion: A normal colposcopy does not appear to provide psychological reassurance for substantial proportions of women referred with low-grade cytology. Although management is changing, large numbers of women will continue to have normal colposcopy findings, suggesting it is timely to focus on what can be done to allay their concerns.

O-2

FOLLOW-UP OF UNTREATED HIGH-GRADE LESIONS: IS THERE A ROLE FOR SURVEILLANCE WITH HPV-RELATED BIOMARKERS?

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Objective: To review outcomes of women with untreated high-grade lesions in different clinical scenarios and to identify possible combinations of tests and biomarkers that could safely discriminate which of these women require treatment.

Material and Methods: Setting: Three University Hospitals; Ioannina, Greece-West London, UK. Period: 2009-2011

Population: A young women with small histologically proven CIN2 lesions with consistent or< HG colposcopy that have been offered the option of close surveillance and b.women with high-grade lesions declining treatment.

Interventions: Follow-up data on cytology,colposcopy and histology were retrieved through the colposcopy database. In a subgroup with CIN2, an LBC specimen was prospectively obtained prior to colposcopy and was tested for HPV-related biomarkers.

Outcomes: Progression/persistence/regression rates during the follow-up period. Biomarkers'sensitivity(S, specificity(Sp),PPV,NPV,(+)&(-)likelihood ratios(LR) were calculated.

Results: A total of 102 patients, were identified. During 2years of follow-up, 32%of them were eventually treated due to persistent HGSIL, while 64%out of these regressed spontaneously to normal; 8 didn't attend for treatment, 4 have borderline smears, 5 had mild dyskaryosis smears and 14 are still under close surveillance with cytology/colposcopy 4monthly.Results on HPV-related biomarkers are available in 20% of the included cases and will be presented. Four women referred with high-grade cytology and consistent colposcopic findings refused treatment. There were no progressive invasive lesions in any of the groups.

Conclusion: Some of the combinations of HPV-related biomarkers may have significant accuracy in predicting lesions likely to regress. This could allow conservative management for women at low risk and avoidance of unnecessary intervention and/or treatment. These biomarkers may also allow safer surveillance of women: a.declining treatment or b.conceive prior to treatment.

O-3

ACCURACY OF COLPOSCOPIC DIRECTED PUNCH BIOPSIES: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: The colposcopy-directed punch biopsy is widely used in the management of women with abnormal cervical cytology; however, its accuracy compared to definitive histology from an excision biopsy is not well established.

Objectives: To assess the accuracy of the colposcopy-based punch biopsy to diagnose high-grade cervical intraepithelial neoplasia (CIN) by performing a systematic review and meta-analysis

Search Strategy: A systematic search of MEDLINE, EMBASE and the Cochrane library was performed.

Selection Criteria: Articles that compared the colposcopically-directed cervical punch biopsy with definitive histology from an excisional cervical biopsy or hysterectomy.

Data collection and analysis: Random effects and HSROC regression models were used to compute the pooled sensitivity and specificity applying different test cut-offs for outcomes of high-grade CIN.

Results: Thirty-two papers comprising of 7,873 paired punch/definitive histology results were identified. The pooled sensitivity for a punch biopsy defined as test cut-off CIN1+ to diagnose CIN2+ disease was 91.3% (95% CI 85.3-94.9%) and the specificity was 24.6% (95% CI 16.0-35.9%). In most of the studies, the majority of enrolled women had positive punch biopsies. Pooling of the four studies where the excision biopsy was performed immediately after the punch biopsy, and where the rate of positive punch biopsies was considerable lower, yielded a sensitivity of 81.4% and specificity of 63.3%.

Conclusion: The observed high sensitivity of the punch biopsy derived from all studies probably is due to verification bias.

O-4

HPV DNA, MRNA AND P16INK4A/KI-67 PROTEIN CO-EXPRESSION IN LOW GRADE CERVICAL ABNORMALITIES

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Introduction: The management of low grade abnormalities remains problematic, due to the high prevalence of transient HPV infections in low-grade disease HPV DNA triage is limited. The use of HPV E6/E7 mRNA detection and biomarkers such as p16INK4A and Ki-67 has potential to identify clinically significant infections improving diagnostic specificity.

Methods: Cervical smears for HPV testing and immunocytochemical analysis were collected from 1024 women presenting with LSIL/ASCUS at their first visit to colposcopy at the National Maternity Hospital, Dublin. HPV DNA was detected by Hybrid Capture II (Qiagen, UK), HPV E6/E7 mRNA expression by the PreTect™ HPV Proufer (NorChip AS, Norway) and p16INK4A/Ki-67 expression was assessed using CINtec PLUS (Roche).

Results: A total of 240 (23%) had CIN 2+ at first visit to colposcopy. Detection of HPV E6/E7 mRNA appears to be more specific 70% (95% CI 0.663-0.730) than HPV DNA testing 44% (CI 0.415-0.488) for detection of CIN 2+. In a subset of cases p16/ki67 expression has been correlated with HPV DNA and mRNA status to investigate combined testing for optimal clinical sensitivity and specificity.

Conclusion: This offers prospective evidence that HPV testing in the management of women presenting with low grade abnormalities could be useful in detecting those at risk of developing high grade disease.

This study is carried out under CERVIVA the Irish Cervical Screening Research Consortium funded by the Health Research Board. Christine White's PhD studentship is funded by The Irish Cancer Society.

O-5

CONSERVATIVE MANAGEMENT OF HIGH GRADE VAGINAL INTRAEPITHELIAL NEOPLASIA: WHAT DO YOU DO WHEN COLPOSCOPY IS NORMAL BUT CYTOLOGY IS ABNORMAL?

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Objective: To determine the role of conservative management in high grade vaginal intraepithelial neoplasia (VaIN), particularly when colposcopy is normal but cytology is abnormal.

Design: Retrospective observational study of all women with histologically proven high grade VaIN from January 1995 until June 2011.

Setting: Northern Gynaecological Oncology Centre (NGOC), Gateshead, UK.

Subjects: 100 women referred to the NGOC found to have high grade VaIN on biopsy.

Outcome Measures: 1) Overall progression to cancer, 2) treatment cure rate, 3) disease recurrence, and 4) progression-free follow-up when colposcopy is normal but cytology is abnormal.

Results: Of the 100 women referred, 71 underwent primary treatment and 29 were managed conservatively. The rate of progression to cancer was 3% with all 3 cancers detected amongst the primary treatment group at a median of 58 months (range 8-252 months) after diagnosis of high grade disease.

Forty two patients were cured after initial treatment of high grade disease and, of these, there were 8 disease recurrences after a median period of 29 months (range 8-112 months).

Of the 38 patients with normal colposcopy but abnormal cytology, all cases were later diagnosed with clinically confirmed high-grade VaIN after a total of 80 women years of follow-up resulting in a median period of 16 months per patient (range 1-110months). No cases developed cancer.

Conclusions: This study represents the largest cohort of women with high grade VaIN described in the literature. It demonstrates the safety of conservative management and the importance of long-term follow-up.

O-6

MANAGEMENT OF FIGO STAGE 1A1 CERVICAL CANCER OF EARLY STROMAL INVASION TYPE: RESULTS OF A NATIONAL AUDIT

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Introduction: National Audit was conducted to assess attitudes towards the management of women with ESI type cervical cancer; and to investigate whether attitudinal differences exist regarding the management of ESI type cervical cancer when LVSI is present.

Methods: National invitation was sent to all colposcopy leads via the BSCCP to complete a questionnaire approved by the NHSCSP Colposcopy PAG. Responses were centrally collected. Statistical analysis was performed with Fisher's exact test.

Results: 71 completed questionnaires. In ESI <1mm (no LVSI) the majority reported that they would re-excise on a background of incompletely excised CIN irrespective of patient age group. Significantly more respondents re-excised if the endocervical margin was involved as compared with the ectocervical margin alone in women <50yrs (p=0.0109).

LLETZ was the preferred method of choice for performing repeat excision. More respondents were prepared to perform hysterectomy when there were additional gynaecological indications than in cases where ESI was the only issue.

The presence of LVSI resulted in no change of management in the majority. However, >40% wished to perform an MRI, and 18% offered pelvic lymphadenectomy irrespective of age.

Conclusion: There is appears to be national consensus on the management of ESI. However, practice varies when LVSI is taken into account. In ESI the risk of nodal involvement is <0.1% and the overall reported risk of LVSI is 4.4%. There is no clear evidence to support an aggressive management strategy, and considering the morbidity associated with lymphadenectomy, this needs to be examined in more detail.

0-7 POST-COLOSCOPY MANAGEMENT OF WOMEN WITH CIN1 AND FACTORS ASSOCIATED WITH PROGRESSION OF CIN1: RESULTS FROM TOMBOLA

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Background: The most effective management of women with CIN1 remains uncertain.

Objectives: Among women with low-grade cytology and biopsy proved CIN1, to determine,

- 1) Clinical outcomes after 36-months of follow-up;
- 2) Whether HPV status influences risk of progression

Methods: Women aged 20-59 years with recent low-grade abnormal cytology were recruited to TOMBOLA, randomised to colposcopy or cytological surveillance, and followed for 36-months to an exit colposcopy. At recruitment, socio-demographic and lifestyle data and a sample for HPV testing using PCR methods (for 14 high-risk (HR) types, HPV16, and HPV18) were collected. This analysis includes 166 women from the colposcopy arm with biopsy proven CIN1 and managed conservatively.

Results: The median age was 29 years (IQR 23-29). 46% (76/166) were HRHPV positive, 16% HPV16 positive and 10% HPV18 positive. 12 women (7%) did not have a cytology test during follow-up. Up to and including the exit examination, 20 (12%) women developed CIN2/3; (median time to detection= 26 months). In univariate analysis of socio-demographic, lifestyle and HPV data, the only factor associated with risk of progression to CIN2/3 was presence of HPV16 and/or HPV18 at recruitment (OR=4.3, 95%CI 1.5-11.7). The sensitivity and specificity of combined HPV16/18 testing for the detection of CIN2/3 over three years were 42% and 78% respectively.

Conclusion: These results suggest that women with biopsy-confirmed low-grade lesions have low rates of progression to high grade CIN within 3 years. A single HPV test is not clinically useful as a tool for triage of women with CIN1.

0-8 A HAND-HELD ELECTRICAL IMPEDANCE SPECTROSCOPY DEVICE IMPROVES COLPOSCOPY PERFORMANCE

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Objective: To determine if use of an Electrical Impedance Spectroscopy (EIS) device (APX100) as an adjunct to colposcopy, improves performance.

Methods: APX100 was used to take 12 readings from the cervix. Colposcopic examination and biopsies were taken per local practice. Examinations were video recorded to produce a colposcopic diagnosis for each APX100 reading site and assess accuracy of colposcopy directed biopsies. EIS spectra were compared with spectra generated from a computer model of cervical epithelia to derive a probability that HSIL is present.

Results: 429 evaluable women with abnormal cytology were recruited, at three colposcopy clinics, with 214 eligible for analysis in phase one and 215 in phase two. Mean age was 33.2 (range 20-64). 48.5% had high grade cytology. Biopsy rates were 1.4 - 1.6 per woman. Colposcopic performance was consistent with published studies. Using EIS, as an adjunct, gave the following results; sensitivity 73.5%, specificity 90.8%, PPV 86.5%, NPV 81.2%. Receiver operator characteristic to detect HG-CIN showed an area under the curve of 0.89 in phase two, a significant increase on published values. Three adverse events were reported.

Conclusions: The study demonstrated the safety of APX100. Performance of APX100 is independent of the application of acetic acid. Using APX100, as an adjunct, PPV to predict HSIL can exceed 90%. APX100 is a clinically useful device for the detection of or absence of HSIL. APX100 could prevent over treatment when using a 'see and treat' management strategy and enhance patient care.

O-9

WHAT DO WOMEN WHO HAVE NEVER HAD A SMEAR TEST THINK? WOMEN'S ATTITUDES AND BELIEFS AND OTHER FACTORS ASSOCIATED WITH NEVER HAVING HAD A SMEAR

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Background: The success of cervical screening programmes is based on achieving high uptake. In recent years, uptake in several countries has been decreasing. Understanding the attitudes and beliefs of non-attendees may help inform initiatives to improve attendance. We investigated factors associated with never having had a smear and compared attitudes and beliefs among these women with those who had had smears, in Ireland.

Methods: A questionnaire was mailed to a random sample of 5,553 women aged 20-64, selected through primary care. This included questions on socio-demographics, health behaviours, and views/attitudes towards smear tests. Respondents were classified by whether they had ever/never had a smear. Logistic regression was used to identify factors, attitudes and beliefs associated with never having had a smear.

Results: 3,470 completed questionnaires were received (response rate=62%), of whom 237 (7%) had never had a smear. In adjusted models, smokers and single women were significantly less likely to have ever had a smear. Women who had never had a smear were significantly more likely to be unsatisfied with their GP, or believe women only need a smear if their GP recommends it. They were also significantly more likely to perceive that having a smear would be difficult (19% vs 5%), time-consuming (16% vs 6%), or embarrassing (14% vs 4%).

Conclusions: GPs have a hugely influential role in women's screening behaviours. Women's perceptions about smear tests still pose barriers to attendance. Smear takers and screening programmes need to focus on addressing these perceived barriers if uptake is to be increased.

O-10

ALTERATIONS ON HPV-RELATED BIOMARKERS AFTER PROPHYLACTIC HPV VACCINATION

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Aim: 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 p16^{INK4a}.

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 136 women were included. Twenty-one women were vaccinated (Group A). HPV vaccination reduced statistically significant the HPV positivity rates for 16 and 18 subtypes (p=0.008) in women tested positive with activated HPV infection 16 or 18 prior to the vaccine. The same significant reduction was not shown for the women tested negative for mRNA E6 & E7 expression (p=0.879).

Conclusions: HPV vaccination appears to reduce significantly the rates of positivity for 16 or 18 activated HPV infections and possibly could enhance HPV clearance. HPV vaccination doesn't seem to affect the simple not integrated HPV infections.

0-11 IMPACT OF HPV VACCINATION ON ADOLESCENT SEXUAL BEHAVIOUR: EXPLORING RISK COMPENSATION AND 'GREEN LIGHT' EFFECTS

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Background: Since the roll-out of the UK HPV vaccination programme in 2008, critics have suggested that vaccinating adolescent girls against HPV, which is sexually transmitted, might lead to increased risky sexual behaviour. If this is the case, some of the benefits of the vaccination programme may be offset by other adverse health consequences of risky sexual behaviour such as unplanned pregnancy and other sexually transmitted infections.

Objectives: We tested two hypotheses: 1) that vaccinated girls would feel less at risk of cervical cancer and would therefore engage in riskier sexual behaviour than unvaccinated girls (risk compensation effect); and 2) that simply being offered the vaccine would imply parental support of sexual behaviour and would make girls more likely to become sexually active ('green light' effect).

Methods: 406 girls completed a questionnaire before and after being offered the HPV vaccine as part of the catch-up campaign. Comparisons were made between vaccinated and unvaccinated girls. We also compared girls who had not been offered the vaccine with an equivalent cohort of girls who had (n=1018).

Results: Vaccinated girls had a greater decrease in perceived risk of cervical cancer between Time 1 and Time 2 than unvaccinated girls but there were no differences in risk-related behaviours. Girls who had been offered the vaccine were no more likely to be sexually active than those who had not.

Conclusion: We found no evidence to support the suggestion that HPV vaccination might have an adverse impact on adolescent sexual behaviour.

0-12 A QUESTIONNAIRE SURVEY TO STUDY THE EFFECT OF COLPOSCOPY TEACHING IN EUROPE

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The objective is to see if colposcopy teaching can provide a measurable effect.

A questionnaire containing 10 clinical scenarios requiring colposcopy was completed by delegates attending three colposcopy training courses in Europe.

128 and 132 questionnaires were returned pre- and

post-training respectively. The means and standard deviations for the number of correctly assessed scenarios were M=4.21, SD=1.71 at pre-training and M=5.05, SD=1.82 at post-training. The chi-square test showed a statistically significant difference in the proportions of correct answers at pre- and post-training for five questions. The two factor ANOVA showed that there is a statistically significant difference between the pre- and post-training measures ($F_{(2,124)} = 17.13$, $p < .001$) although the effect of training is not the same for all three locations.

Trainees' results show that there is a positive effect of training. The questionnaire may be used as a quality tool for measuring the effectiveness of training for colposcopy.

0-13 PROPORTION OF EXCISION, CERVICAL HEALING AND PREGNANCY OUTCOMES AFTER LARGE LOOP EXCISION OF THE TRANSFORMATION ZONE FOR CERVICAL INTRAEPITHELIAL NEOPLASIA

Maria Kyrgiou¹, Christina Founta^{2,3}, George Valasoulis², Sofia Melina Stasinou², Pierre Martin-Hirsch³, Marc Arbyn⁴, Walter Prendiville⁵, Evripidis Bilirakis⁶, Spyros Tzioras², Petros Karakitsos⁷, Dimitrios Kassanos⁸, Aristotelis Loufopoulos⁹, Evangelos Paraskevaidis², & The Hellenic Cervical Pathology Study Group¹

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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 139women have been recruited (MRI:62,3D-TVS:61,2D-TVS:16); 116 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 5-41%(median 13%).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.Seven have already delivered,5 at term, one at 35 and one 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.

have immediate loop treatment. 186 (72.1%) of these women had high grade disease on loop histology, 1 additional adenocarcinoma in situ and 2 cancers were diagnosed on these loops. Of the 100 (38.8%) women who had loop biopsy at a later date, 65 (65%) had high grade loop histology. Three women with CIN 2 on punch biopsy opted for colposcopic and cytologic surveillance only.

Conclusions: This study demonstrates a higher than previously reported concordance rate of punch biopsy with loop histology when both are performed on the same day. It also proves the long-term sustainability of the one-stop colposcopy service established in 1999 and establishes patient acceptability.

O-14 LONG-TERM FEASIBILITY OF A 'SELECT-AND-TREAT' ONE STOP COLPOSCOPY SERVICE: TEN YEARS' EXPERIENCE

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Objective: To determine the long-term feasibility of a 'one stop' colposcopy clinic and the correlation of punch biopsy and loop histology.

Design: Observational study of all women with low grade referral smears referred to the 'one stop' colposcopy clinic between March 2001 until June 2011 .

Setting: 'One stop' colposcopy clinic at the Northern Gynaecological Oncology Centre, Queen Elizabeth Hospital, Gateshead.

Subjects: 2287 women referred with low grade cytology, 2090 of whom underwent colposcopically directed punch biopsy.

Outcome Measures: Patients' choice for either immediate or deferred loop treatment. The histology of the punch biopsy and excised transformation zone.

Results: Of the 361 women with high grade disease proven on punch biopsy, 258 (71.5%) women opted to

P-1 COLPOSCOPY REFERRALS FOR POST COITAL BLEEDING SOUTHEND HOSPITAL NHS TRUST

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Introduction: With increasing number of referrals to colposcopy clinic with symptoms of PCB (49%), the bulk of which either had no referral cytology but reporting symptoms of pcb or referrals of PCB with a negative smear, we decided to carry out this audit to ascertain the source, reason, appropriateness and outcome of these referrals.

Methodology

- Retrospective audit
- Patients referred:162
- 79 women referred for colposcopic assessment with symptoms of PCB
- Jan – Dec 2009

Results: Colposcopic impression

- 17 looked normal
- 53% (9) had biopsy
- 18% (3) had CIN (High grade - 1; Low grade- 2)
- 11 looked abnormal
- All had a biopsy
- 68% had CIN
- (High grade – 2, Low grade- 6)
- No malignancy detected throughout

Conclusions:

- 49% of referrals were for PCB
- Only low grade CIN picked up in the < under 25s
- 15% (12 cases) of referrals had CIN (3 high grade)
- Despite PCB being a common presentation of cervical malignancy – none were diagnosed on colposcopy.
- Patients who have PCB should be considered for a colposcopy assessment, provided basic investigations have been performed.
- Colposcopy accuracy for diagnosing abnormal looking Cx is 68%, normal looking cx is 33%

Future Recommendations

- Guidelines needed - Local Trust Guidelines, including protocol for internal referral & development of flow chart for over 25yrs
- Re- Audit in 12 months

P-2 CONSENT FOR TREATMENT IN COLPOSCOPY - AN AUDIT OF CURRENT PRACTICE, AND CREATION OF A PRE-PRINTED CONSENT FORM

*Martyn Underwood
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Background: Destructive and excisional treatments are performed within the colposcopy department on a daily basis but are we taking adequate consent for the procedure? There is ever increasing evidence of the risk of preterm birth following treatment to the cervix, however not all patients are being informed of these risks. There is no pre-defined consent form either from BSCCP or RCOG with regards to LLETZ and destructive treatment.

Objective: Perform an audit and retrospective review of recent consent forms for LLETZ and destructive treatment performed.

Selection Criteria: 20 set of notes/consent forms reviewed covering consultants, SpR and nurse specialist for patients undergoing colposcopy and treatment, identifying type of treatment and risks documented.

Data Collection: Notes collected at random and collated into a Microsoft Excel spreadsheet.

Results: All patients were informed of the risk of bleeding and infection, however of those who should have been informed of the risk of preterm birth only 62% were informed.

Conclusion: Of the 11 most common risk factors only three were commonly reported to the patients. With the ever increasing evidence particularly of preterm birth we need to standardise the consent form so that patients can make informed consent prior to undergoing there treatment.

P-3

THE USE OF SENTINEL NODE SAMPLING IN VULVAL CANCER: A UK CANCER CENTRE EXPERIENCE

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Objectives: To determine the accuracy of the Sentinel lymph node sampling (SLN) technique and compare short and long term morbidities of those having vulvectomy with SLN sampling followed by total inguinofemoral lymphadenectomy with those managed by vulvectomy and SLN sampling alone.

Methods: Retrospective data collection of all cases undergoing SLN sampling at a cancer centre between march 2007 and December 2009. Disease demography, short- and long-term post-operative morbidities, length of post-operative hospital stay, lymph node status, nodal recurrence, false negative rate and disease mortality were recorded and analysed. The SLN and inguinofemoral lymph nodes from the same groin were then assessed separately for cancer metastasis. Comparing the sentinel and inguinofemoral lymph nodes enabled an assessment of the false negative rate of SLN sampling.

Results:

Short term morbidity

SLN 14%, total inguinofemoral lymphadenectomy 56%
P=0.094

Long term morbidity

SLN 4%, total inguinofemoral lymphadenectomy 33%
P=0.035

Mean duration of stay

SLN 7.7days, total inguinofemoral lymphadenectomy 11.4 days P=0.172

Conclusion: SLN sampling in vulval cancer is a safe procedure with a lower morbidity both short and long term. We await the outcome of GROINSS-V II study to address the issue of adjuvant treatment for sentinel node positive patients. Until further evidence of appropriate adjuvant treatment is established, SLNB should be limited to specialist cancer centres with established experience in managing vulval cancer

P-4

PREVALENCE OF PATHOLOGY IN WOMEN ATTENDING COLPOSCOPY WITH SYMPTOMS OF POSTCOITAL BLEEDING OR SUSPICIOUS CERVIX

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Background: Postcoital bleeding (PCB), intermenstrual bleeding (IMB) and persistent vaginal discharge may be a symptom of cervical cancer. Our aim is to estimate the incidence of cervical intraepithelial neoplasia (CIN) & cervical cancer to assist in organizing the colposcopy service at the eve of the implementation of HPV test.

Objective: To determine the frequency of cervical pathology and the incidence of cervical neoplasia in women presenting with symptoms or a suspicious cervix.

Design: A retrospective study.

Population: Two groups were identified. Group 1 of a192 symptomatic women and the 2nd group of 22 women with suspicious cervix were seen in the colposcopy unit between the1st January 2011 and 31st December 2011.

Methods: Women were identified from computer records and details were extracted from the case notes.

Main Outcome Measure: Histopathological diagnosis.

Results: Colposcopy identified CIN in 41 (21%) symptomatic women with histological confirmation in 18 (9%) women. There were 2 (1%) suspected cervical cancers cases confirmed on histology in the 1st group.

In the 2nd group with suspicious cervix, colposcopy identified CIN in 2 (9%) women and suspected invasion in 3 (13%) women. Histology confirmed CIN in 1 (4.5%) and invasion confirmed in 2 (9%) of the women.

Conclusion: Women with symptoms who have suspicious cervix when inspected by GP appear to be at much greater risk of cervical cancer than women who are referred with symptoms. We recommend colposcopic assessment for women with persistent symptoms more than 3 months or women with suspicious cervix.

P-5 SETTING CLEARER STANDARDS FOR THE PRACTICE OF CERVICAL PUNCH BIOPSY IN WOMEN REFERRED WITH LOW GRADE SMEARS - AN AUDIT

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Background: Trends are moving away from indiscriminate use of cervical punch biopsy in women referred with low grade cytology. Over reliance on punch biopsy (PB) reflects the standard of care provided - uncertain colposcopic assessment and lack of experience.

When our unit was assessed by the BSCCP Quality Assurance (QA) in 2009, it was highlighted that our PB rate for women referred with Low Grade smears was high, with high 'negative' histology rates. An Audit was therefore conducted prior to the next QA assessment.

Audit Objectives:

- Provide evidence of change in practice
- Set benchmark for future practice

Methodology: Data on 12 months period (April 2009 to March 2010) was retrieved from the Compuscope database, on all *new* patients referred with Borderline and Mild dyskaryosis. Re-attendees were excluded.

With no *objective BSCCP benchmarks* for the first 2 standards, we set arbitrary targets based on previous performance, deemed *high* by QA assessors. Other relevant BSCCP standards were included.

Results:

Audit Standard	Target	Pre-QA visit	Audit result
Proportion of women undergoing PB	< 40%	55%	26%
(Arbitrary) 'Negative' Histology Rate - PB showing no CIN	<10%	32%	25%
(Arbitrary) PB adequate for histological assessment	>90	90%	98%
Repeat colposcopy in 'inadequate' histology group	100%	100%	100%

Conclusions: Significant improvement in practice was evident within our unit. No cases of higher grade lesions were missed. If a negative histology rate of **25%** is acceptable in this group, it appears reasonable to set a lower benchmark of **25%** for the first standard.

P-6 FIVE YEAR FOLLOW-UP OF WOMEN AFTER LLETZ IN A DISTRICT GENERAL HOSPITAL

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Aim: To compare LLETZ outcomes with NHSCSP standards OF 2010; To know if we need to see women with involved margins in colposcopy or community for follow-up.

Results: We audited the outcomes for all 228 women who had a LLETZ biopsy in the year 2006. Of these 37 were excluded as either the results showed no evidence of dysplasia (14), polyps (13), cancer (3), lost to follow-up (6) and VAIN (1). the other 191 had High grade changes in 151 and low grade in 40.

97.4% had follow-up smears; 86.5% had no dysplasia on histology; 13.6% had dyskaryosis at follow-up smears in 6 months; 5.2% had histologically confirmed failures within 12 months. Equal number of women with clear or involved margins had dyskaryosis at 6 months or dysplasia in 12 months.

Conclusion: We need to be more compliant to reach NHSCSP standards; whether women have their smears in colposcopy or community did not seem to matter as treatment failure was picked up effectively with either method. To reduce the demand on colposcopy clinics all women can have their follow-up smears in the community after LLETZ.

This would be particularly important as the demand for colposcopy would increase with the advent of HPV testing this year.

P-7 KNIFE CONE BIOPSY - 5 YEAR AUDIT

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Rationale: Retro/prospective audit of Knife Cone biopsy at The Countess of Chester Hospital NHS Foundation Trust

Method: 38 patients identified from colposcopy database and data items gathered from database and pathology department

Results/Outcomes/Success: Data will be presented on initial smear report, colposcopy findings, initial LLETZ (if performed), indications for knife conon the 38 patients undergoing cold knife cone biopsy from June 2006 - December 2011e biopsy (MDT discussions), size of cone biopsy, any surgical or post operative complications, histology from cone biopsy, need for further treatment (hysterectomy/radical hysterectomy), first colposcopy/smear results following cone biopsy, future pregnancy outcomes

Conclusions/Recommendations:

- ?Need for regional audit of cone biopsy
- ?Tailor size of cone biopsy according to patient age

P-8

AUDIT ON THE MANAGEMENT OF GLANDULAR ABNORMALITIES FROM 1ST APRIL 2010- 31ST MARCH 2011 AT PRINCESS ROYAL UNIVERSITY HOSPITAL, KENT

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Background: In many series, adenocarcinoma of the cervix represents 20% - 30% of all primary cervical cancers. The majority of the invasive adenocarcinomas are purely glandular but a significant percentage (40%) has a mixed adeno-squamous pattern.

Adenocarcinoma is more likely to be diagnosed in younger women (mean age 36 years) which has implications for treatment modality in this child bearing age. The outcome in comparison with squamous lesions is poorer because there is a delay in diagnosis. This is multi-factorial including low index of suspicion in this age group, its endocervical distribution, being a multifocal disease and having no clear clinical features for identification.

Finding

- 13 cases with cytological smear referral as cervical glandular abnormalities were audited.
- Median age 39 years.
- 45% diagnosed with adenocarcinoma in situ or high grade CIN with the first colposcopy assessment.
- Colposcopy impression ranged from cervicitis to high grade CIN.
- 55% of women had a punch biopsy done as part of their initial colposcopy assessment.
- LLETZ GA was the treatment modality of choice.

Recommendations

1. Increase the use of MDT in discussing cases of suspected glandular neoplasia especially where punch biopsy has been performed. Current guideline does not recognize the use of punch biopsy.
2. Colposcopist individualized audit on colposcopic recognition of glandular neoplasia for continuing professional development.
3. Develop and implement a unit guideline and/or care pathway for the clinical management of suspected glandular neoplasia.

P-9

AUDIT OF CIN IN WOMEN UNDER 25 YEARS OF AGE

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Aim:

1. To determine the incidence of high-grade CIN and invasive disease in women under 25 years referred to colposcopy clinic.
2. To assess management.

Method: We carried out a retrospective data analysis of 249 cases of women < 25 years at their first presentation from 01/04/2005-31/03/2011. Data was collected from the cytology department and colposcopy database.

Results: A total of 249 cases studied were referred to colposcopy unit with abnormal smears. Low-grade smears were 57% and high-grade smears 43%. LLETZ was performed in 60 cases (24%) in the first visit (See & Treat) and in 59 cases (23%) (Select & Treat). Histology revealed no cases of invasive cancer. However, CIN 2 was present in 22% and CIN 3 in 20% of total referred cases. Recurrence occurred in 3.6% of cases of high-grade CIN treated.

Conclusions:

1. There is a low incidence of invasive disease in women under 25 years of age, which supports the NHSCP guidelines.
2. We established a high percentage of high grade CIN 42% above the national figures. As such, the new screening strategy may prove to be unsafe in the long term in this age group. Henceforth, it may be worth re-evaluating the first age of screening for cervical cancer.
3. We propose implementation of BSCCP guidelines and adopting 'Select & Treat' policy to minimise intervention. These guidelines require updating to manage women < 25 referred with high-grade smears. Conducting a randomised controlled study comparing treatment versus conservative management of CIN can achieve this objective.

P-10 DOES THE CURRENT NHSCSP TREATMENT STANDARD REFLECT TREATMENT OUTCOMES OF $\geq 90\%$ OF HIGH GRADE HISTOLOGY FOLLOWING TREATMENT AT THE FIRST VISIT?

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Background: NHSCSP guidelines (May 2010) state that the proportion of women treated at the first visit who have evidence of CIN2/3 or cGIN on histology must be $\geq 90\%$. We believe the threshold should be lower. Factors such as patient age, referral cytology and colposcopic impression need to be considered.

Methodology: A retrospective review was performed of all first visit *see and treat* cases at the Colposcopy clinic, Coombe Women and Infants University Hospital, Dublin between 1st January 2010 and 31st December 2011. Demographic details, risk factors, referral cytology, colposcopic impression, grade of colposcopist, and histological diagnosis were determined.

Results: 444 *see and treat* procedures were performed, a rate of 11.7%. Histological examination confirmed that 73.9% of cases were CIN2/3 or cGIN. CIN1 was reported in 84 cases (18.9%), with 14 cases of carcinoma (3.2%). Overall, 102 patients had a histological diagnosis of CIN1 or less, of these 78 were over the age of 40, 11 of the remaining 24 were referred with an AGUS or HSIL smear, and 8 of the remaining 13 had a colposcopic impression of a high grade lesion. 91 of these cases were performed by accredited colposcopists with 11 by trainees.

Conclusions: In the study population 23% of patients had CIN1 or less. Assessment of additional features suggests these *see and treat* procedures were indicated, a target of $\geq 90\%$ CIN 2/3 or cGIN on histology may be too high. In particular age is an important factor in decision-making. Advice about *see and treat* should be qualified.

P-11 COLPOSCOPY DNA RATES AT WALSALL MANOR NHS TRUST

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Background: The NHS Cervical Screening Programme provides an evidence-based, quality-assured programme accessible to all women in the UK. Despite expected preventative vaccine programmes coming on line within 10 years, it is likely that screening and management of cervical disease by colposcopy will be required for several decades to come. Proper follow up is essential as treated women are 2-5 times more likely than general population to experience cervical cancer.

Aim/Objective: We wish to assess colposcopic follow up failure rate (DNAs) at Walsall Manor NHS Trust and address any issue identified.

Methodology: We utilised retrospective data obtained

from the West Midlands Cancer Intelligence Unit (WMCIU) of our colposcopic database. We analysed data from Jan 2010 - Sept 2011 (21 months) pertaining to patients demographics, referral smears, colposcopic opinions, patients' treatment had and their histological results, follow up smears and total number of appointments given out to each patients.

Results: We found that most non-attendees were women of child bearing age (25-44), those who were referred with low grade smears (70%), those who had treatment carried out (60%), those who had either had a normal or low grade colposcopic opinion (70%) and those who had either had a normal or low grade follow up smears (80%).

Conclusions: Our colposcopy unit DNA rates were above national average (15.9%) These may be partially explained by patient demographics, lifestyles and attitudes towards their disease. Our unit should limit post treatment follow up appointments and encourage more smear-taking in the community to improve patients' compliance. We do however acknowledge those who would require longterm hospital follow up.

P-12 DOES HISTOLOGICAL COMPLETE EXCISION OF CERVICAL INTRAEPITHELIAL NEOPLASIA REQUIRE COLPOSCOPIC FOLLOW UP?

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Objective: To assess whether there is need for colposcopic follow up in women post Large Loop Excision of Transformation Zone (LLETZ) when there was histological confirmation of complete excision of cervical intraepithelial neoplasia (CIN).

Methods: A retrospective study was performed on women with histological confirmation of complete excision of CIN who subsequently had cytological and colposcopic follow up between May 2005 and December 2009. Data was collected from our hospitals database and analysed using SPSS.

Results: During this period 595 women were identified and analysis to date was performed on 230 women. The mean age of these women was 33.6 years (8.3) and 42.8% were smokers. High grade changes were histologically confirmed in 71.1% of LLETZ performed. We found that the first smear post LLETZ was normal in 82.9% of the women. This figure increased to 93.3% in women who had a second smear post treatment. Furthermore, women whose first and second smear post LLETZ was normal, colposcopy was also normal 92.5% of the time and was unsatisfactory 3.8% of the time. However, if the first smear was normal and the second was abnormal, colposcopy was normal half of the time and unsatisfactory the other half.

Conclusion: These provisional results highlight the importance of follow up in women post LLETZ

procedure for CIN. Cytological follow up for these women is pertinent to enhancing effective and efficient care, whilst the role of colposcopic follow up is limiting and has not shown to add to the quality of care provided to women with complete excision.

P-13 CYTOLOGY FOLLOW UP POST-TREATMENT

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The National Health Service Cervical Screening Programme guideline recommends that the cytology follow up post treatment should start at 6 months and no later than 8 months after treatment (more than 90%). The proportion of treated women with no dyskaryosis 6 months after treatment should exceed 90% and the proportion of confirmed histological treatment failure should not exceed 5% within 12 months of the treatment.

We report the outcome of cytology follow up post-treatment in women treated by LLETZ from 1st July 2007 to the 30th of June 2010 (3 years). Data was extracted from the KC65, the colposcopy database (Infoflex), ICE (Trust computer system) as well as the open Exeter cytology national database.

79%-84% of women had cytology follow up within 6-8 months. 91%-93% of treated women did not have dyskaryosis. Histological failure rate ranged from 2.6% to 4%.

We conclude that NHSCSP standard of follow up cytology within 6-8 months was not achieved over the three years despite all women being advised to do so in writing following treatment.

There is a need to review the results of audits in different regions of the UK to determine whether the NHSCSP standard of cytology follow up post-treatment is being achieved.

P-14 CRYOTHERAPY IN THE MANAGEMENT OF LOW GRADE CIN

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Introduction: The aim of the audit was to find out the percentage of cure for CIN1 after Cryotherapy and compare it to the natural regression percentage within 2 years, to justify the benefits of continuing our local policy of offering cryotherapy as a mode of treatment for Low Grade cervical abnormality at the first colposcopy visit.

Local guidelines were reviewed against the NHSCSP guidelines No 20 (May 2010) and the European Guidelines for clinical management of abnormal cervical cytology in 2008. Spontaneous regression rates of low

grade cervical abnormality in different studies were reviewed.

Methods: All cases with CIN 1 who were treated with cryotherapy over a one year period Jul 2008 to Jun 2009 were collected. Total number of cases considered for audit were 116. Patients who had a history of High Grade CIN with excisional treatment in the previous 10 years were excluded (n=18). Total case notes analysed were 98.

Results: The post cryotherapy cervical smear test results were as follows: (a) 67 had negative smears (cured)(68.4%). (b) 23 still had abnormal smears (not cured) (23.5%). (c) 8 were lost to follow up (8.1%).

Conclusions: The cure rate after cryotherapy (68.4%) is comparable to the natural regression rates of CIN1(50-80%). Accordingly the local policy has been amended and we now offer expectant management up to two years before offering treatment for Low Grade CIN.

P-15 CERVICAL SCREENING IN WOMEN UNDER 25 YEARS OLD/ 2005 – 2009 (CLINICAL AUDIT)

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NHS Trust, Orpington/ Kent, UK*

Study design and Objective: A retrospective audit includes 426 women under 25 years, who referred with cervical smears taken at Bromley PCT's to the colposcopy clinic/ Bromley Hospitals/ SLH NHS Trust, between 2005 and 2009. The colposcopy findings and histology results were reviewed and analyzed to determine the effectiveness of the cervical screening in women under 25

Results: 44.80 % of smears showed mild dyskaryosis. 23% and 12% were moderate dyskaryosis and severe dyskaryosis, respectively. 11.2% were borderline smear, and 0.2% revealed glandular changes.

On colposcopic examination; 16.2% (69) were reported as normal. 25.8%, 20% were diagnosed with low grade and high grade abnormalities, respectively. 12% of the cases showed HPV-related changes. No malignancy was found. Directed biopsies obtained in 228 women. CIN I found in 48% of all biopsies, however, 25% and 9% revealed CIN II and CIN III, respectively. The glandular changes noticed in 0.44%. Treatment planned for 130 women. The histological examination of the biopsies showed CIN in 91% of the cases; 74.8% of them were CIN II or CIN III. Glandular changes found in 2 cases (1.6%). There was one case diagnosed with microinvasive cervical cancer; 0.79% and this comprises 0.23% of our sample.

Conclusion: Until the availability of high quality evidence, the initial age for starting cervical screening will remain a controversial issue. The main challenge would be the balance between decreasing the overall cervical cancer rates by early detection of precursors and the cost, anxiety, workload, and potential fertility harm of screening younger women.

P-16 COLPOSCOPIC AND HISTOLOGIC CORRELATION OF AN ABNORMAL SMEAR REFERRAL

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Objectives: To correlate the colposcopic and histologic outcomes of women referred to the colposcopy unit with an abnormal smear.

Method: New patients referred to colposcopy for an abnormal smear between January 2010 and December 2010 were identified from the colposcopy database.

Case records were reviewed retrospectively and audited against the NHSCSP 20 guideline which recommends a 65% correlation between colposcopy findings and histology.

Results: A total of 50 case records were reviewed. 24% percent were referred with severe dyskaryosis, 22% with moderate dyskaryosis, 26% with mild dyskaryosis and 28% with borderline nuclear changes.

Of the severe variety, 67% had high grade lesions on colposcopy and 75% of these were confirmed as CIN2/3 on histology.

In women with moderate dyskaryosis, 64% were high grade on colposcopy and 72% of these were CIN2/3 on histology.

In the mild variety, 70% had low grade disease on colposcopy, 15% were normal and 15% were high grade lesions. Of the low grade lesions, 78% were confirmed CIN1/HPV on histology.

Of the borderline referrals, 57% were normal at colposcopy and 43% had low grade lesions. Of the low grade lesions, 67% were confirmed CIN1/HPV on histology.

Conclusion: The audit results show that our colposcopy unit meets the NHSCSP 20 guideline standard which recommends that the predictive value of a colposcopic diagnosis of a high grade lesion should be atleast 65%.

P-17 PREVALENCE OF HIGH-GRADE CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN) AND CERVICAL CANCER IN WOMEN WITH POST-COITAL BLEEDING (PCB) AND NEGATIVE SMEAR

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Objective: To calculate the prevalence of high grade CIN (CIN2 and CIN3) and cervical cancer in women with PCB and a negative smear since last recall.

Design: Retrospective analysis

Setting: Colposcopy clinics in St James's University Hospital in Leeds / UK.

Methods: Analysis of the electronic records of 1470 patients referred to our colposcopy clinic with PCB during the 69-month period from March 2005 to

December 2010. Patients who had a suspicious looking cervix were excluded. Patients were identified from the colposcopy unit database.

Result: The overall prevalence of CIN was 12.1% (179/1470) and of high grade CIN was 3.8% (56/1470). There were six cases of cervical cancer (0.4%) (6/1470), all of whom had abnormal smears at referral. In addition, there was one case of CGIN and one case of endometrial cancer.

1073 out of 1470 women had a negative smear within the last three years of their referral to the colposcopy clinics. One patient had CGIN (0.09%) (1/1073) in cervical biopsy but not in subsequent LLETZ. The prevalence of CIN was (96/1073) 8.9% and of high grade CIN was 2.1% (23/1073). There were no cases of cervical cancer in this group.

Conclusion: In the absence of a suspicious cervical lesion or abnormal smear, PCB alone does not appear to be an indicator of cervical cancer and should not be referred to the colposcopy clinic.

P-18 TRENDS IN CERVICAL SMEAR NUMBERS AT PROCESSED THROUGH A SOUTH LONDON HOSPITAL FROM 2000 TO 2011

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Aims: The aim of the audit was to look at the numbers of smears processed through Lewisham Hospital from 2000.

Method: This was a retrospective audit looking at the numbers of smears taken over the last 10 years. These were analysed according to age range. Particular attention was paid to the dates of innovation (eg LBC 2004 and vaccination introduction) and Publicity (Jade Goody 2008-2009). The age range with the most significant increase was analysed further to examine the ratios of normal to low/high grade cytological abnormality.

Results: The results showed an increase in all age ranges below 55years. The maximum increase was after 2008. The age range 40-49 showed the most significant increase over the 10 years.

Further analysis showed that the greatest increase in number was the 45-49 age range. Though in the 40-49 age range there was a slight increase in the number of mild dyskariotic smears, the majority of smears were reported as normal. The numbers of high grade abnormalities remained similar over the 10 years of smears.

Conclusion: The data shows a rise in the number of women having smears in the age range 40 - 55Yrs. The reason for this is unclear and may be due to publicity or changing attitudes. Further investigation may be necessary to ensure women of this age group can access appropriate care.

P-19 TRENDS IN CERVICAL SMEAR NUMBERS PROCESSED THROUGH A SOUTH LONDON HOSPITAL FROM 2000 TO 2011

A Lin, O Folayan, D Zamblera, P Linda
Lewisham Hospital NHS Trust, London, UK

Aims: The aim of the audit was to look at the numbers of smears processed through Lewisham Hospital from 2000.

Method: This was a retrospective audit looking at the numbers of smears taken over the last 10 years. These were analysed according to age range. Particular attention was paid to the dates of innovation (eg LBC 2004 and vaccination introduction) and Publicity (Jade Goody 2008-2009). The age range with the most significant increase was analysed further to examine the ratios of normal to low/high grade cytological abnormality.

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Conclusion: The data shows a rise in the number of women having smears in the age range 40 - 55Yrs. The reason for this is unclear and may be due to publicity or changing attitudes. Further investigation may be necessary to ensure women of this age group can access appropriate care.

P-20 UNDERSTANDING GYNAECOLOGICAL CANCER PATIENTS' EXPERIENCE OF CARE WHEN TRANSFERRED FROM UNIVERSITY HOSPITAL LEWISHAM FOR TREATMENT AT GUY'S AND ST THOMAS'

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Method: Focus group was 6 patients identified by colposcopy nurse and through the local support group for gynaecological cancers and the Cancer Voices Lambeth Southwark Lewisham User Partnership group

Discussion - Using Flipchart - brainstorm ideas

Results: Key points from discussions on the points of transition along the pathway

What would make this a better experience?

1. Focusing on the transition from Lewisham to GSTT

- To have more in-depth information about, diagnosis, staging and what to expect - I just wanted that information so that I could feel in control

- Information about what to expect at St Thomas' - including - who I am seeing, why I am seeing them ; more about the size of the wards etc

2. Focusing on treatment at Guy's and St Thomas'

Expecting - knowledge, experts, honesty and caring

3. Focusing on follow up

- When discharged from follow up appointments after 5 years - reassurance is required that you can get straight back in to the system should you need it
- When discharged have access to phone the team - **someone who knows you**

Conclusion: Patients felt they would (and did) get good quality treatment. The contrast between a smaller more local hospital and the very busy cancer centre caused some anxieties. Access to regular follow up with healthcare professionals they know and trust provides considerable reassurance for patients. This could be helped by reviewing the what to expect at GSTT and GSTT patient information to ensure that all of the important things - from a patient perspective - are covered.

P-21 CERVICAL CYTOLOGY/HISTOLOGY DISCREPANCY

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Objectives: (1) To find out the proportion of high-grade biopsy results which originated from low-grade smears. (2) To observe the discrepancy between the cervical cytology and histology.

Background: The introduction of cervical screening programme has arguably been one of the most successful cancer detection and prevention strategies in the history of medicine. In the UK, we screen almost 4 million women each year. If we have 80% or more coverage, it is predicted that there will be 95% reduction in the death rates in long term. In 2008/9, the coverage of eligible women was 78%.

Methods: A retrospective observational study was conducted in the Northumbria NHS Foundation Trust. All new patients aged under 30 years with colposcopy referral who presented from 2007-2010 were included. Data was retrieved from Colposcopy Database in Excel Format and was analysed.

Results and Conclusions: There was a total of 699 presenting smears referred from the above given period. 396 smears were low grade smears and 303 smears were high smears. There were total of 677 histopathology biopsy results. Between the years of 2008 to 2010, there was an increase of 89% of patients referred to colposcopy and an increase of 91% of histopathological biopsy. There were 234 diagnosis of CIN3 and above and 20% of these came from low grade smears. A significant discrepancy between cytology and histology was identified in 154 cases (23%).

P-23 THE EFFECT OF INTRODUCING TWO WEEK TURN AROUND FOR CERVICAL CYTOLOGY REPORTING ON THE TIME REQUIRED TO INFORM PATIENTS OF THEIR RESULTS

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NHSCSP Publication No 20 states that patients should be informed of their results within 4 weeks (best practice 90%) or eight weeks (minimum standard 100%) of colposcopy attendance. Historically, our colposcopy service has struggled to meet these standards. Possible reasons for this include: delays in transporting specimens from geographically separate sites to central laboratories; delays in reporting within the cytology laboratory; differences in reporting times between individual histopathologists; delays between results being received by the service and results letters being generated.

An audit of cytology and histopathology results from patients seen by the colposcopy service during May 2009 looked at these factors and could not identify any differences in the time taken to inform patients of their results based on the clinic of origin, the reporting histopathologist, or the time taken to generate results letters within the service. The time limiting factor was shown to be delays in cytology laboratory reporting of smear results.

The audit was repeated one year later, following the introduction of 2 week turn around for cervical cytology reporting. This showed significant reductions in the time taken to communicate results to patients, with the service now meeting both best practice and minimum standards.

Conclusion: Introduction of the 2 week turn around for cervical cytology reporting has reduced the time taken to communicate results, and allowed us to comply with National standards that we were previously struggling to meet.

P-24 HPV TRIAGE VERSUS CYTOLOGIC TRIAGE: BURDEN OR BONUS? A COMPARISON OF TWO COLPOSCOPY UNITS IN ENGLAND

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Introduction: Conventionally women with index smears showing low grade changes centres on repeat cytology prior to colposcopic assessment. Testing for high risk Human Papilloma Virus in a similar cohort can identify women at risk of high grade CIN (HGCIN) and streamline the referral for colposcopy. This audit compares data across two sites to ascertain the predictive value of conventional cytological triage in a District General Hospital (DGH) versus HPV Triage in a Sentinel site for identification of HGCIN.

Methods: 91 women with persistent low grade/

borderline cytology were referred for colposcopy assessment to a DGH between April and September 2011. 176 women with single low grade/borderline cytology samples that were HPV positive were referred to a Sentinel Site Hospital between May and October 2010. In both these centres colposcopic impression was recorded and cervical biopsy done when appropriate.

Results: 26 women at the sentinel site and 17 at the DGH had HGCIN on biopsy. This equated to a HGCIN detection rate of 14 % in the sentinel site and 22% in the DGH.

Discussion: The positive predictive value of HPV triage for detection of HGCIN was 14% in line with the findings of Kelly et al. This appears to be less than the 22% achieved with the cytologic triage pathway and might be due to differences in the HPV DNA prevalence rates and the local correlation. This study also demonstrates the well anticipated increase in the colposcopy workload of nearly 47% at the sentinel site.

P-25 GLANDULAR NEOPLASIA-MANAGEMENT AND OUTCOME OVER A 5 YEAR PERIOD

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Introduction: The natural history of glandular neoplasia is less understood than CIN. The reported incidence of glandular abnormalities (category 6) on routine smears is between 0.04% -0.1%. Evidence suggests that cytological diagnosis of glandular neoplasia is associated with a high prevalence (PPV of 17-96%) of invasive and preinvasive disease. Colposcopic evaluation helps detect concomitant CIN and to plan the extent of biopsy and treatment.

The aim of the audit was to review the notes of patients referred with a cytology of ?Glandular neoplasia to our unit (over a five year period) and correlate this with the histological diagnosis/ outcome and current evidence base.

Methods: All cases with a cytological report of glandular neoplasia over a five year period from 2005-2010 were included in the audit. Index cytology, investigations, treatment and follow up of this group of patients was analysed and compared to current/ available data. A total of 56 patients were included.

Results: The incidence of glandular neoplasia in our unit over the 5 year period was 0.038% with a high incidence of invasive (cervical or endometrial) cancer- 32% and pre-invasive glandular neoplasia- 28.6%. Concomitant CIN was present in > 32% patients. 10% had endometrial cancer diagnosed on endometrial biopsy. 71% of patients had atleast one LLETZ.

Conclusions: “? glandular neoplasia” on cytology is commonly associated with significant gynaecological pathology. Rigorous investigation, management and follow-up is advisable in these patients. Detailed evaluation of the full genital tract may be needed to identify the likely source of the glandular cells.

P-26 NEED FOR POST TREATMENT COLPOSCOPY? AUDIT OF LLETZ AND FOLLOW UP SMEARS

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Document 20 of NHSCSP states that the depth of excision for CIN should be atleast 7mm and excision margins clear to reduce risk of residual disease.

The guideline from the Director of NHSCSP and Sentinel Audit for HPV testing advices follow up after treatment for CIN in the Community to reduce Colposcopy attendances.

The aim of the audit was to assess the depth of excision and clearance of endocervical and ectocervical margins and follow up smears.

We audited our practice by analysing 117 consecutive patients who had LLETZ in 2010.

1. Depth of excision was greater than 7mm in 71%(83/117) with followup smears of 0.9% moderate, 0.9% severe and 9.4% borderline.

- Depth of excision was less than 7mm in 29%(34/117) with mild dyskaryosis in 1.7% and 2.6% borderline.

2. Both endocervical and ectocervical margins were clear in 43%(50/117). 6-8 months post treatment smears were negative in 94%, moderate dyskaryosis in 0.8 and borderline in 5.2%.

-Both were involved in 57%(67/117). The smears were mild or severe in 2.5% and borderline in 6.8%.

If either margins were involved, 84.6% were negative, 3.4% mild/moderate/severe and 12% borderline.

These were not statistically significant.

The repeat smears for borderline were negative in 66%(8/12) and persistantly abnormal in 16%(2/12).

We conclude that in our practise it is safe for women to have followup smears in the community and return to colposcopy only if smears are abnormal.

P-27 BORDERLINE SMEARS: WHAT IS ACTUALLY FOUND AT COLPOSCOPY

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The aim of the audit was to see what the actual findings were at colposcopy in patients who were referred with borderline smears to our DGH . It was done retrospectively looking at all referrals in 2008/2009 with smears that were borderline/ borderline query high-grade/ borderline glandular. In total there were 369 referrals.

The findings showed that the majority of patients had a normal colposcopy (12.7 % overall had high-grade disease) though there was a greater incidence of high-grade disease in the borderline query high-grade group

(44%). Lletz histology reflected the fact that only patients with higher-grade disease findings at initial colposcopy appointment were given treatment. Follow-up smears indicated that those patients who went on to have a subsequent high-grade change had all had normal or low-grade findings at their initial referral colposcopy.

This audit showed that the majority of borderline smears had normal findings and with the introduction of HPV testing they will probably not need to be seen at colposcopy except if they had borderline query high-grade smears where it would be prudent to continue to see them due to their increased incidence of high-grade disease.

P-28 BIOPSY AT FIRST VISIT IN PATIENTS WITH HIGH GRADE SMEARS

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Introduction: High grade CIN is diagnosed in 74% of women with moderate dyskaryosis and in 80-90% of women with severe dyskaryosis. Hence, it is recommended that unless excisional treatment is planned, 100% of women with high grade smears referred to colposcopy should have a biopsy at their visit. A retrospective audit was undertaken at Pontefract Hospital to assess whether this standard was being met and to explore the reasons, if any, for deviation from this standard.

Methods: Information was obtained from the colposcopy database for all patients who were referred to the colposcopy clinic at Pontefract Hospital between April 2010 and March 2011 with high grade smears (moderate and severe dyskaryosis).

Results: 181 patients were referred with high grade smears during the audit period. Data could be obtained for 176 out of 181 women (97.2%). 98 women (55.7%) had an excisional biopsy (LLETZ) performed at their first visit. 70 patients (39.8%) had a colposcopically directed punch biopsy. 8 patients (4.5%) did not have a biopsy at their first visit. However, 7 of these women had a LLETZ within one month of their first colposcopy visit. One patient was pregnant and therefore biopsy was delayed until after delivery.

Conclusion: 95.5% of women with high grade smears had a biopsy at their first visit. 4% of women had excisional treatment planned within one month. There appears to be no adverse outcome in those women who did not have a biopsy at their first visit provided treatment was planned.

P-29 COVERAGE A MAJOR CHALLENGE IN EARLY YEARS OF CERVICALCHECK - THE NATIONAL CERVICAL SCREENING PROGRAMME IN THE REPUBLIC OF IRELAND

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CervicalCheck - The National Cervical Screening Programme in Ireland, has now completed three years of screening. In the first year there was an open access system of invitation, to accommodate initial interest. In the second year 'call, re-call' was introduced. In the third year a modification of 'call, re-call', including an online eligibility check facility for women and for programme entry by smeaertakers, was introduced, to maximise participation particularly among 'harder-to-reach' women.

The eligible population (25 to 60 years) (Census 2006) is 1.1 million women. The targets set by the programme for coverage are 60% by end round one (2011) and 80% by end round two (2014). By the end of round one 733,044 women have been screened. This represents cumulative coverage of 20.6% in the first year, 44.2% in the second year and 65.7% by end of third year of screening.

Over 92% were screened in primary care settings. The programme target for results returned within two weeks of receipt in laboratory is >90%; this has improved (year one 78.1%; year two 98.4%). The target time for results to women is four weeks; 51% were sent a results letter within four weeks, 96% within six weeks. Smear tests were satisfactory in 99.5% and 99.8% of cases in years one and two respectively.

Improving coverage remains a major challenge to this new programme. CervicalCheck will continue to actively monitor the impact of changes to programme entry routes including web technology, to ensure it can achieve the target mortality reduction.

P-30 IMPLEMENTATION OF A NATIONAL QUALITY ASSURED COLPOSCOPY SERVICE; THE IRISH EXPERIENCE

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Background: In Ireland, fifteen CervicalCheck colposcopy services have been developed to provide quality assured diagnosis and treatment for women with abnormal smears. The implementation of individualised service plans aligned with matching resources aimed to deliver increased capacity and significant improvements in the quality of the service for women.

Methods: Computerised data was extracted, collated centrally and analysed according to national quality

standards.

Results: The numbers of new patients attending per year increased from 9,043 in 2009 to 17,571 in 2011 with a reduction of waiting times to target levels at 1.5, 3.4 and 6.6 weeks for urgent, high- grade and low-grade by 2011. The default rate for new (8.6%) and follow-up (14%) visits was within the target (<15%). The numbers of treatments increased from 2,504 in 2007 to 7,647 in 2011 95% of which were performed under local anaesthetic (target >85%). CIN was present in 86% of all excisional treatments (target >80%) and in 85% of those performed at the first visit (target >90%). Treatment was performed at the first visit in 6.7% of women with low-grade disease (<10%). A colposcopic suspicion of high-grade CIN was confirmed in 73% (target >65%). A biopsy was performed in the presence of an atypical TZ in only 80% of women referred with an abnormal smear (target >95%) but in 100% of cases with suspected invasion (target>90%).

Conclusions: CervicalCheck has produced significant improvements in colposcopy services within a short timeframe. The central collection of data has identified opportunities for continued improvements into the future.

P-31 OUTCOME OF COLPOSCOPY FOR WOMEN ON THE BASIS OF A SMEAR SUGGESTING ATYPICAL (BORDERLINE) GLANDULAR ABNORMALITY

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Background: CervicalCheck – the Irish national cervical screening programme commenced in September 2008 with cytology services provided by US laboratories. This prompted a change to Bethesda terminology with referral of women to colposcopy following a single atypical glandular smear AGC (Borderline glandular). In general, the prevalence of low-grade abnormalities has been higher than anticipated especially ASCUS (9%) and AGC (0.6%).

Objective: To examine the data from the fifteen CervicalCheck colposcopy services to document the outcome of women referred with a single atypical glandular smear.

Results: From 1st September 2009 to 31st August 2010 in Ireland 1383 women attended CervicalCheck colposcopy services on the basis of a smear suggesting Borderline glandular abnormalities – (8.2% of all new patients). The colposcopic impression was available for 1200 women and was normal in 39% and unsatisfactory in 6%. A biopsy was performed in 843 cases – 608 punch biopsies (44%), 177 excisional biopsies (12.8%) and 58 endometrial biopsies (4%). The biopsy was adequate for histological examination in 820 cases – No CIN was detected in 489 (60%) high-grade CIN was present in 150 cases (18%), CIN1 in 205 (17%), adenocarcinoma

in-situ was detected in 36 (4%) and invasive cancer in 12 women(1.5%). Overall for the women who attended colposcopy, 25% had CIN1 or worse and 14% had CIN2 or worse. No histological abnormality was detected in 75% of cases.

Conclusion: Cytology alone is not specific enough in women with atypical glandular abnormalities. Alternative strategies should be considered to reduce unnecessary colposcopy.

P-32 IMPROVING FOLLOW UP CARE INFORMATION PROVISION TO COLPOSCOPY PATIENTS

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Following the implementation of a regional colposcopy information leaflet in 2007, the regional colposcopy nursing group decided to develop a bespoke set of post-procedure colposcopy information leaflets. These leaflets would be distributed to all colposcopy services across the West Midlands region to ensure the provision of consistent and accurate follow up information to all patients undergoing colposcopy and would cover all types of procedures including punch biopsy, loop excision, cold coagulation and cryotherapy.

Methods: The developed leaflets were submitted to the Plain English Campaign in order to ensure that the leaflets were clear, accurate and understandable for patients. In order to tailor the leaflets for each individual clinic, each clinic was requested to submit details of all colposcopy procedures performed and the main contact details for patient queries regarding follow up care. A survey was developed to assess the quality of the information provided across the 24 colposcopy clinics within the region.

Results: Results will be presented on the assessment of the leaflets.

Conclusion: The development of regional colposcopy post procedure information leaflets has enabled the provision of clear, consistent and understandable follow up care information to all women undergoing colposcopy procedures within the West Midlands region.

P-33 OUTCOMES OF ASCUS-H SMEARS IN THE COOMBE HOSPITAL COLPOSCOPY UNIT-DUBLIN

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Detection and treatment of high grade lesions is critical to cervical cancer prevention. The National Cervical Screening Programme in Ireland (Cervical Check) uses the Bethesda Classification for reporting smear results. Recently a new category of atypical squamous cells was introduced, where high grade changes can not be ruled out (ASCUS-H.)

A retrospective review of colposcopy data-base (Mediscan) and clinical records was carried out. Data was analysed in an EXCEL sheet.

We looked at the outcomes of women referred with ASCUS-H smears in our colposcopy unit since March to September 2011.

Total referrals were 1163. 62 had ASCUS-H smears. 70% were reviewed within eight weeks. Colposcopic impression was HSIL in 33% of cases (21/62). Subsequent smears were HSIL in 24% (15/62) of which 73% (11/15) were CIN3. 21 case (33%) had a histologically proven diagnosis of CIN3. 29 (46%) had LLETZ with a histology showing high grade lesions in 24% and both HSIL and LSIL in 55% of cases. There were two cases of micro-invasive cancer. 10 women were post-menopausal with CIN1-2 in 60%. This might reflect the low threshold in treating this category of patients, and supports the evidence of less CIN3 in women over the age of 50.

The prevalence of high grade cervical intra-epithelial lesions among ASCUS-H referrals is considerably high. Patients with ASCUS-H smears should be referred to colposcopy as per high grade smears referral recommendation and seen within four weeks. The role of HPV-DNA test in further management of such cases is yet to be identified.

P-34 A REGION-WIDE COLPOSCOPY AUDIT - A WEST MIDLANDS PERSPECTIVE

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After completion of the 2009/10 QA Team visits, it was evident that there had been improvements in the validation of colposcopy outcome data, however the importance of routinely auditing colposcopy data and clinical practice was still not fully imbedded across all colposcopy services within the region. Due to the success of the first regional colposcopy outcome audit in 2006, another region-wide audit was undertaken to re-assess local colposcopy service performance against key outcome measures.

Methods: Through a set of bespoke queries, the West Midlands QA Reference Centre (WMQARC) extracted data from the regional colposcopy database installed at each individual colposcopy service either remotely (where access had been granted) or via the colposcopy co-ordinator and returned securely to WMQARC. Data requested included information on biopsies, first visit treatments, follow up information and type of anaesthesia used for women treated in colposcopy from 1 January 2010 to 30 June 2010. Details on community follow up samples were provided by the WMQARC via 'Open Exeter' if requested.

Results: Results to be presented include proportion of adequate biopsies, single loop specimens, depth of loop specimen, proportion of first visit treatments with high grade CIN or CGIN on histology, treatments carried out under local analgesia and cyto-reversion rates. Comparison with 2006 audit results will be presented where applicable.

Conclusion: Systematic region-wide colposcopy audit of key outcome measures is feasible and motivates individual services to audit and improve practice. The audit also facilitates ad hoc service assessment if potential issues are identified.

P-35 A NEW COLPOSCOPY EMAIL ADVICE SERVICE

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Introduction: We would like to present our findings on an innovative way of improving communication between the Colposcopy service and patients outline its potential to improve communication between Practice Nurses/ FPC/GP practices and Colposcopy. This new service, set up in April 2011, created a new line of communication between patients and the CNS in Colposcopy.

Our patient satisfaction survey found that 72% of respondents would welcome this service. Acting on this request, the dedicated Email address was set up. The address was added to all patient correspondence, advertised on posters and encouraged by clinicians. Patients sending Emails to this address are asked some baseline security questions i.e. Hospital number and DOB to ensure patient confidentiality.

Results: April 2011-December 2011- 56 emails received :-29 new enquiries and 27 follow up Emails. 85% of enquiries replied to within 24 hours. 11 Emails - administrative in nature, 4 - non-colposcopy related and 13 - questions regarding results/symptoms.

Use of the email address has increased over 9 months - in November and December 28 Emails received

Conclusion: This dedicated and confidential patient Colposcopy Email advice service ensures a rapid response to patient enquiries by a Colposcopy Nurse Specialist.

The service is being expanded to local GPs/ Practice Nurses and will be advertised in the Good Practice Newsletter, and circulated to GPs within our local Primary Care Trust. This, we expect, will act as an essential resource for information/ communication not only for patient enquiries but also for the new HPV testing policy being implemented soon.

P-36 IMPLEMENTATION OF REAL-TIME COLPOSCOPY DATA ENTRY WITH THE COLPOSCOPY CLINIC - BENEFITS TO PATIENTS AND SERVICE IMPROVEMENT

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Within the West Midlands region, a uniform system for the collection of colposcopy data has existed since 2007, through the regional colposcopy database. Historically, data have been captured retrospectively via standard proformas completed in clinic and input later by colposcopy administrators often resulting in backlogs and limited usage/knowledge of the database by colposcopists. However, following the requirement for image capture there was a need for the database to record colposcopy activity in real-time.

Methods: Re-development of the regional colposcopy database was undertaken to enable efficient real-time data entry and tested at the Sandwell and West Birmingham Hospitals NHS Trust and the Wye Valley NHS Trust colposcopy services. A visit to each colposcopy clinic was undertaken to assess hardware requirements and set-up of the clinic. On-site database training was offered to all staff members including colposcopists, nursing staff and healthcare assistants. Once training was completed, testing of real-time data entry commenced.

Results: Case studies for the two colposcopy services will be presented.

Conclusion: Real-time data entry is feasible and does not impact on patient care. It is cost-effective and enables a complete, up to date patient record to be accessible at all times. It frees up administrative time for data validation/audit of the colposcopy service. Individual colposcopists are actively involved with the database and therefore able to undertake their own personal audits. Colposcopists generate their own result letters directly benefiting patients through the timely notification of biopsy results. This good practice is now being shared across the West Midlands region.

P-37 INVESTIGATION ON THE LEVEL OF KNOWLEDGE AND EDUCATION ABOUT CERVICAL CANCER SCREENING AMONG THE WOMEN ATTENDING THE GYNAE OUTPATIENT CLINIC IN AL QASIMI HOSPITAL

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Cervical cancer is a life threatening cancer, with an incidence of 9.9 per 100,000 women in UAE. Unfortunately, there is no organized cervical screening

program and cervical smears are opportunistically offered to patients. The alarming increase in the incidence of cervical cancer in the UAE highlights the need for awareness and preventative screening programs.

Objective: Interviews based study was conducted to investigate the level of knowledge about cervical cancer and to create awareness about prevention. Finally to make recommendation for improving the current system

Materials and Methods: Women attending gynecology clinic at AL QASIMI HOSPITAL UAE were interviewed based on a set of questionnaire as regards awareness of cervical cancer, risk factors, type of education, strategies and solution. Ethical approval was obtained and written informed consent was also taken.

Results: All participants were Emirati women. Total 480 women were interviewed (Jan to march 2010). Most of them did not have the knowledge about cancer. Only 20% knew it is serious. 60% never had Pap smear done. 40% were aware of one or more risk factors. , none of the participant had knowledge of Human papilloma virus. Nobody received HPV vaccine.

Conclusion: It highlight the importance of education and the purpose of Pap smear screening. Since cancer is a killer disease and fighting it is possible if detected in the early stages. Awareness must be spread so that people will not hesitate to go for required tests

There is a need for a clear policy from ministry of health for cervical cancer screening.

P-38 CGIN: INCIDENCE AND CORRELATION TO REFERRAL CERVICAL CYTOLOGY

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A histological diagnosis of CGIN is a relatively rare finding following referral to the colposcopy clinic with abnormal cervical cytology.

The aim of our study was to investigate the incidence of CGIN and correlate these results with the referral cervical cytology. 6236 cytology referrals over a five year period were analysed. The incidence of histologically confirmed CGIN was 1.9% (120 patients).

Surprisingly only 40% of these cases had a referral smear suggesting glandular abnormalities. There was also no difference in this finding when this group of patients were subdivided into high and low grade CGIN

P-39 IS A CYTOLOGICAL DIAGNOSIS OF ABNORMAL GLANDULAR CELLS A GOOD INDICATOR OF A HISTOLOGICAL DIAGNOSIS OF CGIN

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A retrospective analysis of our colposcopy database was used to identify all referrals with abnormal glandular cytology over a five year period from January 2006 to December 2011.

Histological results from colposcopic biopsies were obtained and compared to the referral smear.

P-40 LONG TERM FOLLOW-UP OF CONSERVATIVE TREATED STIA1 CERVICAL CA. A 25 YEARS EXPERIENCE OF 2 WEST LONDON HOSPITALS

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Background: St1a1 cervical cancer can be managed conservatively by local excisional techniques. The aim of this study was to access recurrence rates for pre-invasive and invasive disease and to evaluate compliance with post-treatment surveillance.

Materials and Methods: 25 years retrospective audit from 1986-2011 in 2 West London Hospitals. Data on women undertaking excisional procedures for St1A1 were obtained using colposcopy database and Open Exeter. Medical records from a total of 115 patients were reviewed; in 8 cases there was coexistent adenocarcinoma in situ. The median age was 36,6 years (24-61y). The most of the cases (92%) were screen detected and 6% presented with symptoms. The majority (54%) had NETZ excision, 40% LLETZ and 6% knife cone biopsy. Fifty of those (43%) had positive margins for microinvasion or CIN at the initial treatment. Amongst those 50 patients, 18 underwent reflex hysterectomies and 14 repeat NETZ. The remaining 18 patients were under close surveillance. In total there were 11 recurrences of high grade pre-invasive disease between the first 6 months-7 years of follow-up. Amongst those, 7 were the patients that had margin involvement in the original treatment and 4 had free margins. The follow up period of the patients was in average 9,2 years (3months-25years).

Conclusion: Conservative excisional treatment for stage 1A1 cervical cancer appears to be a safe alternative to hysterectomy. There was 9,5% recurrence rate of high grade pre-invasive disease, without any case of invasion. Annual cytology for at least 10 years allowed early detection of cytological abnormalities.

P-41 OUTCOME OF WOMEN PRESENTING WITH A BORDERLINE GLANDULAR ABNORMALITY SMEAR

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Background: In the literature, the management of women presenting with borderline glandular smears is unclear. There have been increasing reports of smears of borderline glandular in nature since cervical screening commenced.

Aims: To review the management and outcome of women presenting with a borderline glandular smear on liquid based cytology. To determine the sensitivity and correlation of colposcopy for abnormal histology at first visit assessment.

Methods: Retrospective database and chart review including cytology and histopathology results on all women referred with a borderline glandular smear over a 7 year period.

Results: 179 new referrals were seen. Mean age was 43.1 years. At first visit, 47.5% (85) had a normal colposcopic finding. Unsatisfactory colposcopy was seen in 7.8% (14). 46.4% (83) had a cervical biopsy performed, 9.5%(17) had a see and treat procedure. Overall final histological diagnosis based on cervical biopsy and LLETZ (including subsequent visits n=113) showed a benign histology in 25.1%(45), low grade CIN in 15.1%(27), high grade CIN/cGIN in 16.2%(29) and malignancy in 3.9%(7). 23.5% (4) women with a see and treat procedure had a normal cervical histology.

Conclusion: Significant incidence of cervical pathology, pre-invasive and malignancy (35.2%) are seen in referrals with borderline glandular smears. Immediate referral to colposcopy should be made on all women with borderline glandular smears and be seen within 2 weeks. Consideration of a see and treat procedure at first visit should be limited in order to preserve fertility.

P-42 CERVICAL TREATMENT IN THE OVER 40'S - A COLLABORATIVE STUDY FROM TWO LONDON UNITS

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Introduction: Loop/ needle excision of transformation zone is widely used to treat cervical intraepithelial neoplasia (CIN). There are concerns in treating young women because of the risk of preterm labour, but less a concern in women over the age of forty as many will have completed their families.

Aims of study:

- (a) To see if more patients over 40 had cervical treatment for low grade lesions
- (b) To analyse those who did not have disease on their cone and suggest a protocol for these patients

Methods: Retrospective study to review the reasons and outcome of cervical treatment in women over the age of forty in two London hospitals, St Mary's hospital (SMH) and King's College hospital (KCH).

A total number of 2036 women underwent excisional cervical treatment over a five year period from 2007 to 2011 (687 - KCH, 1036 - SMH)

The total number of women over the age of forty was 575(28%).

Low grade lesions commoner in SMH group 204/350(58%) than KCH group (20%), High grade lesions more common in the KCH group (47%) than SMH (33%)

2 patients (KCH) and 11 (SMH) were diagnosed with malignancy.

73 patients from KCH group and 11 from SMH group had histology results showed no CIN. These included completion of treatment for previous positive margins or a diagnostic treatment in those with a Type 3 TZ.

In conclusion, the study suggests that women over forty are more likely to receive excisional treatment for less severe lesions.

P-43 MANAGEMENT OF GLANDULAR ABNORMALITIES REPORTED ON CERVICAL SMEARS AT ROTHERHAM GENERAL HOSPITAL OVER A TEN YEAR PERIOD

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Introduction: Although glandular abnormalities on cervical smears account for only a small number of reports, the management has often posed a challenge for colposcopists. The abnormal cells may arise from a variety of sources; cervical and non-cervical sites including pelvic and abdominal organs.

Objectives: To audit the management of women referred to colposcopy clinic at Rotherham General Hospital with abnormal glandular cells on smears from 2000 to 2009 and compare their care with the guidelines from NHS Cervical Screening Programme Document 20, 2009.

Results: Overall 105 women were referred. Median time from referral to clinic was 9 days, 74% were seen within two weeks, with a non-attendance rate of 7%. At colposcopy, 50% had a normal appearance of the cervix and in 26 cases the overall impression was CGIN. Investigations included punch biopsies, (27 patients), and endometrial sampling in 91 (87%). 60 women went onto have excision biopsies of the cervix, the majority (95%) had a knife cone. Of these 29 were completely excised CGIN, 16 incompletely excised, all at the endocervical margin, and 12 had negative histology. Median depth of biopsy was 15mm (range 6-30mm). Endometrial cancer was diagnosed in 22 women after initial investigations and one was found to have carcinoma of the fallopian tube.

Conclusions: The results illustrate some of the difficulties faced by colposcopists when dealing with glandular abnormalities. Now that the likely source of the cells is also reported, women with extra-cervical glandular cells should be referred elsewhere, allowing management to focus on CGIN only.

P-44 CLINICAL INDICATIONS - FINDINGS AND OUTCOMES: A COLLABORATIVE STUDY FROM 10 LONDON UNITS FROM 01/04/2010 - 31/03/2011

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Introduction: Clinical Indications referrals to Colposcopy have remained constant for years both nationally and regionally. They constitute 18% of the Colposcopy workload (4% Urgent and 14% Non-Urgent) and it is not known nationally how much disease is found on examination, especially high grade CIN and malignancy.

Aims: To analyse clinical indication referrals with regards to their findings/ outcomes in a number of Units to obtain the incidence of disease in these patients and their subsequent outcomes.

This study has been carried out in 10 London Units in order to become one the largest series investigating referrals with Clinical Indications.

Methods: An audit profroma was created and all Units were asked to complete this from their Colposcopy databases. This was to cover the period - 01/04/2010 to 31/03/2011. There are 5 databases in use in these Units. The anonymised spreadsheets were sent to the author, collated and analysed.

Results: 8695 patients were referred to the 10 Colposcopy Units and clinical indications referrals constituted 18%. The individual Units vary greatly however in their percentages.

Referrals with clinical indications numbered 1733. The commonest reasons for referral are PCB/abnormal looking cervix. One Unit showed an incidence of HGGIN of 7%. The other Units showed an overall incidence of high grade disease of 5%. Most patients were discharged or treated within 1/2 visits.

Conclusion: While the incidence of CIN \geq 1 is overall about 10%, these patients are seen and treated in a timely manner by a clinician with experience of lower genital tract disease management. This facilitates early discharge.

P-45 AUDIT ON MANAGEMENT OF COLPOSCOPICALLY DIRECTED BIOPSIES YIELDING A HISTOLOGICAL DIAGNOSIS OF CIN 1-2

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Introduction: There is significant subjectivity and inter-observer variability in grading the severity of CIN by pathologists. A systematic review showed that colposcopically directed biopsy has a lower PPV for CIN1 and 2(16%, 32%) than for CIN3 (86%).

Objectives: To determine outcomes of women diagnosed with CIN1-2 on Colposcopic directed biopsy.

Method: Retrospective analysis of 42 cases of Colposcopy directed biopsies yielding a diagnosis of CIN 1-2 between august 2008 and august 2011.

Results: 34 patients (81%) were managed by excision biopsies, 3 (7%) treated with cold coagulation and 5(12%) managed conservatively.

14 cases (33%) yielded CIN 2 or higher, 2 cases (6%) identified no CIN.

All 42 cases were followed up at Colposcopy clinic.

At 6 month follow up 30(81%) had a negative smear, 3 cases (9%) borderline smear, 2 cases (5%) mild dyskaryosis and 2 cases (5%) were lost to follow up.

In the monitored group 2 cases (40%) had a negative smear and normal colposcopy at 6 & 12months of follow up, 1 case (20%) required cold coagulation for CIN 1 & mild dyskaryosis at 18 months, 1 case (20%) required excision biopsy at 12 months for CIN1-2 and finally 1 case (20%) was lost to follow up.

Conclusions: Ablative treatment or monitoring appears to be appropriate in cases with CIN1-2 compared to excision, as only a third of excisions showed high grade CIN. Review of histology by a senior pathologist before the final decision is recommended.

P-46 REDUCING PATIENT NON ATTENDANCE FOR COLPOSCOPY: INTRODUCING PARTIAL BOOKING FOR FOLLOW UP APPOINTMENTS

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Introduction: Non-attendance (DNA) for appointments is a significant cost to the NHS. NHSCSP publication 20 advises that DNA rates for colposcopy should be less than 15%.

Aim: to evaluate a partial booking system for women being followed up in a busy urban colposcopy clinic from April 2011.

Women identified as requiring a follow up appointment 6-12 months following their current visit were put on a review list. If followed up was required, a letter was sent explaining that the woman should ring in 4-5

months to make a follow up appointment. A reminder letter was sent out 1 month prior to their next expected attendance. A reminder text message was also sent. Women who did not respond within 4 weeks were sent a second reminder letter. The GP practice was contacted to confirm correct details. If there was still no response, up to three further phone calls were made at 1-2 week intervals. The patient was then discharged. GP and screening failsafe co-ordinator were informed.

A patient satisfaction questionnaire was given to women attending whose appointment had been partially booked.

Results: The DNA rate for follow-ups between 2010-2011 was 27%. To date the introduction of partial booking for this group has reduced the DNA rate to 14%. Of the 1784 women on the review list, 30 did not respond and were discharged.

To date there have been 50 completed responses to the patient satisfaction survey. All women find it a better experience; they are less likely to miss their appointment.

P-47 AN AUDIT OF NON-EXCISIONAL TREATMENT MODALITIES FOR CIN AT ELHT COLPOSCOPY SERVICES

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Aims: As we know, Conservative management is the mainstay of treatment for low grade CIN lesions. At ELHT, Cold Coagulation and Cryotherapy are the ablative methods that are offered. Also Single freeze Cryotherapy had been a longstanding practice at our unit compared to nationally recommended Double freeze method. We wanted to compare our practice to national standards and to identify any gaps as well as good practice points in our management.

Methods: A retrospective audit of all women who had had either Cryocautery or Cold coagulation from 2008 to 2010 period, were identified.

Audit population of 51 - selected from Colposcopy clinic register.

A detailed proforma was devised and we audited various aspects of care namely: Referral pathway, prerequisites for treatment, Communication of results and plan, treatment modality standards and treatment efficacy at follow -up.

Results: On the whole, as a unit, our practice has been good. However the key areas which required improvement were documentation and communication.

Conclusion: Our results showed that all women were followed up until their smear results were negative. Hence patient safety had not been compromised in any way at ELHT. We have since amended our local guidelines to double freeze technique, in accordance with national guidelines.

P-48 VARIATION BETWEEN COLPOSCOPIST FOR ACCURACY OF COLPOSCOPIC OPINION, SHOULD THIS INFLUENCE RECOMMENDATION AND IMPLEMENTATION OF NATIONAL GUIDELINES

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Significant changes have been made to cervical screening programme recently in UK based on recommendations of BSCCP guidelines. These include more conservative management of low grade abnormalities diagnosed on colposcopy and increasing the interval of colposcopic review from 6 to 12 months. Imminent implementation of HPV cure test is also highly dependent on colposcopic diagnosis. While accuracy of colposcopic diagnosis can be significantly high especially in predicting high grade disease, this is not a consistent finding. Variation in colposcopic diagnosis between colposcopist can vary significantly and put women at risk of over or underdiagnosis if unified guidelines are implemented without taking this variation into consideration. Our audit of colposcopic diagnosis confirms large variation between colposcopist. We recommend BSCCP should consider including colposcopist diagnostic accuracy as a standard for each colposcopist for accreditation or reaccreditation.

P-49 WHAT IS THE COLPOSCOPIC OUTCOME FOLLOWING A BORDERLINE SMEAR WITH HYPERCHROMATIC CROWDED GROUPS OF CELLS

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One of the cytology subcategories of Borderline Changes? High Grade reported by our local laboratory is that of Hyperchromatic Crowded Groups of Cells (HCGs). Patients with this finding are referred to colposcopy. An audit of all these referrals over a four year period was carried out to assess the final histological findings in this group of patients.

176 HCG referrals were received during the period January 2007 - December 2010. 168 of these were seen at colposcopy. 62 patients (36.9%) had high grade changes on histology from the first visit (including one micro-invasive carcinoma and 3 CGIN). A further 84 patients had CIN1 or less on first visit. 77 of these attended for a second colposcopy, 8 (10.4%) of whom had high grade histological abnormalities. Subsequent visits revealed a further 4 patients to have high grade histological changes. In total, of 168 patients seen in colposcopy after a borderline smear with HCGs, 74

(44%) had high grade abnormality on histology

We conclude that Hyperchromatic Crowded Groups on cervical cytology is an important finding warranting colposcopy referral and perhaps a similar colposcopy protocol as a report suggesting high grade changes.

P-50 LOOP EXCISION FOR CIN, DEPTH AND REMOVAL IN SINGLE PIECE! HOW OFTEN IS THE BSCCP STANDARD MET? AUDIT OF LOOP EXCISION FOR CIN

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For complete excision of CIN and exclusion of invasive disease, depth of loop excision should be at least 7mm. For interpretation of margin status of excised tissue, BSCCP recommendations are that the loop should be removed in a single piece as best practice. Colposcopy data from our unit was reviewed to audit these two standards. Data from 81 loop excisions was reviewed. Variables included referral cytology, colposcopist, colposcopic opinion, histological diagnosis, characteristics of loop specimen. Outcome measures were compared with the national standard. The results showed standard as met in 86% and 93% with variation between colposcopist.

P-51 COMPLICATIONS AFTER COLPOSCOPY OUTPATIENTS PROCEDURES

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Background: In colposcopy we work to national standards to ensure we are meeting these standards we continually audited are practice. These are two of the standards which we have just looked at to enable us to improve the service delivery.

- | The proportion of women managed as outpatients with local analgesia should be >80%
- | The proportion of cases admitted as inpatients because of treatment complications should be <2% (section 8.1)

Methods: Retrospective documentary.

Information obtained from CSW and theatre computers

Results: We are meeting the standards regards to post LLETZ complication management and proportion of women managed as outpatients with local analgesia.

Conclusion and Recommendation:

Points for discussion for service provision

Implications if we needed to have stand alone services in the community in future.

Helpful in planning Day surgery requirements.

P-52 REVIEW OF NURSE COLPOSCOPIST EFFECTS ON SERVICE PROVISION OVER THE LAST 5 YEARS

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Background: There have been nurse Colposcopist in post for five years in our trust and this service evaluation has highlight some of the achievements of this extended nursing role.

Method: Service evaluation

All information was collected from CANIS and hospital dater bases.

Results: The clinical work load was looked at and the types of procedures performed, clinic numbers and clinics cancelled.

The cost effectiveness and flexibility brought to the service has also been highlighted.

P-53 BORDERLINE GLANDULAR SMEARS - EVALUATION OF CURRENT DIAGNOSTIC TESTS AND CLINICAL OUTCOMES

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Background: Borderline glandular abnormalities on liquid based cytology (LBC) are associated with a small but significant risk of high-grade pathology. The NHSCCP currently recommends investigation with colposcopy, cervical biopsy and endometrial biopsy (EB) but not endocervical curettage (ECC). We wanted to ascertain the incidence of significant pathology in our population and the predictive value of the investigations.

Methods: A retrospective casenote review of 47 women with borderline glandular smears 2007-9.

Results: The incidence of significant pathology was high at 42.5% with 14.9% having a cancer diagnosed (5 cervical and 2 endometrial). 19.1% of patients had high grade CIN and 8.5% had CGIN. Colposcopy was abnormal in 34.8% of patients giving a positive predictive value of 66.6%. ECC was the sole initial investigation which was abnormal in 2 cases of CGIN and one case of endometrial cancer but 3 cases of significant endocervical pathology were not picked up on ECC. EB was performed on 30 patients (normal in 28, inadequate in 2). Of the two cases of endometrial cancer one arose in a patient not biopsied and the other in one of the samples initially reported as inadequate.

Discussion: Borderline glandular smears are a strong predictor for significant pathology. ECC may still have a role where the ectocervix appears normal. However, it has low sensitivity/specificity. Whilst EB did not

identify any cases of cancer it did have a good negative predictive value in this audit. In the future HPV-DNA status may give additional diagnostic information to complement existing investigations.

P-54 AUDIT OF APPROPRIATE MANAGEMENT OF PATIENTS REFERRED FOR COLPOSCOPY. ARE BSCCP STANDARDS MET?

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Colposcopy service provided as secondary screening tool for patients referred with abnormal cytology or clinically abnormal cervix and subject to meeting national BSCCP/QA Audit standards. Method: Review of 1197 cases managed in a colposcopy unit. Data retrieved from hospital IT colposcopy database. Outcome measures: Excision biopsy for high grade CIN, Predictive value of colposcopic diagnosis, Loop excision in one piece, Depth of Loop. These standards were assessed for the unit and individual colposcopist.

Results: 677 patients were seen due to abnormal results, 202 with clinically suspicious cervix and 194 with suspicious symptoms. Diagnostic accuracy for high grade CIN varied from 38 to 95%. In 86% of cases loop excision was done in one piece with colposcopist variation of 75 to 93%. Depth of loop excision was more than 7mm in 93% cases.

Conclusions: Most of the BSCCP audit standards were met within the unit overall, however at each colposcopist level some of the standard were not met. This has implications for implementing national guidelines with emphasis on more robust audit measures for accreditation.

P-55 AUDIT ON THE MANAGEMENT OF CERVICAL INTRAEPITHELIAL NEOPLASIA (C-GIN)

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Objectives: To assess the sensitivity of cytology and colposcopy in detection of c-GIN. To see if these women were managed in accordance with NHSCSP guidelines.

Standards: NHSCSP Guidelines, Number 20 (May 2010)

Design: Retrospective audit

Setting: Consultant led Colposcopy Clinic, , Great Western Hospital, Swindon.

Population: 42 women with c-GIN on histology (either punch or excisional biopsy) between 1st January 2005 and 31st December 2010 were included .

Method: Data was collected from the patient's case notes, the Colposcopy database and electronic patient records.

MAIN OUTCOME MEASURES

- Correlation between cytology, colposcopy and histology findings;
- Number of invasive cancers

Results: 42 women were shown to have (c-GIN) on their histology report .2/42 had punch only, 8/42 had excisional biopsy, 32/42 had punch followed by excisional biopsy.

24/42 (57.2 %) had High Grade CGIN,11/42 (26.2%) showed Low Grade c-GIN, 4/42 showed ungraded c-GIN (9.5%). Invasive cervical cancer was identified in 3 cases (7.1%). One was a squamous micro invasive lesion and referral smear showed severe dyskaryosis. Two were adenocarcinoma stage I B1 , one was referral for glandular abnormal and other was for persistent Borderline nuclear abnormality in squamous cell.

Majority of HG c-GIN were associated with glandular abnormality (37.5%) and severe dyskaryosis (41.7%).

All Patients with high grade c-GIN, only one was diagnosed as ?glandular lesion on colposcopy (2.3%). The sensitivity of cytology for glandular abnormality is 15/42 (35.7%). The improvement in sensitivity afforded by punch is (61.9%).

Conclusion: The presence of abnormality in glandular cells on punch biopsy suggests the need for further excision to confirm the diagnosis of glandular abnormality. Our study supports that colposcopy performs poorly in identifying glandular lesions.

P-56 A TWO YEAR RETROSPECTIVE AUDIT OF LLETZ AND THERMOCOAGULATION TO CERVIX IN ONE COLPOSCOPY CLINIC IN A DISTRICT GENERAL HOSPITAL

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A 2 year retrospective audit was performed. Patients were treated according to the clinician's preference. 260 women had a LLETZ. 134 women had thermocoagulation. All women (100%) had a colposcopy and confirmed biopsy diagnosis prior to destructive treatment. No woman had evidence of glandular or invasive disease. The age range was 19yrs to 64yrs. Most women were of child-bearing age.

Of the 260 LLETZ group follow up cytology was available for 253 women (98%). 239 women did not have dyskaryosis (94.5%) 14 women had abnormal cytology (3 severe 2 moderate 9 mild). Five patients had second LLETZ which 4 showed high grade CIN. All the women with mildly dyskaryotic cytology have not required further treatment to date.

Of the 134 thermocoagulation group 131 women had follow up cytology (97.8%). 120 women (91.6%) had no dyskaryosis. Cytology was non-negative in 11 (8.4%) women. 6 patients were treated conservatively and all reverted to negative cytology within 18 months. 5 patients had follow-up excisional treatment (LLETZ). There were no cases of high grade CIN, CGIN or invasive cancer on the final histology.

LLETZ was more common than thermocoagulation. The audit standard of 90% was met in both groups. LLETZ was better than thermocoagulation. Five woman treated initially with LLETZ required 2 excisional treatments. Five women initially treated with destructive treatment had subsequent excisional treatment but 129 women avoided this. No case of CGIN or cancer was missed. Destructed treatment is an acceptable treatment in our unit and may reduce neonatal morbidity and mortality.

P-57 NURSE TRAINING FOR CERVICAL SCREENING AND COLPOSCOPY IN NEPAL

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Women in Nepal have little access to reproductive health services and the mortality from cervical cancer is high. The Nepal Network for Cancer Treatment and Research (NNCTR) and gynaecology community has been working for more than 10 years on building up a system of opportunistic screening and treatment through screening camps and also hospital screening. Nepal had no nurse Colposcopists but had nurses delivering screening camps and working alongside gynaecologists. The PHASE Colposcopy Group is committed to working with the NNCTR to produce a pool of high quality trained Colposcopists in Nepal including nurse Colposcopists.

The first two Nepali nurses were recruited and were funded to study for 4 weeks in a UK NHS Hospital Trust. The aim of the PHASE Worldwide Colposcopy Nurse Training Programme is to enable nurses to obtain the core knowledge, develop the necessary skills and the personal and professional attributes to begin competency in colposcopy. These competences are based upon The BSCCP training programme and comprise basic skills, colposcopic technical skills, practical procedures, the ability to recognise the normal and abnormal cervix, administration, laboratory training and communication skills. The nurses underwent an externally examined exit assessment (OSCE). We understand that one of the nurses now works alongside the gynaecologist in "one stop camps", where colposcopy and biopsy are performed on the same day to screen positive women. The programme details will be presented at the conference.

P-58 INCREASING TREND TOWARDS SUBTOTAL HYSTERECTOMY: RISK OF INAPPROPRIATE CESSATION FROM CERVICAL SCREENING PROGRAMMES AND CONSEQUENCES

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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.

Objective: To study the national and regional trend of STH in the region covered by NEYH QARC from 2000-2009 and analyse the smear follow up data of these women and their outcomes.

Methods: Anonymous national and regional data for STH (Q07.5) were obtained from www.hesonline.nhs.uk and regional identifiable data gathered by direct contact with hospital data/ information managers. Data on cervical screening history and outcomes were obtained from open Exeter system www.openexeter.nhs.uk and call/recall screening offices.

Results: Nationally, the STH rate (% of all hysterectomies) increased from 10.6% in 2000-1 to 13.5% in 2008-9 (age group 15-59 years); however, there was a regional variation in this trend. In the North East region, out of 1197 women who underwent STH, 150 women (12%) were inappropriately ceased from the screening programme as no longer having a cervix; 41 of them have been recalled back. Three out of 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. The smear follow up data is awaited as is the complete data from the Yorkshire and Humber region.

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.

P-59 AUDIT OF CANCER OF THE CERVIX OVER A 15 YEAR PERIOD

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Introduction: Prospective data on women with cervical cancer have been collected over a 15 year period (1996-2010). The region is served by 2 district general hospitals and one colposcopy clinic. Women requiring radical surgery, radiotherapy or chemotherapy are referred via the South East of Scotland Cancer Network to Edinburgh. Since 1999 retrospective review of smears has been undertaken and an annual report produced with recommendations for action based on audit findings.

Results: 277 cases of invasive cervical cancer were diagnosed at a mean age of 51 years (range 21-96). 239 (86%) had squamous cancer. 101 (36%) were smear detected and 171 (62%) symptomatic. Information on stage, treatment and waiting times to diagnosis and treatment will be presented. 111 women (40%) had adequate attendance for screening, 86 (31%) had inadequate attendance and in 80 (29%) the history was inapplicable/unknown. 120 women (43%) had a negative history, 27 (9%) had had previous CIN, 39 (14%) a previous abnormal smear. 40% of women had smears available for review. There were 18 false negatives (6.5%).

Conclusions: The annual incidence of invasive cancer has remained relatively constant. Around 60% of women each year are symptomatic at presentation. The majority have had no previous smears or inadequate attendance. This is a failure of compliance with screening rather than call-recall. The incidence of false negative smears is low. Delay from referral to diagnosis is usually delay in seeing a gynaecologist, delay from diagnosis to treatment demonstrates a lack of capacity in the centre as the main concern.

P-60 EVALUATING THE CORRELATION BETWEEN COLPOSCOPY DIRECTED PUNCH BIOPSY AND LLETZ

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Objective: To assess the accuracy of histopathology from the initial Colposcopy Directed Biopsy (CDB) in comparison with the subsequent histopathology from Large Loop Excision of the Transformation Zone (LLETZ).

Method: Retrospective analysis of 207 newly referred women to Colposcopy unit for investigation and treatment of cervical dysplasia. Study period from 01/07/2010-30/09/2010. Conducted in Mid Western Regional Hospital, Limerick. Histological differences between biopsy specimens obtained by punch biopsy and LLETZ were studied.

Results: Out of 207 new patients, 72 (34.7%) were referred with Low Grade Squamous Intraepithelial lesion (LSIL), 38 (18.35%) with High Grade Squamous Intraepithelial Lesion (HSIL), 55 (26.56%) were referred with Borderline Nuclear Abnormality (BNA), 24 (11.59%) with high grade BNA and 18 (8.69%) with Borderline Glandular.

192 (92.7%) patients had punch biopsy, 80 (41.6%) had CIN1, 65 (33%) had CINII-III, 4 had endometrial biopsy, 19 had Normal biopsy, others 43. There were 65 (33%) LLETZ performed out of which 9 (13%) had overcall on histology for CIN1 and 15 (13%) had undercall for CINII-III and 1 had CGIN, resulting in a 61.5% accuracy. The comparison between punch biopsy and LLETZ showed fair agreement.

Conclusion: As the accuracy between CDB and LLETZ tends towards the higher side there is considerable value in clinical use of CDB. LLETZ allows further and more accurate histological examination of the transformation zone. Therefore, it should be one of the standard assessment procedures in all cases of CIN II-III detected at punch biopsy and whenever cytology or Colposcopy suggests the risk of punch biopsy undercall.

P-61 MULTI-CENTRE REVIEW OF MANAGEMENT AND OUTCOMES OF BORDERLINE CHANGES IN GLANDULAR CELLS (BLGC)

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Introduction: In women referred with BLGC evidence suggests malignancy rates: 4-16% and pre-invasive disease: 17-40%. NHSCSP guidelines recommend colposcopy referral after one smear suggesting BLGC.

Aims: To assess:

- referral trends
- form of investigation
- types and rates of pathology

in women with BLGC.

Methods: 10 year retrospective study involving two large units- St Marys Hospital(SMH) and Whittington Hospital(WH). Identification of women with BLGC required manual inspection of all results coded as borderline. Information was retrieved from colposcopy databases.

Results: No of women with BLGC: SMH: 65(7 incomplete records) WH: 235(13 incomplete)

Proportion of overall smears: SMH: 0.3% WH: 1%

Prior to 2004 women with BLGC were not routinely referred for colposcopy.

Proportion of women who underwent colposcopy: SMH: 29/58(50%) WH: 153/235(65%)

The majority of women who did not have colposcopy were prior to 2004

Histology:

Malignancy: SMH:2/58(4%) WH: 2/222(0.9%)
Overall: 4/280(1.4%)

HGCIN/CGIN: SMH: 18/58(31%) WH: 34/222(15%)
Overall 52/280(18%)

Overall cervical disease:SMH: 27/58 (47%) WH: 46/222(21%)
Overall 73/280(26%)

Conclusion: Overall rates of pathology agree with published data and justify colposcopy referral.

A marked discrepancy between units was found in terms of rates of BLGC smear reporting and rates of pathology

Currently identification and study of women with BLGC is hampered by lack of a separate laboratory code. Introduction of this should be considered

Both the variation between hospitals and the rates of pathology suggest the need for further collaborative work in this area. Data including further units will be available for final presentation.

P-62 LOOP EXCISION, DOES THE COMPLETENESS OF EXCISION OR THE NUMBER OF EXCISION FRAGMENTS AFFECT THE OUTCOME? AN AUDIT OF PRACTICE

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Objectives:

1. To determine whether the BSUH colposcopy service met the national standard of 90% negative cytology after treatment.
2. To determine whether completeness of excision, as determined by histological examination, affected the negative cytology rate post treatment.
3. To determine whether the national standard of 80% of excisions being performed in a single piece was adhered to and whether excising more than one fragment had an impact on success of treatment.

Method: Data were extracted from the regional colposcopic database for women receiving LLETZ as treatment for CIN during 2008-09 (n=1310). Chi-squared statistical tests were performed on data.

Results: 87.4% of women undergoing LLETZ had negative cytology at first follow-up (national standard 90%).

Of those with high grade dyskaryosis at follow-up, 91.9% had repeat excision (national standard 90%).

There was no significant difference in negative follow-up cytology for women who had a complete excision (51.1%) compared to those who had an incomplete excision (46.3%) ($X^2(3)=4.55$, p.21), and those who had the specimen removed in one fragment (76.6%) compared to those in whom the specimen was removed in multiple fragments (23.4%) ($X^2(3)=1.78$, p=.62).

Conclusions: The results show that we are close to meeting the national target of 90% negative cytology at first follow-up and that the completeness of excision does not appear to adversely affect outcome. We did not meet the target of 80% excision in one piece, but taking a specimen in multiple pieces did not affect rates of negative cytology at first follow-up.

P-63 MANAGEMENT OF WOMEN WITH HIGH-GRADE CYTOLOGICAL ABNORMALITIES AND LOW-GRADE OR NORMAL COLPOSCOPY: A COMPARISON OF TRIAGE OPTIONS

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Background: Approximately 70% of women referred with high-grade cytology that have low-grade or normal colposcopy will have CIN1 or less at histology.

Objective: to assess various combinations of tests and biomarkers that could safely identify which of these women have an underlying high-grade lesion.

Material & Methods:

Design: Diagnostic study

Setting: University Hospital of Ioannina(from 10-2010)

Population: Women referred with high-grade cytology that have low-grade or normal colposcopy.

Intervention: An LBC specimen obtained prior to colposcopy was tested for HPV-typing, mRNA E6&E7 (NASBA& flow cytometry), p16^{INK4a} and microspectroscopy. All women underwent LLETZ.

Outcomes: The sensitivity(S),specificity(Sp),PPV,NPV,positive and negative likelihood ratios(LR) were calculated for each parameter alone or in combination for CIN2+ &CIN3+ histology.

Results: A total of 218women with high-grade cytology were referred; 57 of those had low-grade or normal colposcopic findings. P16 appeared to have the best sensitivity[75%(95%CI:0.301-0.954)],NPV[93%(95%CI:0.685-0.987)]and (-)LR [0.27(95%CI:0.049-1.479)]. NASBA and p16 had the best specificity[93%(95%CI:0.685-0.987)],NPV[93%(95%CI:0.685-0.987)] and (+)LR[10.5(95%CI:1.462-75.412)]. The combination of HR HPV&p16 with had the best sensitivity[80%(95%CI:0.376-0.964)] and negative LR[0.27(95%CI:0.045-1.586)]; HR HPV with NASBA had the best specificity[85%(95%CI:0.64-0.948)] and NPV 90%(95%CI:0.686-0.971), while NASBA with p16 the best PPV 60%(95%CI:0.231-0.882).

Conclusions: Some of the combinations might have significant accuracy for the prediction of high-grade histology in women with low-grade or normal colposcopy.

This could allow conservative management for women at low risk and avoidance of unnecessary intervention and/or treatment. All the above markers should be evaluated in a cost analysis and could be integrated in high-grade triage prediction scoring system, allowing tailored selection for treatment. The above findings need to be confirmed in larger cohorts.

P-64 COMPLIANCE WITH FOLLOW-UP AFTER TREATMENT FOR CERVICAL INTRA-EPITHELIAL NEOPLASIA.

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Aim: To assess the level of adherence to follow-up after treatment.

Material & Methods:

Design: Retrospective observational study

Setting: Teaching hospital, London

Period: 1989-1999

Population: Women who attended for follow-up after CIN treatment in the colposcopy clinic and in the community.

Interventions: Cytology results were obtained from the hospital-based colposcopy and the community-based database. A questionnaire exploring reasons for non-adherence was sent to compliant and non-compliant women.

Outcomes: The average interval between appointments attended was compared to the expected interval. The time that elapsed since the previous appointment attended was calculated for each visit and was correlated to the time since the treatment.

Results: 1013 women attended 4128 follow-up visits in the colposcopy clinic and in the community. Twenty-two (2.2%) women never attended any post-treatment appointment and 209 (21.0%) of the 991 women who attended at least once, did so on average more than 12 months later than specified by the follow-up protocol. There was a highly significant correlation between the interval since the previous appointment and the time since treatment (P<0.0001) showing that compliance deteriorates with increasing time since treatment. The questionnaire was sent to 526 women; 153 were patients who complied poorly, whilst 373 attended appropriately. Only 23 (15%) of the non-compliant group answered all the questions, whereas 108 (29%) of the compliant patients responded (P=0.0006).

Conclusions: The findings suggest that compliance significantly deteriorates with time since treatment. It is plausible that this decline in adherence may partly contribute to the increased risk for future invasive disease.

P-65 A CASE OF MESONEPHRIC ADENOCARCINOMA OF THE CERVIX, AND LITERATURE REVIEW

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Summary: Mesonephric adenocarcinoma is a rare type of cervical cancer that derives from mesonephric remnants in the uterine cervix. This is the 33^d case of mesonephric adenocarcinoma in adult women documented in literature to the best of our knowledge.

We present an asymptomatic 64 year old postmenopausal woman presenting with a suspicious looking cervix as an incidental finding and diagnosed with a stage IB mesonephric adenocarcinoma of the cervix.

This case was managed with radical hysterectomy, bilateral salpingoophorectomy and pelvic lymphadenectomy.

The rarity of such cases imposes challenges on the management in terms of diagnosis, prognosis and therapeutic options.

P-66 COLPOSCOPY PATIENT SATISFACTION SURVEY AUDIT

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Aims/Objectives:

- } To improve patient satisfaction by creating patient friendly ambience
- } To reduce default rate in the clinic
- } To allay anxiety of patients by providing effective and timely information

Background:

- } Wasted appointments represent costs to colposcopy departments.
- } 20% of women fail to attend for their appointment due to various reasons.

Method: It is a prospective audit in which questionnaires were handed to women attending colposcopy clinic, 37 women returned filled up questionnaire 33 questions were asked, including information provided before the clinic, information re: ambience and staff behaviour, information re: the procedure and re: conveying results to women.

Results: Most women were given adequate pre-clinical information (75% approximately), found reminder to attend clinic very useful. Most women were seen within 30 minutes of scheduled time (97%), found the clinic ambience and staff behaviour good. Approximately 50% women were not informed about their rights to stop the procedure, also not given contact details for further information after clinic session.

Summary/Conclusions: 48% women considered the service as excellent. Although patient satisfaction was overall good, more efficient reminder system needs to be employed, in terms of text reminder, ensuring correct contacts of women were in the system. Staff need to be trained and supervised in providing adequate and correct information to women. Contact details of a named person (nurse colposcopist) to be provided to all women for any further queries.

The next audit in one year after implementing changes.

P-67 LIGNEOUS CERVICITIS/ENDOMETRITIS: A GYNAECOLOGICAL PRESENTATION OF PLASMINOGEN DEFICIENCY

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Type 1 (quantitative) plasminogen deficiency is a rare inherited systemic disorder characterised by pseudomembranous, wood-like (ligneous) deposits of fibrinous material on mucosal surfaces.

We report the case of a 20-year-old woman with ligneous cervicitis She referred for colposcopy with a history of postcoital bleeding, irregular menses, menorrhagia and dysmenorrhoea. She described passing pieces of 'wood-like' tissues during menstruation. Colposcopic examination identified membranous lesions on the cervix. Cervical smear, human papillomavirus test and vaginal swabs were negative.

She gave a history of recurrent ligneous conjunctivitis during childhood and a diagnosis of type 1 plasminogen deficiency. Her plasminogen activity was 11 IU/dL (normal range 80-120).

Colposcopy was repeated following 3 months use of the combined oral contraceptive pill (COCP) which is associated with an increased in plasminogen level. The cervix was covered with the same raised yellow ligneous tissue. The ligneous tissue and cervical punch biopsies were sent for histological examination. Laser vaporisation of cervix was performed achieving good haemostasis in conjunction with topical application of tranexamic acid.

Hysteroscopy revealed regular uterine cavity. The cervical canal and lower third of the cavity were filled with ligneous membranes. An endometrial biopsy was taken for histological examination.

Adequate treatment of the condition is limited as rapid re-growth of the membranous lesion follows excision. A study is in progress to assess the use of local plasminogen replacement for ligneous conjunctivitis. COCP has been reported to induce improvement in the condition.

P-68 DOES APPLICATION OF ACETIC ACID AFFECT THE QUALITY OF A LIQUID BASED CYTOLOGY SMEAR?

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Background: A conventional smear taken prior to application of acetic acid may precipitate bleeding and sloughing of the epithelium, particularly, in the presence of a high-grade cervical intraepithelial neoplasia (CIN), thereby, making colposcopic evaluation difficult. Whilst a conventional pap smear taken after application of acetic acid is of a poor quality, the efficacy of liquid-based cytology (LBC) is not known.

Objective: To study efficacy of LBC smear taken after application of 5% acetic acid.

Methods: A prospective cohort study of women who attended our colposcopy clinic as a new referral between 1st February 2010 and 30th June 2010 was performed. A LBC smear was taken after application of 5% acetic acid. The smear was evaluated by an experienced cytopathologist who was unaware about the application of acetic acid. The primary outcome measure was adequacy of the smear.

Results: Fifty five women were included in this study. The mean age of the study population was 35 years. Three women (5%) were referred with a borderline smear, 13 (23%) with mild dyskaryosis, 13 (23%) with moderate dyskaryosis, 24 (43%) with severe dyskaryosis and 2 (3%) with possible glandular changes. Thirty specimens (54%) taken after application of acetic acid were reported to be inadequate for diagnosis, although endocervical cells were present in 49 specimens (89%). Four low-grade smears (23%) and 12 high-grade smears (31%) had a positive correlation to the original smear. There were eight (32%) false negative specimens.

Conclusion: Application of acetic acid affects the adequacy and efficacy of a liquid-based cytology smear.

P-69 A SURVEY OF KNOWLEDGE OF HPV INFECTION IN WOMEN ATTENDING COLPOSCOPY CLINIC

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Background: To assess current levels of awareness about human papillomavirus (HPV) on the eve of implementing the HPV test.

Objective: We aim to study knowledge of HPV infection in women attending our colposcopy clinic.

Methods: Women attending our colposcopy clinic for the first time between 1st February 2010 and 30th June 2010 were invited to participate in a survey. Prior to the visit to colposcopy clinic, women had received the relevant leaflets on colposcopy and HPV infection with their appointment invite. A questionnaire that included questions concerning knowledge of HPV infection,

colposcopy and HPV vaccination was completed by the participants at the colposcopy visit. Demographic data such as age group, education and smoking status was collected. The primary outcome measure was accurate information regarding HPV infection.

Results: Forty seven women participated in this survey. Twenty three women (48%) were not aware of HPV infection. Out of the 24 women (51%) who were aware of HPV infection, 13 women (54%) thought condoms provides protection against HPV infection, 11 women (45%) thought HPV infection was symptomatic and there was no vaccine available. One of the eighteen women (0.05%) who smoked thought it increased the risk of cervical cancer. Five women (10%) thought that colposcopy was a test for cancer and annual cervical smears are recommended. Ten women (21%) thought they would be told that they have cancer, when they received a colposcopy appointment.

Conclusion: In our cohort, in spite of media focus on HPV vaccine, women lack accurate knowledge of HPV infection.

P-70 CGIN TOPOGRAPHY: A REPRODUCIBLE HISTOMORPHOLOGICAL ASSESSMENT OF CGIN WITH A VIEW TO PREDICTING RECURRENCE RISK

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Introduction: Cervical glandular intraepithelial neoplasia (CGIN) is dysplasia of the glandular tissue of the cervix. The majority of women affected undergo cone excision and follow-up surveillance to prevent recurrence. However even with clear margins, the risk of recurrence is quoted as between 15 to 25% and there does not appear to be a way of predicting recurrence.

Methods: A retrospective review of case notes and cervical cone histological topography of patients treated for CGIN at St Mary's Hospital, London over four years.

CGIN topography was mapped for the initial cone biopsy using standard microscopy and image analysis software.

Results: Ten complete cases were identified.

80% had multifocal disease and 88% of these were bilateral (both sides of the endocervical canal).

The maximum distance between foci was 6.75mm (median 1.34, range 0.51-6.75mm). Excluding cases with positive margins, CGIN was present 7.5mm from the endocervical margin (range 3-17.2mm) and 3.15mm from the deep lateral margin (range 1.5-4.4mm).

All patients with a positive endocervical margin (three) had type 2 transformation zones (TZ).

Conclusion: There is a strong correlation between type 2 TZ and positive endocervical margin and, given the predominance of multifocal disease, it is important that the surgeon ensures that the endocervical canal is well sampled and excised to an adequate depth and breadth. From this work we hypothesise that the disease-free excision margin should be based upon the greatest distance between separate foci. To calculate this figure on an individual basis, a large multisite assessment and follow-up of cases is required.

P-71 INCIDENCE OF HPV INFECTION IN WOMEN WITH LOW GRADE SMEARS AND CORRELATION WITH THE PRESENCE OF HIGH GRADE CERVICAL DISEASE (CIN2+) IN DIFFERENT AGE GROUPS

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Objective: HPV testing was introduced in our colposcopy department as a triage for women referred with low grade smear tests. The aim of this study was to assess the incidence of HPV infection in various age groups and its significance in predicting CIN 2 or worse.

Method: This was a retrospective study from January 2005 to October 2011. The HPV status of 2406 women with a Low Grade smear test was determined using the HC2 assay. Data was collected from the computer database for colposcopy (Mediscan).

Results: HPV positive rates were 37% (953 patients) with great variation between the different age groups: 52% between 20-24 years of age, 50% 25-29 years, 41% 30-34 years, 30% 35-39 years, 22% 40-44 years, 22% 45-49 years and 15% >50 years.

Between the 1453 women that tested negative for HPV infection only 5 had a diagnosis of high grade disease.

The sensitivity of HPV testing in predicting high grade cervical disease was 86 % and showed a decreasing trend with increasing age. The overall specificity was 64% and gradually increased in the older age groups.

The negative predictive value was very high among patients of all ages (99.4 to 100%).

Conclusion: We conclude that in women with Low Grade smears, HPV testing can be used to rule out presence of HG disease across all age groups. We therefore feel that the implementation of HPV testing in triaging women with borderline cytological abnormalities and mild dyskaryosis is a safe strategy.

P-72 REFERRAL PATTERNS TO A TWO WEEK RAPID ACCESS COLPOSCOPY CLINIC: OUTCOMES AND EDUCATIONAL NEEDS OF PRACTITIONERS USING THIS PATHWAY

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Objective: The two week rapid access referral pathway for women with suspected gynaecological malignancies was introduced in 2000. The aim of this study was to assess the commonest pathologies diagnosed in that clinic and the proportion of clinically benign lesions referred as suspicious.

Method: This was a retrospective study from January 2006 to May 2011. 259 women were referred to the TWR clinic in our tertiary colposcopy unit, with a diagnosis of suspected cervical, vaginal or vulval malignancy. Data was collected from the computer database for colposcopy (Viewpoint).

Results: The median age of the 219 women referred for suspected cervical malignancy was 44 (range 20-85) and the median age of the 40 women with suspected vulval or vaginal malignancy was 67 (range 31-88).

The most common conditions diagnosed were cervical polyps (32%), cervical ectropion (22%), Nabothian follicles (17%), atrophic vaginitis (10%) and lichen sclerosus (8%). The vast majority of them were referred as suspicious cervical or vaginal lesions.

Only 4 women (1.5%) that were referred with suspicious lesions had a final diagnosis of malignancy (3 patients with squamous cell carcinoma of the cervix and one with adenocarcinoma). The main complaint of those patients was irregular bleeding (postcoital and/or intermenstrual).

Conclusion: Our study highlights the conditions that non specialists and referring physicians are most likely to encounter, concerning the cervix, vulva and vagina. Emphasis on education regarding those conditions will reduce the number of unnecessary rapid referrals and accordingly the cost to the primary care trusts.

P-73 ASSESSMENT OF THE EFFECT OF PUBLICITY SURROUNDING CELEBRITY DEATH FROM CERVICAL CANCER ON THE CERVICAL SCREENING IN PORTSMOUTH

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Objective: To assess the impact of a celebrity's cancer diagnosis on the workload of both pathology and colposcopy services.

Methodology: A retrospective case controlled cohort study was performed comparing 9 months cytology and colposcopy workload at Portsmouth Hospitals after the announcement of a celebrity's diagnosis and death from cervical cancer with the same period a year previously.

Results: There was a 10.6% increase in the number of cervical cytology specimens received over the nine months following the announcement (37838 to 41843). This increase was similar for all age groups.

The increase in cervical specimens resulted in a 63.9% increase in referral for colposcopy. The number of women referred to colposcopy increased from 775 to 1270.

The proportion of women with high grade dyskaryosis (moderate/severe) or worse also increased (278 to 582) and as a proportion of total referrals (35.9% to 45.8%).

There was a 50% increase in cancers diagnosed (14 to 21). The majority of these were early stage cervical cancers.

Following initial colposcopic assessment there were more people kept under colposcopic surveillance 11.5% vs. 6.65% (OR1.8) (P<0.0002). There were fewer defaulters in the study group (OR 0.23) (P<0.0001).

Conclusion: The celebrity's death had a substantial effect on the screening programme. The celebrity's tragedy has influenced the behaviour of both the users and providers of cervical screening services. The use of resources has increased but reassuringly more pre-cancerous and cancerous lesions have been identified and treated.

P-74 CONCORDANCE BETWEEN INTROITAL AND CERVICAL SAMPLES FOR HPV STATUS AND TYPE

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Background: Comparative HPV testing and genotyping between the introitus and the cervix is of relevance not only for self-testing but also for determining the potential risk of HPV-associated vulval disease in women referred for colposcopy.

Objective: To determine 1) the prevalence of asymptomatic vulval HPV infection in women with abnormal cervical cytology and 2) the concordance between vulval and cervical HPV infections in terms of HPV positivity and types identified.

Methods: Women attending the colposcopy clinic were approached. Introital and cervical samples were collected in LBC-medium. HPV detection was performed using the APTIMA® RNA-based (Gen-Probe), Hybrid Capture-2 (HC2) DNA-based (Qiagen), and Papillocheck® (Greiner Bio-one) PCR-based DNA assays.

Results: Cervical and introital HPV results were obtained for 56/60 and 59/60 women respectively using all three tests. The overall proportion of HPV+ve introital samples when compared with HPV+ve cervical samples was 64% (34/53). The two samples contained the same HR-HPV type (+/- other HR types) in 68% (23/34) with 52% (27/52) concordance with respect to the presence of HPV16 or non-HPV16 HR types and HPV-ve results. In 26% (14/54) of women, different types of HR-HPV were detected in the introital samples when compared with the cervical samples.

Conclusions: There is significant concordance between vulval and cervical HPV infections. HR-HPV is frequently detected at the introitus in the absence of disease. This may reflect exfoliated cervical cells or true vulval infection with the future risk of VIN and raises the issue of whether surveillance of women with HPV-16 infection at the introitus is warranted.

P-75 THE EFFICACY OF HPV E6/E7 MRNA TESTING IN POST COLPOSCOPIC TREATMENT SURVEILLANCE OF CERVICAL INTRAEPITHELIAL NEOPLASIA

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Background: Disease recurrence following treatment with LLETZ for high-grade CIN ranges from 5-35%. Women with evidence of persistent HPV infection following treatment have a higher incidence of disease recurrence than those who clear their infection. This study evaluates the utility of HPV mRNA testing in determining the risk of residual CIN2+ disease post-treatment.

Study Design: We are prospectively following a cohort of 307 women treated by LLETZ for suspected high-grade disease. Cervical specimens are taken at first visit prior to colposcopic procedure at 6, 12 and 18-24 months. HPV DNA is detected using HC II (Qiagen) and HPV mRNA detected using HPV PreTect Proofer (Norchip).

Results: The prevalence of high-risk HPV DNA and mRNA prior to treatment was 92.4% and 70.1%, respectively. HPV16 was the most predominant HPV type representing 66.7%. Histological examination revealed 80.7% had CIN2+, 15.9% CIN1, and 3.1% Normal. Post colposcopic follow up at 6-12 months post-treatment, showed 20.72% with abnormal cytology and indicated HPV DNA persistence in up to 20.01% of cases and HPV mRNA persistence in 9.61%. HPV data was correlated with margin positivity and residual/recurrent CIN2 disease within 18-24month follow up.

Conclusions: HPV DNA testing is useful for predicting recurrence of CIN in women post-treated and can be used as test of cure in the colposcopy setting. HPV mRNA testing is more specific but less sensitive than HPV DNA testing, however sensitivity may be more central in post treatment disease surveillance.

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P-76 THE ROLE OF OPTICAL COHERENCE TOMOGRAPHY IN THE MANAGEMENT OF VULVAL DISORDERS

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Background: Optical coherence tomography(OCT) is an imaging technique which enables real-time visualisation of tissues (depth of 1-2mm) at near-microscopic resolution. Neoplastic changes which destroy the internal layered structure of the epithelium can be evidently visualised with OCT.

Objective:

1. Assess the feasibility of using OCT on vulva
2. Study the changes in the OCT acquired image pattern associated with vulval disorders

Methods: Women attending for vulvoscopy were approached. Laser(630nm) was focussed via the hand-held probe and a 2.5mm imaging width and depth were chosen. Image acquisition and display was instantaneous. Images were captured across the lesion by moving the hand-held probe. Borders and any intralesional peculiarities were demarcated followed by vulvoscopy. Biopsies although were guided by clinical need, extra biopsies were allowable if OCT findings were discrepant and suggestive of high-grade disease.

Results: We currently have results for 14 women (median age 51yr). Complete data-set will be presented at the meeting. The transition from normal to a neoplastic area was distinguishable on OCT as a transition from a well-structured to a structureless image. OCT image pattern was consistent with high-grade neoplasm in all six cases of VIN(n=5) and VAIN(n=1) confirmed on histology.

Discussion: Use of OCT on the vulva is innovative with only three published studies thus far. This study demonstrates the feasibility of using OCT as an adjunct

to vulvoscopy. In addition to enhancing the accuracy of lesion demarcation, OCT aids in distinguishing non-cancerous, pre-invasive and invasive conditions and merits further evaluation.

P-77 A COMPARISON OF THE THINPREP IMAGING SYSTEM AND MANUAL SCREENING BY META ANALYSIS AND SYSTEMATIC REVIEW

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Introduction: The aim of this study was to review quantitatively and non-quantitatively, the literature which assesses the impact of the ThinPrep Imaging System (TIS) as opposed to manual screening in cervical cytopathology.

Methods: We searched the literature using keywords and MESH terms. Papers were rejected if they were a) concerned with liquid based cytology rather than automation and b) studies that were narrative. A meta analysis using a random effects approach was adopted to investigate the impact of introducing the Imager on; the levels of high grade disease reported as well as changes in the levels of all cases reported as anything but negative/normal between technologies.

Results: Twelve papers were included in the systematic review and nine were eligible for inclusion in the meta analysis. The Imager was superior in the following; rates of reported high grade disease 1.24 (1.08-1.43), slides reported as non negative in any other category 1.15 (1.01-1.34), rates of biopsy confirmed high grade disease following an HSIL and ASC-H diagnosis 1.21 (0.95-1.53) and 1.06 (0.47-2.40) respectively. Manual screening performed better on the level of inadequate slides reported .67 (0.54-0.83). Productivity and sensitivity and specificity were non-quantitatively assessed. There were noted potential gains in terms of productivity for the Imager and a mixed message in terms of sensitivity and specificity when automation is introduced.

Conclusion: The evidence from this meta analysis and systematic review shows that introducing Imager in a laboratory setting has obvious benefits. The Imager's performance was superior to manual screening in four out of five cases.

P-78 POSITIVE PREDICTIVE VALUE OF LIQUID-BASED CYTOLOGY AS COMPARED TO CONVENTIONAL CYTOLOGY IN CERVICAL SMEARS REPORTED AS POTENTIALLY MALIGNANT

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Objective: To compare the PPV for invasive cervical cancer of LBC with CC for cervical smears reported as Severe Dyskaryosis (suspicious of Invasive Carcinoma).

To identify cytological or pathological factors that may influence a false positive finding suspicious of Invasive Carcinoma.

Materials and Methods: LBC replaced CC in the University Hospital of North Durham in April 2006. All cervical smears reported as Severe Dyskaryosis (suspicious of Invasive Carcinoma) between January 2001 to December 2009 were identified. Those identified by LBC after April 2006 were compared to those identified by CC before April 2006. A independent review of all smears and histology was undertaken by an advanced cytology practitioner to identify factors leading to false positive result. The PPV of these smears for confirmed invasive cervical cancer was then calculated.

Results: 126 smears (43 by CC and 83 by LBC) were identified during the study period. The frequency of smear suspicious of invasive cancer was 0.034% (CC) and 0.064% (LBC).

The PPV of malignant cytology for invasive carcinoma by CC and by LBC was 38.5% and 32% respectively.

Glandular involvement with central necrosis was the predominant feature leading to a false positive diagnosis in both CC and LBC. Other factors being extensive keratinisation of the high grade dysplasia, inflammatory changes due to chronic cervicitis, tissue features like thin epithelium, epithelial stripping with loss of orientation.

Conclusion: Potentially malignant cervical cytology has a low PPV in the diagnosis of invasive cancer. LBC did not improve the PPV as compared to CC in our study.

P-79 RAMAN AND FTIR SPECTROSCOPY FOR CERVICAL CANCER SCREENING AND HPV TESTING

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Raman and FTIR spectroscopy have recently been shown to accurately discriminate normal and abnormal cervical cytology samples based on the biochemical fingerprint of the cells. The aim of this study was to investigate the potential of Raman and FTIR spectroscopy to detect biochemical changes

associated with HPV infection. Cervical cell lines, C33A (HPV negative), HeLa (HPV-18 positive, 20-50 copies per cell), SiHa (HPV-16 positive, 1-2 copies per cell) and CaSki (HPV-16 positive, 60-600 copies per cell) were cultured on glass slides. After Raman and FTIR measurements, the spectra were analysed using multivariate statistical techniques, Principal Component Analysis (PCA) and Partial Least Squares (PLS) analysis. Each cervical cell line showed distinct spectral fingerprints corresponding to protein, nucleic acid and lipid levels. Principal Component Analysis (PCA) clearly differentiated the groups of spectra representing each cell line. Partial Least Squares (PLS) analysis was employed to construct a model which could predict the p16INK4A expression level based on the spectral fingerprint of each cell line. The results show clearly that as well as discriminating HPV positive and negative cells based on their biochemical fingerprint, cells with different HPV type and copy number could be clearly differentiated. In addition, the p16INK4A expression level could be predicted based on a spectral fingerprint of a cell. These results suggest that Raman and FTIR spectroscopy could potentially be used not only to detect abnormal cells in cervical cytology samples but also to detect the presence of HPV infection.

P-80 CERVICAL SCHISTOSOMIASIS

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Introduction: Schistosomiasis affects the reproductive system of women causing significant gynaecological morbidity. Schistosomiasis can affect the cervix, ovaries, vulva, vagina and fallopian tubes

Case Presentation: A 33year-old Zimbabwean woman, settled in UK for the last ten years. She is a mother of two children. She is known to be HIV positive and has been on anti-retro-viral treatment. Her HIV disease remains well controlled. She gives history of regular periods and was sterilised in 2005.

This lady presented to the colposcopy clinic with cervical smear reported as mild dyskaryosis. The colposcopic examination and cervical biopsy confirmed CIN 1 disease. Therefore, she was given an appointment in 6months time for further assessment.

Her repeated cervical smear showed moderate dyskaryosis and colposcopy reported a small deeply stained aceto-white area (CIN 2) in the cervical canal. Thus loop excision of the transformation zone was performed. The specimen results showed no evidence of CIN disease, but there were Schistosoma species ova seen in the stroma of the cervix consistent with Schistosoma haematobium infection.

Discussion: This case is presented to stress the importance of high index of suspicion for cervical schistosomiasis in women with persistent

abnormal cervical cytology especially among travellers and residents in endemic areas. The cervix is the most commonly affected site. Clinical symptoms are often non-specific which can lead to misdiagnosis and therefore ineffective therapy. Management in our case included LLETZ and medical treatment, resulting in a full clinical and histological recovery.

P-81 IDENTIFICATION OF WOMEN FOR REFERRAL TO COLPOSCOPY BY NEURAL NETWORKS: A PRELIMINARY STUDY BASED ON LBC AND MOLECULAR BIOMARKERS

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Objective: To assess the role of the Learning Vector Quantizer Neural Networks (LVQ NN) classifier on various diagnostic variables and its contribution in an algorithm for the easier classification of individual cases.

Methodology: A prospective multicentric diagnostic study conducted at a University Hospital environment in the period of 2007 till 2010. The eligible population of women had cytological evaluation and histological diagnosis of CIN after punch biopsies or LLETZ. A liquid based cytology sample was obtained and was tested for various HPV-related biomarkers. The data was classified in two groups according to histology: CIN2+ and ≤CIN 1. Half of the cases (50%) were randomly selected for the LVQ NN in order to identify the important variables.

Results: Out of the 1258 cases included in this study, cytology identified correctly 72.90% of the CIN2+ and 97.37% of the ≤CIN 1 (accuracy 94.36%). The application of the LVQ classifier allowed correct classification for 84.62% of the cases with CIN2+ and 97.64% of the cases with ≤CIN1 (accuracy 96.03%). The results on the training set were 85.71%, 98.37% and 96.82% respectively. The use of the LVQ classifier incorporating both the cytological diagnosis and biomarkers significantly improved correct classification for low or high-grade lesion, in comparison to cytology alone (Cytological ROC: AUC=0.866 with S.E.=0.016, LVQ ROC: AUC=0.916 with S.E.=0.017, comparison with z-test: z = -2.142 with p<0.5).

Conclusion: The LVQ NN outperforms cytological diagnosis alone. The addition of biomarkers to the routine cytology improves significantly the correct classification.

P-82 COLD COAGULATION AND UNDER 25'S: ARE WE MEETING THE STANDARDS FOR ABLATIVE THERAPY FOR CIN?

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Background: Although in England cervical screening starts at the age of 25, women under 25 are still referred to Colposcopy clinics with abnormal cytology, symptomatic ectropions and CIN on biopsy. Most of CIN 3 cases will regress or will still be of a treatable pre cancerous stage at 25. Once seen in clinic, there is this dilemma of how to manage these women due to LLETZ associated increased risk of preterm delivery, default to follow up, disease progression and patient anxiety. Following a Cochrane Review we began to use Cold Coagulation to treat CIN in selected cases.

Methods: Retrospective audit of manually collected data and treatment outcomes over 2 year period to ensure adequate management in line with NHSCSP Publication 20 standards.

Results: Of the 35 that underwent cold coagulation therapy (100 C, 120 sec) for CIN2 or above, 21 women were 24 years and under. The Transformation Zone was appropriately recorded in all cases and there was no evidence of glandular abnormality or invasive disease on colposcopy or biopsy. Three had major discrepancy between cytology and histology and these were upheld following Multidisciplinary review.

Conclusion: Women under 25 are appropriately managed in the clinic according to national standards. However, there is a need to look at ways to reduce the number of these referrals from the community by Primary Care education. These cases need to be monitored and if successful, this modality should be preferred for treatment of young and nulliparous women.

P-83 RISK OF PRETERM DELIVERY AFTER TREATMENT FOR CERVICAL INTRAEPITHELIAL NEOPLASIA IN ENGLAND

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Objectives: To explore the association between preterm delivery and treatment at colposcopy in England.

Methods: Women were identified from clinical records in 12 English hospitals as having had cervical histology between 1987 and 2009. These women were linked by HES (Hospital Episode Statistics) to hospital obstetric records between 1998 and 2009 for the whole of England to identify live births whether prior to or

subsequent to the histological sample. NHS maternity statistics (published by HES) from 2000/01 to 2009/10 were pooled to obtain an average population preterm delivery rate for the period.

Results: Of 18,450 singleton births with known gestational age 8.8% (1620) were preterm (20-36 weeks). The average preterm rate between 2000 and 2009 in England was 6.7%, yielding an excess risk in our study population of 2.1% (95% CI 1.7%-2.5%). Comparisons within our study were restricted to first live singleton births, we were left with 12,940 births of which 1102 (8.5%) were preterm. The preterm risk ratio comparing births after colposcopy (n=9,394) to those prior to colposcopy (n=3,546) was 1.23 (95% CI 1.07-1.41). Among 7,888 births after colposcopy with known sample type (punch versus cone/loop excision), the preterm risk was slightly higher in those with an excision: risk ratio 1.18 (95% CI 0.99-1.40).

Conclusion: This study suggests that the risk associated with treatment of CIN in many studies does not apply to the treatment as carried out by the NHS Cervical Screening Programme in England. A future study will obtain treatment details in a nested case-control study.

P-84 DOES INCOMPLETE ENDOCERVICAL MARGIN MEAN INCOMPLETE TREATMENT?

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Background: A large loop excision of transformation zone (LLETZ) is the gold standard excisional treatment for cervical intraepithelial neoplasia (CIN). CIN extending to the resection margin, predominantly endocervical, has been shown to be a risk factor for recurrence.

Objective: To study the recurrence rate following treatment for high-grade CIN, when residual CIN was present at the endocervical margin of the index specimen.

Methods: We performed a cohort study of women who had excisional treatment for high-grade CIN between 1st January 2001 and 31st December 2006. Subjects with LLETZ specimens showing CIN at the endocervical margin were included. The primary outcome measure was the grade of smear at follow-up post-treatment. A sub-group analysis was done stratified by the index specimen histological grade.

Results: Seventy nine women were included in this study. Mean age of the study population was 31 years. The LLETZ biopsy in 26 women (32%) showed CIN 2 whilst in 53 women (67%) CIN 3. At the 6 month follow-up, 13 women (50%) from the CIN 2 group and 26 women (49%) from the CIN3 group had a negative smear. At 12 month follow-up, 20 women (76%) from CIN 2 group and 41 women (77%) from the CIN 3 group had a negative smear. All women had a negative smear

at 3 year follow-up. None required a repeat treatment when followed up to five years.

Conclusion: In our cohort, most women had no residual CIN at 6 months post-treatment. Follow-up with cytology and/or colposcopy is adequate in this group.

P-85 VALIDATION OF COBAS® 4800 HPV DETECTION IN CERVICAL, VAGINAL AND URINE SAMPLES FROM WOMEN WITH ABNORMAL CERVICAL CYTOLOGY IN DUMFRIES AND GALLOWAY, SCOTLAND

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One hundred patients referred to Colposcopy clinic with abnormal smears were consented to urine, self-collected vaginal and clinician-collected cervical sample prior to colposcopy examination. Cervical samples were collected using Rovers® Cervex-Brush, The Netherlands. All samples were suspended in ThinPrep, PreservCyt® Solution, Hologic, UK and processed by Cobas® 4800 HPV, Roche Molecular Diagnostics, USA.

We will present Prevalence of HPV 16, 18 and 12 other high-risk HPVs in patients with low- and high-grade cervical intraepithelial lesions in three samples. This will provide information on the sensitivity of clinically evaluated Cobas® 4800 HPV test in each sample.

This is a first report of HPV detection by Cobas® 4800 in self-collected vaginal and urine samples. Further work should be done in order to optimise use of urine samples in fully automated HPV testing and clinical validation of urine HPV testing in cervical screening scenarios.

P-88 PROGESTERONE CONTRACEPTION IS ASSOCIATED WITH PERSISTENT UNSATISFACTORY SMEARS. MYTH OR FACT?

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Liquid based Cytology (LBC) has significantly reduced the unsatisfactory smear rate from 12% to 1.6%. This still increases anxiety in women and needs intervention if persistent.

Aim: To prove the hypothesis that progesterone use contributes to an increase in unsatisfactory smears.

Methods: Two year retrospective study of all cases referred with persistent unsatisfactory smears to the Colposcopy department at Nottingham University

Hospitals NHS Trust (Jan 09 - Dec 10). Total of 100 cases were referred. 85 case notes were obtainable. 4 patients did not attend the appointment. A total of 81 cases were included in the study.

Various parameters including age, parity, method of contraception, menopausal status, previous treatment, previous abnormal smear, outcome from Colposcopy were looked at.

Results: 23(28.9%) women used progesterone only contraception. 11(13.5%) women used combined oral contraceptive pills, 29(35.80%) women used no contraception or were sterilized, 15(18.51%) women used intrauterine contraceptive device or barrier method as contraception and 3(3.70%) were post menopausal. 40(49.38%) women were over the age of 40 years. 28(34.56%) women were nulliparous. Majority 67.8% were discharged with negative smear. However, 11% had pathology identified. (8 had CIN and one was diagnosed with adenocarcinoma)

Conclusion: Nearly one third of women referred with persistent unsatisfactory smears were using progesterone as contraception. **This favors association of Progesterone contraception with unsatisfactory smears.** National uptake of progesterone as contraception is around 20%(NICE 2010) It was also noted that unsatisfactory smears are more common in nulliparous women and women aged over 40.

P-90 THE PREVALENCE OF CIN IN WOMEN OVER THE AGE OF FIFTY: A NINE YEAR REVIEW

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Background: An estimated 1.6% of postmenopausal women have abnormal cervical smears. Colposcopy in women over the age of fifty presents a diagnostic challenge due to poor correlation between cervical cytology, colposcopy and histology.

Objective: To determine the prevalence of cervical intraepithelial neoplasia (CIN) in women over the age of fifty and study the correlation between cytology and colposcopy.

Method: All women over the age of fifty years attending our colposcopy clinic between 1st January 2002 and 31st December 2011 were identified using the Cyres database. The primary outcome measure was histology of cervical biopsy.

Results: During the study period 3700 women were referred. Histology results for 1216 (33%) women were available. 316/1216 (26%) women had CIN1, 236/1216 (19%) CIN2-3 and 20/1216 (2%) cancer.

Of the women diagnosed with cancer two were referred with borderline or negative smears. The remaining 18 women were referred with severe or suspected glandular abnormalities on cytology, or as an urgent clinical referral.

Of the 236 women with CIN2-3, 107/236 (45%) women were referred with negative, borderline or mild dyskaryosis on cytology. 59/107 (55%) were thought to be normal or low grade at colposcopy with 54 (92%) having a satisfactory colposcopy.

Of the women with CIN1 31/316 (10%) were referred with moderate or severe smears. Of these 13/31 (42%) were thought to be high grade at colposcopy with 10 (77%) having a satisfactory colposcopy.

Discussion: In our cohort of women over fifty years, there is poor correlation between referral smear and histology.

P-91 DEVELOPMENT AND PILOT STUDY OF A TOOL THAT WILL ASSESS ADOLESCENT FEMALE KNOWLEDGE, BELIEFS AND BEHAVIOURS SURROUNDING THE HPV VACCINE

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Background: Soon after the introduction of the HPV vaccination programme adolescent knowledge and understanding on HPV was shown to be poor. Now in its fourth year of running, the first vaccinated girls are eligible for cervical screening in Scotland. Poor understanding can lead to reduced attendance at cervical screening.

Objectives: The purpose of the study is to gain insight into the knowledge, beliefs and intended behaviours of adolescent girls regarding HPV immunisation and cervical screening and to compare these findings by socioeconomic status to identify if the knowledge and behavioural differences seen in women of screening age are present in adolescence.

Methods: Questionnaire run in 3 volunteer schools each with a different demographic intake in Aberdeen. 425 girls (ages 13-15) are expected to participate. Comparisons will be made using indicators of socioeconomic status in each school.

Results: To date 31 volunteers aged 13-15 years have responded to a pre-pilot questionnaire. Despite 81% having received the HPV vaccine general HPV knowledge was poor. Common misunderstandings were that HPV infection is treatable (90%), boys do not get HPV (83%) and the HPV vaccine offers protection against other STIs (32%). Almost 80% of pupils intend to attend their first routine screening appointment and 58% believed they would be putting their health at risk if they did not attend. Pupils found the pre-pilot straight forward.

Conclusion: The intended behaviour of pupils is promising but understanding is poor. This study is ongoing and detailed data from the tested questionnaire will be presented in April.

P-92 USE OF SELF-SAMPLED DRY VAGINAL TAMPON TO DETECT HIGH GRADE CERVICAL PRE-CANCER

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Objective: To evaluate the effectiveness of self sampled HPV DNA collected by an ordinary tampon in detecting High Grade CIN.

Method: A double blinded prospective study.

Study period: August 2010 to April 2011

Inclusion Criteria: Women with all grades of abnormal smears or with suspicion of cervical disease referred for colposcopy.

Women were asked to insert an ordinary tampon by themselves which was removed after a minute prior to colposcopic examination. Further samples were collected from the cervix with the Digene kit brush. Colposcopy directed biopsy was taken where indicated.

HPV DNA was detected from the tampon by PCR test. Hybrid capture was used to detect HPV from the brush. Genotyping was on positive cases. 11 women refused to use the tampon.

Result: 500 samples were analysed for HPV DNA . 163/500 (32.6%) were tested positive by (Hybride Capture) HC2 and 150/500 (30.0%) by the Tampon test (PCR). HC2 missed 3 cases while tampon test missed 13 cases. All samples were subtyped.

	Sensitivity	Specificity	PPV	NPV
Vaginal tampon (PCR)	81.43	50.89	16	96
Cervical Brush(HC 2)	95.8	31.75	14	99
Colposcopy	86.11	78.82	31	98

Conclusion: The HPV test using a tampon is as quick, user friendly and effective as HC2 in detecting HPV and HG CIN. This 'DIY test' can be useful among the non responding, under- screened population.

P-93 MANAGEMENT OF ABNORMAL ENDOCERVICAL SMEARS

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This was a retrospective study done over 1 yr (2009-2010) covering two district general hospitals in the UK of all smears reported as abnormal endocervicals (AEC) and borderline endocervicals, correlating colposcopic, histological and clinical outcome following clinico-pathological meeting and subsequent management. The study attempts to answer whether or not cone biopsy is mandatory for all cases reported as AECs ?Glandular neoplasia.

Total number of cases studied was 23. Case details were obtained from histology department database and

clinical notes procured from the colposcopy clinic which were analysed and the study was done henceforth. None of the cases reported as borderline showed malignancy or pre-malignancy, with majority at present being back to normal recall following conservative management. 10/11 patients with AECs showed colposcopic abnormalities (91%). 8/11 patients with AEC had high grade changes in colposcopy (72%). In women reported as AECs, 9/12 (75%) had definite pathology requiring treatment. Those who had LLETZ, 4/6 (67%) showed CGIN, and 3/5 (60%) showed complete excision. One case was unremarkable. Those with AECs, who had cone biopsy as a primary procedure, only 1/5 (20%) showed CGIN, and 2/5 (40%) were NAD. The remaining 2 (40%) cases showed CIN+/- TEM. Malignancy detected in AECs smear series - 1/14 (7%), which was in the LLETZ group. All three smears showing abnormal endometrial cells had endometrial cancer diagnosed.

P-94 A PROSPECTIVE PILOT STUDY OF EFFECTIVENESS OF IMIQUIMOD AS TREATMENT FOR VAGINAL INTRAEPITHELIAL NEOPLASIA (VAIN)

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Background: Traditionally, Vaginal intraepithelial neoplasia (VAIN) has been treated by surgical excision. Local imiquimod cream has been used to great benefit in treating basal cell carcinoma, squamous cell carcinoma in situ and vulval warts. Literature on treatment of VAIN with imiquimod is limited. Haidopoulos et al reported a series of 7 patients with high grade (2/3) VAIN treated with local imiquimod, where regression was observed in 86% of cases.

Objective: We wish to test the hypothesis that application of vaginal imiquimod cream causes regression of VAIN and also causes HPV clearance..

Methodology: This is a prospective study which includes women with proven VAIN on histology. A swab for HPV is taken at the initial visit. Patients counselled and consented for the treatment. 5% Imiquimod will be prescribed to the patient, one sachet to be inserted in the vagina once weekly for 4 consecutive weeks. The patient reviewed in the colposcopy clinic in 12 weeks. A thorough colposcopic examination, including vaginal examination, performed. Biopsy is taken from the vagina to assess for regression/progression of VAIN, including photographic evidence. A vaginal swab is taken to assess high risk HPV status.

Results: We have successfully recruited seven women in this study. Two women have completed the follow-up ,so far, according to the protocol and have shown to have regression of the VAIN.

Conclusion: Our initial impression from this pilot study is that vaginal imiquimod cream may help in regression of VAIN. We hope to invite other units to participate in a multicentre study.

P-95 MANAGEMENT OF BORDERLINE SMEAR, CANNOT EXCLUDE HIGH GRADE ABNORMALITY (BNCHG)

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Aims/Objectives: (1) Assess the positive predictive value for a high grade lesion in follow up cervical biopsies of women who had a smear BNCHG

(2) Identify time between referral and first appointment

Background: Early cytologic detection & treatment of high grade lesions is critical in the prevention of cervical cancer

BNCHG was introduced by NHSCSP/ BSCCP as focus shifted to facilitating the detection and treatment of high-grade lesions

- Cervical cytology shows a low grade squamous intraepithelial lesion, with occasional cells that are suspicious, but not diagnostic of high grade

Method: A list of patients was generated from the cytology data base at the Belfast Trust

- N = 130

Results, Summary/Conclusions: 81% of patients were <40 years old

38% of patients were nulliparous

Biopsy accounted for 70% of the investigations at the first visit. Followed by LLETZ in 18% and repeat smear in 12%

68% of patients underwent a LLETZ procedure while 23% received no treatment

Aim (1): Assess the PPV for a high grade lesion in follow up cervical biopsies of women who had a smear BNCHG

- PPV = 65%

Aim (2) Identify time between referral and first appointment

- 69% Seen at > 8weeks, Longest,15weeks
- 27% Seen at colposcopy within 4-8weeks
- 4% meet criteria of within 4weeks

Recommendation:

- BNCHG - should be managed as High grade lesion
- Patients should be referred to Colposcopy after one smear
- Patients should be seen urgently (within 4 weeks)

P-96 INTER-RELATIONSHIPS BETWEEN PSYCHOLOGICAL AND PHYSICAL AFTER-EFFECTS REPORTED BY WOMEN UNDERGOING COLPOSCOPY AND RELATED PROCEDURES

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Objectives: Although it is well known that undergoing colposcopy and related interventions can be a distressing experience for women, data remains limited on psychological and physical after-effects. We investigated prevalence and - for the first time - inter-relationships between psychological and physical after-effects reported by women 4-months following colposcopy and related procedures.

Methods: Women who had completed their initial colposcopic management at 2 hospitals were mailed questionnaires at 4-months post-colposcopy. Anxiety, depression and specific worries were assessed using the Hospital Anxiety and Depression Scale and Process Outcome Specific Measure. Details of any pain/discomfort, bleeding and discharge experienced following colposcopy and related procedures were collected.

Results: 425 of 584 women (73%) completed questionnaires. The prevalence of clinically significant anxiety and depression was 21% and 8%. 69% were worried about their next smear being abnormal, 36% had fears about cervical cancer and 56% had concerns about future fertility. In terms of physical after-effects; 56% reported pain, 65% bleeding, and 38% discharge following colposcopy and related procedures. Women with significant anxiety were more likely to report pain or have bleeding for >7 days. Women with significant depression were more likely to report having experienced moderate/severe pain or bleeding. Worries about having sex were positively associated with having had discharge.

Conclusions: High proportions of women report anxiety and worries 4-months following colposcopy. High proportions also report physical after-effects and these preliminary analyses suggest that the two are inter-related. Ensuring women are fully informed about the likelihood of physical after-effects may help to minimise anxiety.

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“WELL I DON'T CARE WHAT IT'S CALLED, I DON'T CARE WHETHER IT'S HPV OR ABC, I JUST WANT TO KNOW IF I HAVE CANCER.” WOMEN'S EMOTIONAL REACTIONS AND INFORMATION NEEDS AFTER UNDERGOING AN HPV TEST

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Objectives: HPV testing is currently being introduced into cervical screening programmes. It is important to understand the emotional impact on women and their information needs. However, most previous research has included women either asked about hypothetically undergoing a HPV test, or tested within research studies. We used qualitative methods to explore emotional reactions and factors influencing information needs among women undergoing HPV tests in routine clinical practice.

Methods: Semi-structured in-depth interviews were conducted with 27 women who had HPV tests performed in a colposcopy clinic for triage following low-grade cytology tests or post-treatment surveillance. Interviews were transcribed verbatim, coded and analysed using framework analysis.

Results: Irrespective of HPV test result, for most women the emotional impact was not strong. Women's (lack of) knowledge about HPV influenced their reactions. Their overriding concerns were about their abnormal cytology/CIN; this also influenced their information needs. Among the few women who did experience adverse emotional outcomes, the most common responses were shame, regret, embarrassment, anxiety, and anger. Amount of HPV-related information previously received sometimes served to increase women's desire for further information.

Conclusions: The emotional impact of HPV testing on women may not be as great as some previous studies suggest. Women's primary concerns were related to their abnormal cytology /CIN, rather than HPV infection. Screening programmes need to strike a balance between providing information about abnormal cytology and HPV, while; ensuring individual women receive sufficient information for their (varying) needs at appropriate stages during follow-up.

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CERVICAL SCREENING IN NEPAL

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Cervical cancer is the most frequent cancer among women in Nepal. Current estimates indicate that every year there are 3504 women diagnosed with two-thirds

dying from the disease. The Nepal Network for Cancer Treatment and Research (NNCTR), a Nepali NGO, has been attempting to tackle the high incidence by the introduction of screening camps with the aim of reaching more women than by opportunistic screening alone.

The PHASE colposcopy group has been working with the NNCTR and the Nepali gynaecology community in order to improve the standard of colposcopy and treatment of pre-invasive cervical disease. To date our collaboration has achieved; twice weekly colposcopy clinics at the Maternity Hospital, Kathmandu, offering diagnosis and treatment to those who have been referred from screening programmes; three 3-day colposcopy workshops with lectures and hands-on training for Nepalese gynaecologists; exchange visits to the UK of six senior Nepalese doctors to train in colposcopy; an overall increase in the number of colposcopists working in the country.

The advocacy for a cervical screening programme that has arisen from this collaboration has helped to influence the Nepali Ministry of Health. It is now committed to a National Screening and treatment programme with a target of screening 50% of women by 2015 through the use of screening camps.

We present the benefits and difficulties in setting up such a colposcopy programme when working with a variety of interdependent stakeholders. A successful and sustainable collaboration is likely if teamwork and engagement at all levels in the process of cervical screening.

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CERVICAL CANCER IN YOUNG WOMEN - BRADFORD ROYAL INFIRMARY

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Aim: To find the incidence of cervical cancer in young women in Bradford between 19 and 30 yrs old

Method: All women diagnosed with cervical cancer between 2007 and 2011 were searched from the database

Data collected from the database and notes

Data collected age of the patients. Total number of patients 19. Total number of cases seen during the same period was 3,643

The referral smear were as follows 14 severe, three glandular smear, and 2 invasive.

Colposcopic impression was one low grade, 2 showed frank invasion and one had a large tumor visible. sixteen other had high grade changes.

Histology: Seven patients had biopsy and two patients were pregnant

Stage of tumor: seven patients had stage 1a1 and stage 1a2 and six had stage 1b1 and one was stage 3. one had small focus on biopsy and no carcinoma on loop

Conclusion: Young patients with cervical cancer are a special group of patients. We currently don't screen women under 25 for cervical abnormalities. We found one patient at the age of 21, with no cervical screening develop advanced cervical cancer. Majority of our patients were stage 1 and had good outcome

P-100 SETTING UP A CERVICAL SCREENING AND COLPOSCOPY SERVICE AT AYDER UNIVERSITY HOSPITAL, MAKELLE, ETHIOPIA

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Background: Cervical cancer is the second most common female cancer in Ethiopia. An estimated 4648 women are diagnosed and 3235 women die of the disease annually. The projected number of new cases in 2025 is 7700.

Currently only 0.6% of all women in Ethiopia are screened. HPV vaccination is not available.

Ayder Hospital is a tertiary referral centre for the Tigray Region (population of 4.3 million). There currently is no formal cervical screening programme or colposcopy service.

Aims: Our aim was to establish the feasibility of setting up a cervical screening programme and colposcopy service within the hospital setting, and establish training links with the department.

Methods: Overall, we identified little investment in infrastructure, training and laboratory capacity. Currently there is one histopathologist in the whole of Tigray. There is a functioning colposcope and diathermy machine, but no one is currently trained to use them.

Results: The service in its current state can not support a national screening programme.

Conclusion: There is clear scope to develop a facility for colposcopy with a see diagnose, and treat approach. We plan to explore the feasibility of using the WHO recommended VIA (visual inspection with acetic acid) method alongside the Zilico Epitheliometer and careHPV as an adjunct to colposcopy in the diagnosis of high grade CIN.

P-101 AN AUDIT ON THE MANAGEMENT OF WOMEN REFERRED WITH MILD DYSKARYOTIC CYTOLOGY TO NORTHAMPTON GENERAL HOSPITAL COLPOSCOPY CLINIC

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Background: The NHSCSP Colposcopy and Programme Management Guidelines (NHSCSP 2004, 2010) recommends that women be referred for Colposcopy examination after one mild dyskaryotic cytology result, and must be referred after two mild dyskaryotic results. In 2006, Northampton General Hospital Colposcopy clinic amended its referral policy for women with first mild dyskaryotic cytology.

Between 30/10/2008 and 29/10 2010 Northampton Colposcopy clinic received 1,176 new referrals. We audited our practice to assess compliance and see if change local practice was required.

Aim:

- Assess adherence to departmental guidelines
- Ensure no invasive cervical cancers were missed
- Determine the number of women who have been re-referred to colposcopy and their subsequent grade of referral cytology

Method: Between 3/11/2008 and 28/4/2010, 781 women were referred with mild dyskaryosis. We randomly selected 250 women from this cohort and collected retrospective data using our Colposcopy database. Data was only available for 243 women.

Results: All women with mild dyskaryosis cytology were referred by direct referral. Despite our vigilant process to invite these women, 86.5% attended within 8 weeks of referral, with a default rate of 10%. All women, who attended, underwent Colposcopy +/- biopsies.

No cancers were missed in this group.

Four women who were discharged, were re-referred back with abnormal cytology - only 1 woman had a high grade cytology.

Discussion: The local management pathway for mild dyskaryosis is robust and did not miss any cervical cancer.

We encountered poor documentation in the database, which was replaced in Oct 2010. Repeat audit is recommended within 24 months.

P-102 REVIEW OF MANAGEMENT IN WOMEN WITH ABNORMAL SMEARS REFERRED TO COLPOSCOPY LESS THAN 25 YEARS

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Introduction: The BSCCP recommends that women under the age of 25 should be sent their first invitation at 24.5 years. Almost one in six cervical cytology samples taken in this age group are abnormal. Much of this prevalent low grade disease would resolve spontaneously if screening were started at a later age. Our study was to detect the occurrence of low and high grade disease in this group of women and to assess the way they were managed.

Methodology: It is a retrospective Audit.

Results: Only 2/50 had documented indication for smear like postcoital bleeding and ectropion. 50% had moderate dyskaryosis and 42% had severe dyskaryosis followed by BNC 4% and Mild dyskaryosis(4%) in the referral smear. Of the 46 who had high grade disease on smear 41 were felt to be high grade on initial assessment, 1 had colposcopic assessment as normal cervix, 4 had assessment low grade but biopsy upgrading them into high grade lesions. Of this high grade group 21/41 had LLETZ in their 1st visit, 18/41 had biopsy and 2/41 had colposcopic assessment only. 5/46 of the high grade on biopsy was managed conservatively. 32% were smokers.

Conclusion: Our study concluded that there were more occurrence of high grade disease in this cohort of patients. Although conservative management is an available option it unclear as how frequent and they need to be monitored. There need to be more stringent guidelines in the management of these women if we detect high grade abnormality.

P-103 LANARKSHIRE WIDE COLPOSCOPY PATIENT SATISFACTION SURVEY

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Background: NHS Lanarkshire caters colposcopy service to large number of women every year across three hospitals. In order to deliver best possible care, we are monitoring the service delivered by the department using patient satisfaction questionnaire.

Aim: To evaluate the level of satisfaction in women attending the colposcopy clinics.

Method: This is a prospective survey. Questionnaires are given to the new patients after each clinic visit across 3 hospitals. We are planning to distribute 100 questionnaires during the study period from Jan 2012-March 2012. Patient satisfaction will be graded for different aspects of colposcopy visit.

Results: The results will be presented at the time of Scottish Colposcopy meeting.

Conclusion: Conclusion will be delivered at the time of colposcopy meeting.

P-104 MOLECULAR MAPPING OF CIN/ CGIN; HELPING TO EXPLAIN SOME CLINICAL PROBLEMS

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Molecular mapping and genotyping are now being used to answer some fundamental clinical problems related to the natural history and pathology of CIN and CGIN. Such techniques as the use of surrogate markers to assess cellular proliferation, localization of viral gene expression, and laser capture microscopy are employed. Four clinical problems have been studied. Firstly explaining the late development of adenocarcinoma may be associated with the finding of HPV virus deep within endocervical tissue. Secondly the question of viral latency as an explanation for the finding of increased prevalence of HPV in women in the fourth and fifth decades with evidence from an animal model suggesting reactivation of a latent viral infection: likely acquired many years before and dormant. As ageing progresses it seems as though a process of immune senescence occurs which can be imitated in an animal model. The third clinical problem relates to the actual distribution of the various HPV genotypes within the epithelium. The usage of laser capture microscopy allows precise mapping of the HPV genotype so that an accurate measure can be made of the location of HPV genotypes within the various regions and in actual pathological regions within the cervical epithelium. The fourth usage is in relation to using viral gene expression to obtain an objective diagnosis of the CIN. There exist a significant inter observer error in the diagnosis of CIN. A study is in progress determining the CIN diagnosis in relation to individual gene expressions with subsequent correlation with standard pathology diagnosis

P-105 ROLE OF TAMPON VERSUS SILVER NITRATE CAUTERISATION AS HAEMOSTATIC AGENTS AFTER CERVICAL PUNCH BIOPSY

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Women having biopsies taken at time of colposcopy from abnormal appearing areas have few options for haemostasis. There seems no consensus, as some clinicians use tampons, whereas others use Silver Nitrate. Silver Nitrate causes pain at the time of application and causes “dirty” discharge whereas tampon insertion is easy, cheaper and haemostasis is achieved by pressure rather than chemical reaction. There are no available studies comparing those two methods.

This is a prospective randomised trial comparing these two methods. The aim of the study is to evaluate the pain, the blood loss, the need of further appointments due to side effects of the biopsy such as bleeding, infection, pain. Secondary outcomes include evaluating the costs, infection rates in relation to blood loss and to evaluate blood loss in relation to size of the biopsy.

The interim analysis of primary outcomes in 47 patients (n=26 in tampon arm and n=21 in silver nitrate arm) showed higher incidence of mild to moderate bleeding in tampon arm (76.9%) compared with silver nitrate (42.8%). Clotting and flooding was also slightly higher in former although none of the patients in any arm needed emergency GP review or hospital admission.

On the other hand abdominal pain was higher in silver nitrate arm (57.1%) compared with tampon arm (34.6%) and so was non-abdominal pain.

None of the patients had any infection needing antibiotics.

In summary the data suggests that both methods are suitable alternatives as haemostatic agents following a punch biopsy of cervix.

P-106 LONG-TERM DATA ON THE TREND OF HPV-RELATED BIOMARKERS POST-TREATMENT FOR CIN

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Aim: 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 & 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 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 268 women included, histology showed CIN2+ in 148 cases. Eighteen individuals underwent second treatment. HPV-DNA appeared to be positive in 32.9% at the second follow-up visit and in 36.4% of the cases 2 years post-operatively. The NASBA test was positive prior to the treatment in 45% of the cases, and 5% at the 4th follow up visit. Flow cytometric evaluation of mRNA E6&E7 appeared to be positive in 33.3% at the 24months visit. The best sensitivity for the prediction of treatment failures was performed by HPV-DNA(65.8%) with PPV=96.2%. The NASBA test appeared to have the best specificity(93.8%) in identifying women with < CIN2+lesions.

Conclusions: 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-107 THE OUTCOME FOR WOMEN WITH MICROINVASIVE CERVICAL CANCER WITH STROMAL INVASION 1 MM OR LESS: SHOULD WE ALWAYS RE-EXCISE?

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Objective: To assess management and outcome for women with microinvasive cervical cancer with stromal invasion 1 mm or less, examining the impact of re-excision.

Design: Retrospective cohort study with interval analysis performed between December 2000 and December 2010

Setting: Sheffield Gynaecological Cancer Centre and Jessop Wing Colposcopy Unit, Sheffield, UK.

Population: Women diagnosed with microinvasive cervical cancer with stromal invasion 1 mm or less during the allocated study period

Methods: Retrospective cohort study.

Main Outcome Measures: Risk of recurrence and mortality from disease, incidence of residual disease in repeat excision specimens.

Results: 140 women were identified as having microinvasive cervical cancer with stromal invasion 1 mm or less. Sixty-three (45%) had a completely excised lesion; seventy-seven (55%) had an incompletely excised lesion at first treatment. Fifty-five women underwent repeat excision. No residual disease was found in the majority (n=40; 73%). No women suffered disease recurrence or died from disease during the allocated study period.

Conclusions: Outcome for women with microinvasive cervical cancer with stromal invasion 1 mm or less is excellent. Repeat excision is associated with very low rates of residual disease. A more conservative approach to follow-up incorporating HPV testing should be explored.

P-108 PSYCHOLOGICAL DISTRESS IN WOMEN UNDERGOING CYTOLOGICAL SURVEILLANCE: A PROSPECTIVE STUDY WITHIN THE UK TOMBOLA TRIAL

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Background: Little is known about distress among women with low-grade cytology who are subsequently managed with cytological surveillance. Using data from the TOMBOLA trial, we investigated the prevalence of distress following the first surveillance cytology test.

Methods: Women aged 20-59 years with a routine screening cytology test showing low-grade abnormalities were recruited to TOMBOLA. Half were randomised to follow-up by repeat surveillance cytology in primary care. Women completed socio-demographic and psychosocial questionnaires at recruitment. Six-weeks after their first surveillance cytology test, women completed the Impact of Event Scale (IES). Chi-squared tests were used to compare proportions of women with significant distress (IES \geq 9) in different groups.

Results: Six weeks after the cytology test, 39% (345/877) of women scored in the range for significant distress. Prevalence was higher among those women whose surveillance test result showed mild dyskaryosis or worse (49%) compared to those whose test result was negative (36%). Prevalence of distress was also higher among women who reported experiencing pain or bleeding following their cytology test, than those who did not. Women aged 50-59 were less likely to report significant distress than younger women. Fully adjusted analyses will be presented.

Conclusions: These results suggest substantial proportions of women experience psychological distress after a follow-up cytology test, even when the test result is negative. Prevalence of distress is similar to that found among women with low-grade cytology managed by colposcopy and related procedures. Distress is an important cost of cervical screening and interventions to alleviate such adverse effects are required.

P-109 COLPOSCOPY PRACTICE AND MANAGEMENT DILEMMA: FOR WOMEN AT AGE 25 AND UNDER, A TWO YEAR OUTCOME STUDY AT THE ROYAL FREE HOSPITAL, CENTRAL LONDON

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Objective: This audit study analyses the management of abnormal smears in women at age 25 years and under.

Study design: Hospital based retrospective study from January 2010 to December 2011.

Methodology: Colposcopy records stored on Infloflex program were analysed. Management of colposcopy was carried out as per NHSCSP guidelines.

Results: During the above period, 5904 women with diverse ethnic origin attended the colposcopy clinic. We had 4.8% (n=283) women at age 25 and under.

At age 25 on their first smear, we had 33%(n=43) of women with high grade abnormality, 51% (n=22) of them, had treatment with LLETZ or Laser cone. Follow up with colposcopy and smear was the plan in 49%(n=21) of women with CIN2.

Among women, aged 24 and under, 17% (n=26), had high grade abnormality. Treatment was carried out in 50% (n=13) of women, remaining had colposcopy, biopsy and further follow up which were mostly CIN 2.

Lowest age to get treated for high grade abnormality was 20 years.

Conclusion: It has been an unresolved issue, when it comes to treatment of high grade abnormality in the age group of 25 and under, though many feel safe to treat. Clinicians face the dilemma such as, Is it breach of protocol if CIN 2 is untreated in young nullipara? What if we loose these women for follow up where CIN 2 is not treated? Could it lead to ethical and legal implications if untreated CIN 2 gets worse? Further study and comparison of practice with different units is required.

P-110 ROLE OF LLETZ (LARGE LOOP EXCISION OF TRANSFORMATION ZONE) AND CONE EXCISION BIOPSY IN CASES OF CERVICAL CANCER AND CARCINOMA IN SITU AND DIFFICULTY IN STAGING DUE TO FRAGMENTED LLETZ OR CONE BIOPSY

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Objectives: To evaluate the role of LLETZ and cone excision biopsy in cases of cervical cancer and the difficulty in staging due to fragmented LLETZ or cone biopsy.

Methods: A retrospective study conducted in women diagnosed with carcinoma in situ or cancer from January 1996 to December 2011 in a cancer centre.

Results: A total of 177 cases were identified with carcinoma in situ and invasive cancer were identified from the database. After going through the cases data was collected. Colposcopic impression was cancer in 13% cases, high grade lesion in 56%, normal looking in 9%, low grade lesion in 7%, and not documented in rest of the cases. On histology, 75(42%) had squamous or adenocarcinoma including micro-invasive cancer and carcinoma in situ. 102(58%) had high grade CGIN.

Further analysis was undertaken in cancer group. 60% had direct LLETZ excision biopsy. Margins were positive in 74%. 49% of these had cone biopsy, of which 60%

had involved margins. No further treatment was required in 25% of these cases. LLETZ biopsy specimen was fragmented in 20% cases, whereas in cone biopsy 10% of specimens were fragmented. The staging was difficult in these cases giving a possible over or under staging, making treatment planning more difficult however did not seem to make a difference to the outcome.

Conclusion: The treatment rate of carcinoma in situ or micro-invasive cancer with LLETZ and cone was 25%. Fragmentation of excision biopsy specimen does not cause significant difference in staging from imaging.

P-111 SHOULD COLD COAGULATION NOW BE CONSIDERED THE FIRST LINE TREATMENT FOR LOW-GRADE CIN IN YOUNG WOMEN?

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Background: Excisional techniques for dealing with persistent CIN 1 in young women are still commonplace in many colposcopy units. This is despite increasing evidence of associated subsequent preterm labour and mid-trimester miscarriage in some cases. Cold coagulation of cervical CIN does not shorten the cervix, and, therefore, is not associated with such pregnancy morbidity

Objective: To analyse the outcome of women who underwent cold coagulation for biopsy confirmed CIN 1

Method: 2 year retrospective chart review of women with biopsy proven CIN 1 treated by cold coagulation.

Results: Total of 72 patients were identified. The average age at treatment was 35.9 (range 20-60). At the follow up nurse colposcopy smear at 6 months, 52 (72%) had a negative smear, 1 (1.38%) had an unsatisfactory smear, 9 (12.5%) had ASC-US, 8 (11.1%) had mild dyskaryosis, 1 (1.38%) had moderate dyskaryosis.

Conclusion: Cold coagulation is an acceptable and clinically effective form of treatment for low grade CIN in young women of reproductive age. The associated morbidity for any future pregnancy is negligible. As such, it should now become 1st line treatment in this age group.

P-112 HIV TESTING IN HIGH GRADE DISEASE-WHAT DO THE PATIENTS WANT?

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Introduction: The National HIV testing guidelines were published in 2008. The aim is to reduce the time between acquisition and diagnosis of HIV by encouraging testing in settings where patient present with indicator diseases, such as High Grade CIN. The experience so far from other setting such as antenatal screening indicates that the majority of women accept HIV screening if it is offered as part of a package of care. In contrast more than 3 years after the publication of the testing guidelines little progress has been made in putting them into practice. Concerns from Health care professionals regarding the possibility of increasing patient anxiety levels at the colposcopy visit has been quoted as one of the reasons for not offering testing in the clinic.

We wanted to find out patients preferences in terms of place and timing of testing in an area of low HIV prevalence.

Method: 25 consecutive patients with high grade disease, and 25 patients attending the colposcopy clinic for other reasons were asked to indicate their preferences regarding site of testing: GP, Colposcopy clinic or GUM, as well as timing of testing: before the appointment, at the time of first colposcopy consultation, at the follow up colposcopy visit or after the colposcopy visits with the GP.

Results: Will be presented on patients testing preferences. All patients agreed to complete the questionnaire. The results will help to inform the parties involved in the management of cervical disease and follow up what steps for implementation of the HIV testing guidelines for High Grade cervical disease should be taken.

P-113 THE CHANGING FACE OF CLINICAL UPDATE EDUCATION FOR SMEARTAKERS IN CERVICALCHECK - THE NATIONAL CERVICAL SCREENING PROGRAMME, REPUBLIC OF IRELAND

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Introduction: Training and education is a critical component for a quality assured cervical screening programme. The Smearmaker Training Unit of CervicalCheck is tasked with keeping smearmaker knowledge on cervical screening up to date in a changing economic and learning environment.

The story so far: Historically, CervicalCheck has delivered clinical update education through annual

regional meetings. In a study by McNamara (2008), the challenges of delivering clinical updates entirely through face to face meetings were identified.

Challenges:

- Over 4,000 smeartakers (GPs and practice nurses) require the provision of training opportunities on an ongoing basis
- The geographical spread of rural Ireland
- Scarce resources
- Cost factors
- Time constraints

Moving Forward:

A dynamic approach to meet the challenges has been adopted by the Smearmaker Training Unit.

- A model of cascade style training has been developed for use in small group CME (Continuing Medical Education) for General Practitioners on a nationwide basis.
- An e-learning platform offering Essential Knowledge Updates online has been launched.
- An online resource centre offering relevant re-useable learning objects e.g. podcast, webcasts, interactive quiz, FAQs, evidence papers has been developed to prepare for the advent of 'ubiquitous' (anytime, anywhere) learning.

P-114 FAST TRACK REFERRAL TO COLPOSCOPY CLINIC: ASSESSING THE APPROPRIATENESS OF REFERRALS MADE UNDER THE TWO WEEK WAIT

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Introduction: UK cancer morbidity and mortality rates are amongst the highest in Europe. To improve outcomes, the Department of Health (1998) introduced the "fast track" referral system for suspected malignancies to shorten the interval between presentation and diagnosis /treatment. This system is criticized by experts in many specialties. Its effectiveness respect of cervical cancer is, at best, unclear.

Methods: Retrospective audit of 111 patients "fast tracked" to colposcopy at Bradford Royal Infirmary, January 2009 - December 2010. Inclusion criteria: all fast track referrals from primary care for suspected cervical cancer. Information collected: patient demographics, stated criteria for urgent referral, presenting signs and symptoms, smear history, history of previous cervical malignancy, use of COCP, diagnosis at colposcopy clinic, management plan, if patient was aware of reason for referral.

Results: Abnormal bleeding was the most common

presenting symptom. At least 25% of patients were unaware of the reason for fast-track referral. None of the 111 patients were diagnosed with cervical cancer: 1% were diagnosed with CGIN, 2% with high grade dyskaryosis, 9 % with CIN1. The remaining 83% had either benign or no cervical pathology. After colposcopy, 64% of patients were discharged and 18% referred to other gynaecology services.

Conclusion: The current system is failing and the current referral guidelines are not fit for purpose. There is too low a threshold for referral resulting in inappropriate fast-track referrals. This has increased waiting times for non-urgent referrals which may adversely affect prognosis for those with cancer in that group.

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1. This study enrolled over 47,000 women > 21 years of age, undergoing routine cervical cancer screening

2. Wright T, et al. Am. J Clin. Pathol 2011; 136: 578-586.

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