



BSCCP2016

ANNUAL SCIENTIFIC MEETING

13th-15th APRIL, LIFE CENTRE EVENTS, BRADFORD



FINAL PROGRAMME & BOOK OF ABSTRACTS

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WELCOME

As chair of the local organising committee I have great pleasure in welcoming you to the BSCCP 2016 Annual Scientific Meeting in Bradford. The conference features a wide range of colposcopy related topics and high quality speakers as part of a diverse programme. The programme will be augmented by a wide variety of proffered papers and posters. We anticipate that these elements will combine into a thought-provoking and informative meeting. The conference venue is a modern, purpose-built facility which should contribute to an enjoyable and comfortable conference. Bradford, once "the wool capital of the world", is a busy and vibrant city that is experiencing growth and regeneration. It also affords easy access to the glorious Yorkshire Dales and Bronte Country, an ideal option for pre or post conference relaxation.

The Local Organising Committee very much hope that you have an interesting and rewarding time in Bradford.



Mr Nicholas Myerson

Bradford Teaching Hospitals NHS Foundation Trust
Chair of the Local Organising Committee

LOCAL ORGANISING COMMITTEE

Mr Richard Hutson – Consultant Gynaecological Oncologist, St James's University Hospital, Leeds

Dr Susan Calvert – Consultant Gynaecologist, Bradford Teaching Hospitals, Bradford

Dr Hemalatha Dadi – Consultant Obstetrician & Gynaecologist, Bradford Teaching Hospitals, Bradford

Mrs Suzanne Taylor – Nurse Colposcopist, Bradford Teaching Hospitals, Bradford

Mr Stephen Porter – Consultant Obstetrician & Gynaecologist, Airedale General Hospital, Keighley

Professor Peter O'Donovan – Consultant Gynaecologist, Bradford Teaching Hospitals, Bradford

CONFERENCE ORGANISERS

BSCCP 2016 Secretariat

c/o In Conference Ltd, Unit 1, Q Court, Quality Street, Edinburgh, EH4 5BP Scotland, UK

Tel: +44(0)131 336 4203 **Email:** bsccp@in-conference.org.uk

Web: www.bsccpconference.co.uk www.bsccp.org.uk



NEXT MEETING
BSCCP 2017 Wednesday 24th- Friday 26th May 2017
St David's Hall, Cardiff, Wales

SCIENTIFIC PROGRAMME

Wednesday 13 th April		Location
10.00 – 13.00	Executive Committee Meeting Invitation Only	Seminar Room One Life Centre Events
11.00 – 17.30	Registration Open	Foyer Life Centre Events
14.00 – 17.00	Trainers Seminar Free to attend, but places MUST be pre-booked	Lecture Theatre Life Centre Events
18.30 – 20.00	Welcome Reception	National Media Museum Little Horton Lane, Bradford

Thursday 14 th April		Location
08.00 – 17.30	Registration / Speaker Preview Open	Foyer / Meeting Room 1
08.30 – 17.30	Exhibition and Posters Open	Main Auditorium
09.00 – 09.10	Welcome Nicholas Myerson, Chair, Local Organising Committee	Hall A
09.10 – 11.10	Plenary Session 1 Chairs: Peter O'Donovan and John Tidy	
09.10 – 09.40	Do Bugs Cause Cancer? The Role of the Vaginal Microbiome in Cervical Carcinogenesis <i>Anita Mitra, Imperial College London, UK</i>	
09.40 – 10.10	The Pathology of Unusual Cervical Cancers <i>Nafisa Wilkinson, Leeds Teaching Hospitals, NHS Trust, UK</i>	
10.10 – 10.40	The New ISSVD and Consensus Terminologies of Vulvar Intraepithelial Lesions and of Vulvar Pain <i>Jacob Bornstein, Galilee Medical Center, Israel</i>	
10.40 – 11.10	Proof-of-concept for a Self-applied, Low-cost, Non-surgical Treatment for HPV and Related Neoplasia <i>Ian Hampson, University of Manchester, UK</i>	

11.10 – 11.40	Tea/Coffee/Exhibition/Poster Viewing	Main Auditorium
11.40 – 12.40	Proffered Papers - Session 1 Chairs: Stephen Porter and Simon Leeson	Hall A
11.40 – 11.55	O-1, Monitoring The Impact of National HPV Vaccination On Type-Specific HPV Prevalence Among Cervical Cancers Diagnosed in England in Women Aged Less Than 30 Years Old <i>David Mesher, Public Health England, UK</i>	
11.55 – 12.10	O-2, NHSCSP Pilot Of Primary HPV Cervical Screening <i>John Tidy, Royal Hallamshire Hospital, UK</i>	
12.10 – 12.25	O-3, Evaluation of Triage Markers for The Management of HPV Positive Women Presenting at Colposcopy with Minor Cytological Abnormalities <i>Prerna Tewari, Trinity College Dublin, Ireland and Coombe Women & Infants University Hospital, Ireland</i>	
12.25 – 12.40	O-4, Regional Evaluation of Outcome of Cervical Cytology Reported as Code"O" with Cytological Features of Non Cervical Glandular Neoplasia <i>Uma Krishnamoorthy, East Lancashire Hospitals NHS Trust, UK</i>	
12.40 – 13.40	Lunch/Exhibition/Poster Viewing	Main Auditorium
12.55 – 13.40	Poster Session One	
13.40 – 15.15	Plenary Session 2 Chairs: Nicholas Myerson and Deirdre Lyons	Hall A
13.40 – 14.15	HPV Infection: A Global Scourge and Scandal <i>Alison Fiander, Royal College of Obstetricians and Gynaecologists, UK</i>	
14.15 – 15.15	Proffered Papers - Session 2	
14.15 – 14.30	O-5, Human Papilloma Virus Status and Cytology Results Six Months Following Cold Coagulation Treatment <i>Dheena Segar, Louth County Hospital, Dundalk, Ireland and Our Lady of Lourdes Hospital, Drogheda, Ireland</i>	
14.30 – 14.45	O-6, Conservative Management of CIN 2: Is It Time To Reconsider Our Options? <i>Madeleine Macdonald, Sheffield Teaching Hospitals NHS Foundation Trust, UK</i>	
14.45 – 15.00	O-7, Conservative Management of Cervical Intraepithelial Neoplasia 2: Risk Of Persistent Disease at Six Months <i>Melissa Bradbury, Northern Gynaecological Oncology Centre, Queen Elizabeth Hospital, UK</i>	

15.00 – 15.15	O-8, Correlation of Cone Volume and Cone Margin Involvement After LLETZ, To Follow Up Cytology and HPV Status – A Teaching Hospital Based Study <i>Geeta Krishnamurthy Bangalore, Guys and St Thomas NHS Foundation Trust, UK</i>	
15.15 – 15.45	Tea/Coffee/Exhibition/Poster Viewing	Main Auditorium
15.45 – 17.15	Plenary Session 3 Chairs: Richard Hutson and Jullien Brady	Hall A
15.45 – 16.15	Modern Management of CIN: A Proposal for a Risk Assessment in Colposcopic Decision Making: RISC <i>Jean-Luc Mergui, SFCPCV, France</i>	
16.15 – 16.45	Risk of Preterm Birth following Surgical Treatment for Cervical Disease <i>Alejandra Castanon, Queen Mary University of London, UK</i>	
16.45 – 17.15	Advances with Fertility Preservation in The Management of Cervical Cancer <i>John Shepherd, Queen Mary University of London, UK</i>	
19.00	Coaches Depart to Aagrah Midpoint	
19.30 – midnight	BSCCP Conference Dinner	Aagrah Midpoint

Friday 15th April		Location
08.00 – 16.30	Registration / Speaker Preview Open	Foyer / Meeting Room 1
08.30 – 14.00	Exhibition and Posters Open	Main Auditorium
09.00 – 10.00	Proffered Papers - Session 3 Chairs: Hemalatha Dadi and Maggie Cruickshank	Hall A
09.00 – 09.15	O-9, Prior Colposcopic Discharge To Routine Recall and Climbing Treatment Rates: Are they Linked? <i>Madeleine Macdonald, Sheffield Teaching Hospitals NHS Foundation Trust, UK</i>	
09.15 – 09.30	O-10, Dysis Service Evaluation in Wales. Patient and Colposcopist Feedback <i>Srividhya Budithi, Ysbyty Gwynedd, UK</i>	
09.30 – 09.45	O-11, A Randomised Trial to Improve Uptake of Cervical Screening in Young Women: Final Results of STRATEGIC <i>Henry Kitchener, University of Manchester, UK</i>	

09.45 – 10.00	<p>O-12, Cin and Cervical Cancer Among Women Attending Community Based Health Camps in Bangladesh <i>Ashrafun Nessa, Bangabandhu Sheikh Mujib Medical University (BSMMU), Bangladesh</i></p>	
10.00 – 11.00	<p>Plenary Session 4 Chairs: Susan Calvert and Theresa Freeman-Wang</p>	Hall A
10.00 – 10.30	<p>Vulval Pain Syndromes <i>Jacob Bornstein, Galilee Medical Center, Israel</i></p>	
10.30 – 11.00	<p>The Lichens <i>Claudia Marchitelli, Hospital Italiano Buenos Aires, Argentina</i></p>	
11.00 – 11.30	<p>Tea/Coffee/Exhibition/Poster Viewing</p>	Main Auditorium
11.30 – 12.15	<p>Plenary Session 5: Discussion Session Chair: Theresa Freeman Wang</p> <p>The Changing Face of Colposcopy: Where has all the CIN gone? <i>Julia Palmer</i></p>	Hall A
12.15 – 12.45	<p>BSCCP AGM</p>	Hall A
12.45 – 13.45	<p>Lunch/Exhibition/Poster Viewing</p>	Main Auditorium
13.00 – 13.40	<p>Poster Session Two</p>	
13.45 – 15.40	<p>Plenary Session 6 Chairs: Nicholas Myerson</p>	Hall A
13.45 – 14.15	<p>What The Colposcopist Needs to Know about HIV in 2016 <i>Sophie Brady, Locala CIC/Bradford Teaching Hospitals NHS Foundation Trust, UK</i></p>	
14.15 – 14.45	<p>Update of NHS CSP Document 20 and QA in Colposcopy <i>John Tidy, Sheffield Teaching Hospital NHS Foundation Trust, UK</i></p>	
14.45 – 15.15	<p>East of England Clinical Guidance for the Conservative Management of High Grade CIN <i>Jullien Brady, East of England and Bedford Hospital NHS Trust, UK</i></p>	
15.15 – 16.15	<p>MDT Clinical Cases Panel: Richard Hutson, St James's University Hospital, UK Jullien Brady, East of England and Bedford Hospital NHS Trust, UK Simon Leeson, Ysbyty Gwynedd, Wales</p>	Hall A
16.15 – 16.30	<p>Presentation of Prizes and Closing Remarks</p>	Hall A

GENERAL INFORMATION

Welcome Reception

Wednesday 13th April 18.30 – 20.00

The National Media Museum, Little Horton Lane, Bradford, BD1 1NQ

The Welcome Reception will be held at The National Media Museum. The cost for this event is included in the registration fee, but places must be pre-booked. Drink and canapés will be served across two exciting interactive floors at the Museum, the Kodak Gallery and the Life Online Gallery.

Conference Dinner

Thursday 14th April 19.30 – Midnight

Aagrah Midpoint, The Aagrah Building, Thornbury, Bradford, BD3 7AY

The Dinner will include a welcome reception followed by a 3-course dinner and entertainment. Places are limited at dinner so early booking is advised! Please ask at the Registration Desk for a late ticket availability.

Certificates of Attendance

Certificates of Attendance will be emailed directly to all delegates on the last day of the meeting. 11 CPD points will be awarded for the main conference and 2 CPD points for the Trainers Seminar.

Exhibition/Posters

The Exhibition and posters will be located in the Main Auditorium in Venue 1 on the ground floor. The Exhibition will be open at the following times:

Thursday 14th April 08.30hrs – 17.15hrs
Friday 15th April 08.30hrs – 13.45hrs

Insurance

The Conference Organisers cannot accept any liability for personal injuries or for loss or damage to property belonging to delegates, either during, or as a result of the meeting. Please check the validity of your own personal insurance before travelling.

Posters

There will be two dedicated poster sessions from 12.55hrs on Thursday 14th April and from 13.00hrs on Friday 15th April. Posters will be available to view for the remainder of the conference during normal opening hours. Authors will be by their boards to discuss their posters at the following times:

Thursday 14 th April 12.55 – 13.40	Friday 15 th April 13.00 – 13.40
Audit/Quality Assurance P-1, P-3, P-7, P-8, P-9, P-13, P-15, P-16, P-17, P-19, P-21, P-23, P-25, P-27, P-29, P-31, P-32, P-33, P-35, P-37, P-43, P-45	Audit/Quality Assurance P-2, P-4, P-5, P-6, P-10, P-12, P-14, P-18, P-20, P-22, P-24, P-26, P-28, P-30, P-34, P-36, P-38, P-39, P-40, P-41, P-42, P-44
Pathology P-47, P-48, P-49, P-51	Pathology P-46, P-50
Science/Epidemiology P-52, P-53, P-55, P-57, P-63, P-64, P-71	Science/Epidemiology P-54, P-56, P-58, P-60, P-61, P-62, P-65, P-66, P-67, P-68, P-70
Training/Education P-73, P-77	Training/Education P-74, P-75, P-76
Treatment/Morbidity P-79, P-81, P-83, P-85, P-87, P-89, P-91, P-93, P-94, P-95	Treatment/Morbidity P-78, P-80, P-82, P-84, P-86, P-88, P-90, P-92, P-96

Registration/Information Desks

All delegates will receive their badge holder with lanyard, ordered tickets and all relevant conference information upon arrival at The Life Centre Events. The registration desk will be located in the foyer area.

The Registration and Information Desks will be open at the following times:

Wednesday 13 th April	11.00 – 17.00
Thursday 14 th April	08.00 – 17.30
Friday 15 th April	08.00 – 16.30

Speaker Presentation Check In – Meeting Room One

Presenters must check in their presentation at least four hours before they are due to speak. On the first day, the Speaker Presentation Room will be open from 08.00 – 17.30 and priority will be given to speakers in the morning session.

It will not be possible to check in presentations in

the main plenary room. Staff will be on-hand in the Speaker Preview room to assist. Presenters do not need to bring a laptop as presentations will be loaded onto a main computer.

Conference App

The conference app is an easy way to look up sessions, plan your event schedule and participate in live voting. Search for BSCCP in App Store or Google Play Store and download for IOS and Android Devices.

Wi-Fi

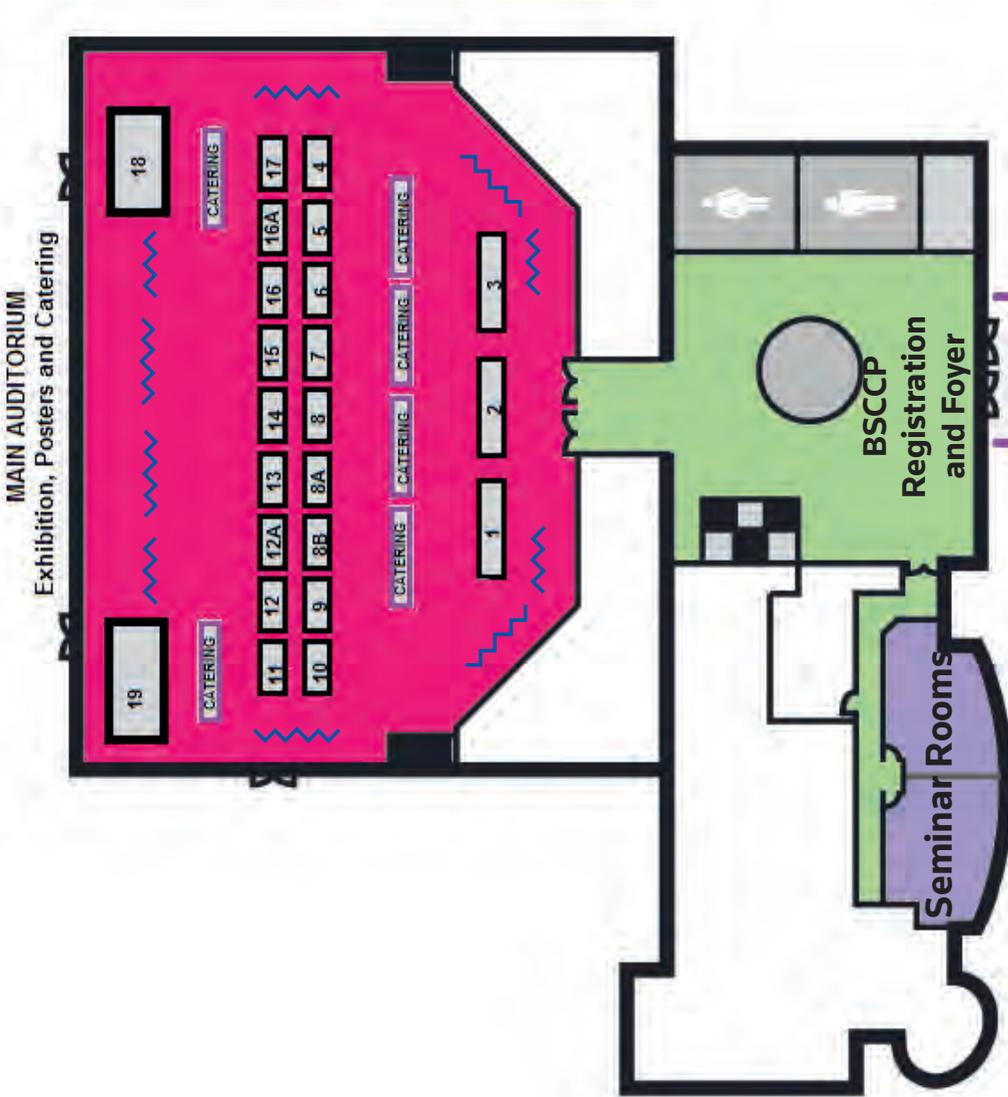
Wireless Internet is provided by the Conference and is kindly being sponsored by Roche.

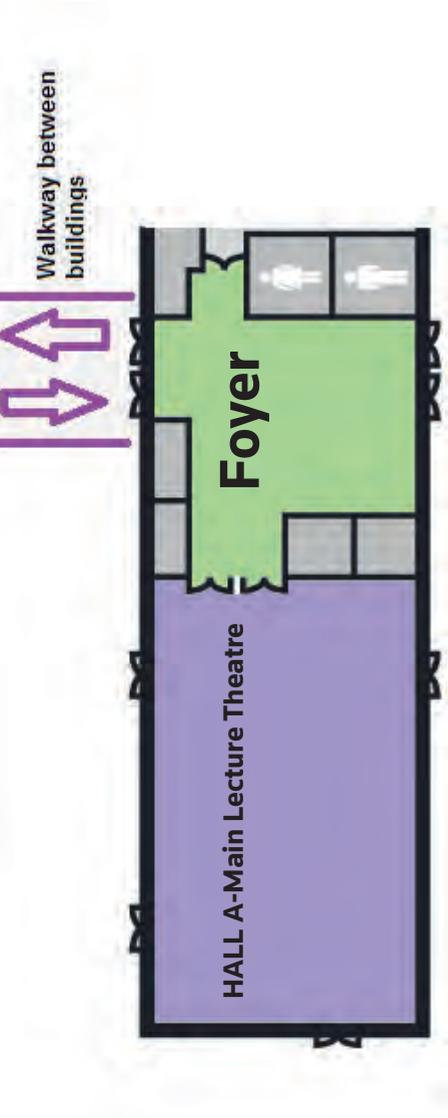


To access the Wi-Fi please use the following details:



EXHIBITION FLOORPLAN





BSCCP 2016 Stand Allocations

- 1 Touchstone Medical Ltd
- 2 Eurosurgical Ltd
- 3 Roche Diagnostics Ltd
- 4 Zilco Ltd
- 5 DP Medical
- 6 Source BioScience
- 7 RB Medical Engineering Ltd
- 8 Sword Medical UK Ltd
- 8A Gynius
- 8B BORCAD CZ S.R.O.
- 9 Femcare-Nikommed Limited
- 10 DTR Medical
- 11 Pelican Feminine Healthcare
- 12 Colposcopy Courses.com
- 12A Irisoft Ltd
- 13 Sanofi Pasteur
- 14 SEA Liverpool
- 15 Aquilant Surgical
- 16 Jo's Cervical Cancer Trust
- 16A Stericom Ltd
- 17 Roberts Surgical Healthcare Limited
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THE BRITISH SOCIETY FOR COLPOSCOPY AND CERVICAL PATHOLOGY (BSCCP)

Birmingham Women's Hospital, Edgbaston, Birmingham, B15 2TG

Contact: Sharon Parisi or Elaine Radford **Tel:** +44 (0) 121 607 4716

Email: Sharon.Parisi@bwnft.nhs.uk or Elaine.Radford@bwnft.nhs.uk or

Stephanie.thomason@bwnft.nhs.uk

Website: www.bsccp.org.uk



BORCAD CZ S.R.O. STAND 8B

Frycovice 673, 73945 Frycovice, Czech Republic

Contact: Jiri Sobek **Tel:** +420 736 628 208 **Fax:** +558 668 087

Email: Sobek@borcad.cz **Website:** www.borcad.cz; www.gracie.eu

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Contact: James Hoare **Tel:** +44 (0) 7788 870770

Email: info@colposcopycourses.com **Website:** www.colposcopycourses.com

Colposcopycourses.com provides high quality online training in colposcopy, approved as a Basic course by BSCCP and EFC. The Company will release an Advanced course in May 2016, which has been submitted to BSCCP for approval for re-accreditation. The new course, led by Prof Singer, can be previewed on our stand.



VISION IN HEALTHCARE

DP MEDICAL SYSTEMS LTD STAND 5

15a Oakcroft Road, Chessington, Surrey. KT9 1RH, UK

Contact: Owen Pemberton **Tel:** +44 (0) 20 8391 4455

Email: sales@dpmedicalsyst.com **Website:** www.dpmedicalsyst.com

DP Medical Systems Ltd has been the leading supplier of colposcopy equipment for over 28 years in the UK. Our product, 'MediScan' helps clinicians capture & store clinical data & images and is widely used across the UK. As are our colposcopes, hysteroscopes, cameras, and patient couches.

**DTR MEDICAL STAND 10**

17 Clarion Court, Enterprise Park, Swansea, SA6 8RF, UK

Contact: Kirsty Martin **Tel:** +44 (0) 1792 797 910

Email: kmartin@dtrmedical.com **Website:** www.dtrmedical.com

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**DySIS MEDICAL LTD STAND 19**

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Contact: Jade Boyd **Tel:** +44 (0) 1506 592159

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Contact: Jane Bell **Tel:** +44 (0) 1794 525 116

Email: jane.bell@femcare-nikomed.co.uk **Website:** www.femcare-nikomed.co.uk

Utah Medical Products, Inc./Femcare-Nikomed Ltd
www.utahmed.com www.femcare-nikomed.co.uk

Femcare-Nikomed/Utah Medical specialised gynaecology products feature the Finesse-Electrosurgery/Smoke Evacuation System, UtahLoop and C-LETZ electrodes. These are globally recognised for their ability to effectively remove cervical pre-cancers and provide excellent specimens for conclusive histopathology. Visit our stand to investigate how we may help you improve your clinical outcomes.



GYNIOUS STAND 8A

Wivalliusgatan 13B, S-112 60 Stockholm, Sweden

Contact: Patrik Barje **Tel:** +46 (0) 8 30 30 35

Email: info@gynocular.com patrik.b@gynocular.com **Website:** www.gynius.se

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**HOLOGIC STAND 18**

Heron House, Oaks Business Park, Crewe Road, Wythenshawe, Manchester, M23 9HZ, UK

Contact: Jo Frost **Mobile:** +44 (0) 7917 155105

Email: jo.frost@hologic.com **Website:** www.hologic.com

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**INTERNATIONAL SOCIETY FOR THE STUDY OF VULVOVAGINAL DISEASE (ISSVD)**

PO BOX 586, Waxhaw, NC 28173 USA

Contact: Debbie Roepe, Executive Director **Tel:** 0017048149494

Email: issvd@issvd.org **Website:** <http://issvd.org/>

To promote international communication among gynecologists, pathologists, dermatologists, and related disciplines, and to establish international agreement on terminology and definitions of vulvovaginal diseases. To promote clinical investigation, basic research, and dissemination of knowledge in this field.

**JO'S CERVICAL CANCER TRUST STAND 16**

CAN Mezzanine, 49-51 East Road, London, N1 6AH, UK

Contact: Claire Cohen **Tel:** +44 (0) 20 7250 8311

Email: info@jostrust.org.uk **Website:** www.jostrust.org.uk

Jo's Cervical Cancer Trust is the only UK charity dedicated to those affected by cervical cancer and cervical abnormalities. It offers a range of online and face to face support and information including: local support groups, a Helpline (0808 802 8000), an online forum and an Ask The Expert service. Services are available free of charge for you and your patients including our peer reviewed information on colposcopy, treatment for cervical abnormalities and HPV testing and our Helpline where 45% of our calls are related to cervical abnormalities and treatments.

**North of England Pathology and Screening Education Centre (NEPSEC)**

Raynham House, 2 Capitol Close, Capitol Park West, Leeds, LS27 0WH, UK

Contact: Kathryn Hawke **Tel:** +44 (0) 113 2466330

Email: Kathryn.hawke@nhs.net **Website:** www.cytologytraining.co.uk

The primary role of the North of England Pathology and Screening Education Centre is to lead on the development of the workforce to meet the requirements of the cervical screening programme. The centre offers a wide range of appropriate, high quality training activities, including those suitable for Basic and Advanced Level Colposcopists.



PELICAN FEMININE HEALTHCARE **STAND 11**

Greypoint, Cardiff Business Park, Cardiff, CF14 5WF

Contact: Tim Christopher **Tel:** +44 (0) 2920 747 400

Email: contactus@pelicanfh.co.uk **Website:** www.pelicanfh.co.uk

Pelican Feminine Healthcare Ltd is a UK manufacturer of single-use medical instruments for Gynaecology and Obstetrics, including the market leading PELIspec® vaginal speculum. Pelican has invested heavily in the design and manufacture of products including the market leading PELIspec®, produced at a state-of-the-art manufacturing facility in Cardiff, which since 2011 has served both UK and international markets with production of over 15 million vaginal speculum.



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Contact: Valerie Lilwall **Tel:** +44 (0) 1989 563 958

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RB Medical is a leading manufacturer and distributor of Colposcopy products and instruments for minor operations and diagnostic investigation. Our products include high resolution 2mm hysteroscope, single use diathermy products, 4 way and insulated speculums, biopsy forceps and a range of endometrial sampling products.



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**SEA LIVERPOOL STAND 14**

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ORAL ABSTRACTS

O-1

MONITORING THE IMPACT OF NATIONAL HPV VACCINATION ON TYPE-SPECIFIC HPV PREVALENCE AMONG CERVICAL CANCERS DIAGNOSED IN ENGLAND IN WOMEN AGED LESS THAN 30 YEARS OLD

David Mesher, Marta Checchi, Kavita Panwar, Dipti Devalia, Simon Beddows, Katy Sinka

Public Health England, London, UK

Background

The national HPV vaccination programme was introduced in the UK in September 2008 with routine vaccination of 12-13 year old females and a catch-up for females aged up to 18 years. The immediate impact on the incidence of cervical cancer will be limited given the delay between HPV infection and cancer manifestation. However, it is important to monitor changes in the prevalence of HPV infection among young women diagnosed with cervical cancer.

Methods

Cervical cancer cases diagnosed in England in women aged less than 30 years old were identified from cancer registration data. A pilot collection of cases diagnosed in 2011 has been completed. For all cervical cancer cases diagnosed in 2013, we requested sections from cancer tissue blocks from the relevant Histopathology laboratories. Type-specific HPV testing is performed using an in-house multiplex PCR and Luminex-based genotyping test. Vaccination status is obtained for women who would have been eligible to receive the HPV vaccine.

Results

A pilot collection of cervical cancers diagnosed in 2011 was completed in 2014. Methods for collection, processing and testing of residual specimens were updated following this pilot. Full surveillance started in 2015 with 451 cases diagnosed in England in 2013. Of these, 433 (96%) requests for residual tissue sections were sent. As of January 2016, 356 (82%) have been returned for testing. Final response rate will be presented once follow-up is complete by end-February 2016.

Conclusions

A high proportion of residual cervical cancer sections have been returned for HPV testing. This surveillance is well placed to monitor the impact of HPV vaccination on the type-specific HPV prevalence among cervical cancers.

O-2

NHSCSP PILOT OF PRIMARY HPV CERVICAL SCREENING*Henry Kitchener¹, Karin Denton², John Tidy³, Sue Moss⁴**¹University of Manchester, UK, ²University of Bristol, UK, ³Royal Hallamshire Hospital, Sheffield, UK, ⁴Queen Mary University London, UK***Background:**

Randomised trials of primary HPV screening have shown that HPV testing is more protective against cervical cancer than cervical cytology, and would allow extension of screening intervals. A large NHSCSP pilot designed to demonstrate the practicability of primary HPV testing, particularly the management of women who screen HR-HPV positive/cytology negative, is ongoing.

Methods:

The Pilot protocol was developed by a Steering Group. Briefly, a proportion of women undergoing cervical screening aged 25-64 across six large English centres are screened for HR-HPV. HPV positive women have reflex LBC and any abnormality prompts referral to colposcopy. Women with negative cytology are recalled at 12 months and if HR-HPV negative, are returned to routine recall. If still HR-HPV positive and cytology negative, several management pathways are under review, including genotyping in some centres to direct colposcopy referral and further recall at 12 months in others. HPV, cytology and colposcopy data are entered onto a central database at QMUL. All cytology labs have only partially converted allowing comparison with contemporaneous primary cytology.

Results:

The Pilot opened in April 2013 and by July 2015 almost 250,000 women had undergone primary HPV testing with colposcopic outcomes on 7256 women. HR-HPV prevalence is 13.3%, and falls from 28.5% in 25-29year olds to 6.8% aged 50-54. The colposcopy referral rate is 4.3% for primary HPV compared with 4.5% for primary cytology. Detection of CIN2+/CIN3+ was 1.52%/1.00% and 1.48%/0.96% for primary HPV and primary cytology respectively. Amongst screened women, 9% were HPV+/cyto- amongst whom HR-HPV persisted in almost 60% at 12 month recall. No major practical obstacles have been encountered.

Conclusions:

The Pilot has demonstrated that HPV primary testing is feasible in the general population. It achieves a higher detection rate of CIN2+ but will result in a short term increase in colposcopy referral due to persistent HR-HPV.

O-3

EVALUATION OF TRIAGE MARKERS FOR THE MANAGEMENT OF HPV POSITIVE WOMEN PRESENTING AT COLPOSCOPY WITH MINOR CYTOLOGICAL ABNORMALITIES

Prerna Tewari^{1,2}, Christine White^{1,2}, Lynne Kelly^{1,2}, Loretto Pilkington², Padraig Kearney^{1,2}, Tom D'Arcy², Cliona Murphy², Nadine Farah², Eimear Lee², Dorinda Mullen², Jacqui Barry O'Crowley², Sharon O'Toole^{1,2}, Linda Sharp³, John O'Leary^{1,2}, Cara Martin^{1,2}

¹Trinity College Dublin, Ireland, ²Coombe Women & Infants University Hospital, Dublin, Ireland, ³Newcastle University, UK

Background:

The management of cervical disease has considerably improved since the incorporation of HPV "test of cure" protocols. However, the specificity of HPV DNA testing is limited due to high prevalence of transient HPV infections. In this study we evaluated alternative options; HPV 16/18 genotyping, HPV mRNA testing, p16/Ki67 expression and cytology to triage HPV positive cases presenting in colposcopy.

Design:

Patients were recruited through the Colposcopy clinic in the Coombe Womens & Infants University Hospital, Dublin, Ireland, following a referral for abnormal smears. A smear sample was taken for cytological evaluation and the residual sample was tested with the Cobas HPV DNA test, Aptima mRNA test and CINtec PLUS (p16/Ki67). Clinical performance of the assays was evaluated with reference to histological diagnosis.

Results:

896 women were tested, of which 67% were HPV DNA positive. Clinical sensitivity and specificity for detection of CIN2+ was 89.5% and 54.3% for the Cobas test and 88.5% and 60.0% for the Aptima test in women referred with minor abnormalities (n =300). We also evaluated the potential for a reduction in colposcopy referral rate following HPV DNA/ mRNA testing and triage of HPV positive cases with HPV16/18 genotyping or cytology. In HPV positive women, sensitivity for detecting CIN2+ remained high and referral rate would drop to 60% of the overall population indicating a potential for 40% reduction in referrals. Where HPV positive women had a cytology test applied, the referral rate would drop to 38% of the overall population, the sensitivity for detecting CIN2+ remained high. HPV 16/18 genotyping would reduce referral rate by a similar proportion. However, sensitivity was considerably lower which could result in delayed diagnosis of CIN2+. CINtec PLUS data is currently under review.

Conclusion:

The specificity of HPV testing can be improved by including additional biomarkers as tests of disease.

O-4

REGIONAL EVALUATION OF OUTCOME OF CERVICAL CYTOLOGY REPORTED AS CODE "O" WITH CYTOLOGICAL FEATURES OF NON CERVICAL GLANDULAR NEOPLASIA

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¹East Lancashire Hospitals NHS Trust, Burnley, UK, ²Manchester Cytology Centre, UK

Introduction:

Cervical cytology showing features of non-cervical glandular neoplasia are reported as code "O" under NHS Cervical screening programme. As suspicion is regarding non-cervical neoplasia, cytology used to be reported as normal and patient informed that result is normal. GP copy of results stated that further referral is indicated.

Aim:

There were several incidents of delayed diagnosis of endometrial cancer in Lancashire among patients referred with code "O" cytology, which prompted this Regional review to enable an understanding of underlying pathology of code "O" smears with aim of raising awareness to reduce risk of recurrence of delayed diagnosis in this cohort.

Methodology:

All Smears reported at Manchester cytology centre (MCC) who process cytology for our Trust over twelve months until March 2014 were reviewed and histological outcome of women with Code "O" report evaluated retrospectively.

Results:

Total smears reported during this period was 109400. Of this result code "O" was 49. Three fourth (37) revealed pathology of noncervical origin. 73%(36) were endometrial pathology with 49%(24) endometrial carcinoma, 12%(6) endometrial polyp, 4%(2) atypical endometrial hyperplasia, 6%(3) endometrial hyperplasia without atypia, and 2%(1 case) adenomyosis and 2%(1 case) ovarian adenocarcinoma.

Conclusion:

This review demonstrated that more than half (51%) of women with code "O" Cytology had underlying carcinoma and 75% had confirmed underlying non-cervical pathology contributory to code "O" report.

Recommendations and Action Plan: A local rapid access referral & management pathway was implemented for Code "O" referrals in our unit. Review outcome and pathway were shared with other Regional units served by MCC through Pan Lancashire cervical screening programme board and through MCC. Locally, the cytology report wording was updated to include in Red Capital font letters stating that "URGENT REFERRAL TO GYNAECOLOGY IS INDICATED". Findings were also shared through Pan Lancashire cervical screening programme board with National cervical screening programme board, and revisions to wording of code "O" smear reports to highlight the need for Urgent referral agreed and subsequently agreed to be implemented at National level.

O-5

HUMAN PAPILLOMA VIRUS STATUS AND CYTOLOGY RESULTS SIX MONTHS FOLLOWING COLD COAGULATION TREATMENT

Clare O'Connor^{1,2}, Dheena Segar^{1,2}, Karen Clinton¹, Marina O'Reilly¹, Rosemary Harkin^{1,2}, Etop Akpan^{1,2}

¹Louth County Hospital, Dundalk, Louth, Ireland, ²Our Lady of Lourdes Hospital, Drogheda, Louth, Ireland

Background:

Cold coagulation treatment is a safe and minimally invasive treatment for cervical intraepithelial neoplasia.

Objective:

To evaluate the efficacy of cold coagulation treatment for the eradication of Human papilloma virus (HPV) and the removal of cervical intraepithelial neoplasia (CIN) at six months follow up.

Methods:

Data was gathered prospectively for all women undergoing cold coagulation treatment in our colposcopy unit from January 2014 to December 2014. The indications for treatment including histology results were recorded. HPV status and cytology results at six months following treatment was recorded.

Results:

Cold coagulation treatment was performed on 116 women. 71% of treatments were carried out for CIN 1. 16% were for confirmed CIN2 or CIN3. 13% were performed for persistent low grade squamous intraepithelial lesion (LGSIL). 94.3% women were free of CIN on cytology at six months. 5.7% had LGSIL on cytology. 8.6% of smears demonstrated borderline nuclear abnormalities (BNA). 88% of women were HPV free at 6 months post treatment. Of the women who had CIN 2 or CIN 3, 90.9% of women were HPV free at 6 months (NS). 18% had BNA result at cytology but there were no cases of LGSIL. There were no cases of high grade squamous epithelial lesion results on cytology in the cohort. 79% of women undergoing large loop excision of the transformation zone in our unit in the same year were HPV free at six months follow up.

Conclusion:

94.3% of women were CIN free at six months post treatment which is similar to reports in the literature. 88% of women were HPV free at six months which compares favourably to results for excisional biopsies in our unit for the same year. This study confirms cold coagulation to be an effective treatment for CIN and proves its value at eradicating HPV infection.

O-6

CONSERVATIVE MANAGEMENT OF CIN 2: IS IT TIME TO RECONSIDER OUR OPTIONS?*Madeleine Macdonald¹, Lucy Rigg², Rachel Lyon¹, John Crossley¹, John Tidy¹, Julia Palmer²**¹Sheffield Teaching Hospitals NHS Foundation Trust, UK, ²University of Sheffield Medical School, UK***Background**

Recommended standard management of high-grade lesion cervical intraepithelial neoplasia (CIN 2/3) is loop excision (LLETZ) or ablation of the transformation zone. This is followed by a 'test of cure' (TOC) cervical sample at six months post treatment. Little is known about the regression rates of CIN 2 in women over 25 years old, the age at which screening commences in England.

In this study the outcomes of women over 25 years old with biopsy proven CIN 2, in a UK-based colposcopy service, are evaluated to compare those who underwent conservative management with those who had standard treatment.

Methods:

Retrospective cohort study of all women diagnosed with CIN 2 performed at the Jessop Colposcopy Unit, Sheffield, UK, between January 2010 and December 2014.

Results

486 women were diagnosed with CIN 2; 74 underwent immediate LLETZ (see & treat group); 412 underwent colposcopically directed biopsy, 190 were planned for LLETZ (biopsy and treat group) and 222 conservative management. In women conservatively managed, 123 (55%) had spontaneous regression of CIN 2; 56 went onto have a LLETZ. A higher proportion of women (44%) in the conservatively managed group who went onto have LLETZ after monitoring were found to have CIN3 compared to those in the biopsy and treat group (11%) ($p=0.0001$).

Limitations of this study include the lack of selection criteria for conservative management, variation of treatment intervals and no clearly identification of reason for treatment. Long-term follow up was not available.

Conclusion

A high proportion of biopsy proven CIN 2 in this study underwent spontaneous regression indicating conservative management appears to be safe for many women. Clear selection criteria and follow-up protocols must be present to allow audit of practice and ensure patient safety.

O-7

CONSERVATIVE MANAGEMENT OF CERVICAL INTRAEPITHELIAL NEOPLASIA 2: RISK OF PERSISTENT DISEASE AT SIX MONTHS

Melissa Bradbury¹, Diane Hemming², Ann Fisher¹, Christine Ang¹

¹Northern Gynaecological Oncology Centre, Queen Elizabeth Hospital, Gateshead, UK, ²Pathology Department, Queen Elizabeth Hospital, Gateshead, UK

Background

Current national UK guidelines recommend standard treatment of high grade cervical intraepithelial neoplasia (CIN2 or 3) with a large loop excision of the transformation zone (LLETZ). There is an increasing awareness that a large proportion of CIN2 lesions may resolve spontaneously, allowing for a more conservative approach in selected cases. We aimed to evaluate the risk of persistent disease at 6 months for women undergoing conservative management of CIN2.

Methods

Prospective study of women diagnosed with CIN2 at the Northern Gynaecological Oncology Centre (Gateshead) between January 2014 and May 2015. All women with abnormal screening cervical cytology were directly referred for colposcopy and underwent a punch biopsy for histology. Women were offered the option of treatment with LLETZ or surveillance with 6-monthly cytology and colposcopy (+/- biopsy). Data was collected on women's age, smoking status, cytology results, colposcopic findings at referral and 6 months and the high-risk HPV subtypes. Persistent disease was defined as the diagnosis of CIN2 or more on biopsy in women with abnormal cytology and/or colposcopy at 6 months. Logistic regression analysis was used to assess for risk factors of persistent disease.

Results

A total of 109 women were diagnosed with CIN2, 68 were treated with LLETZ (62.4%) and 41 were managed conservatively (37.6%) [median age 28 years(range 24-55) vs 26 years(range 24-37),*p=0.021 respectively]. Six-month follow-up data was available for 31 women undergoing conservative management. 61.3% had disease regression. Out of the women with persistent disease (38.7%), seven underwent a LLETZ and five continued surveillance. We found no relation between the presence of persistent disease with age, smoking status, previous history of CIN, cytology result, HPV subtype and colposcopic findings.

Conclusion

Approximately 60% of CIN2 lesions regressed spontaneously at 6 months. We found no significant predictive factors for persistent disease in women undergoing conservative management of CIN2.

O-8

CORRELATION OF CONE VOLUME AND CONE MARGIN INVOLVEMENT AFTER LLETZ, TO FOLLOW UP CYTOLOGY AND HPV STATUS – A TEACHING HOSPITAL BASED STUDY

Geeta Krishnamurthy Bangalore, Olamide Olufade, Ali Kubba

Guys and St Thomas NHS Foundation Trust, London, UK

Objective – Aim of this study was to investigate the association between volume of the cone and margin involvement after LLETZ treatment for high grade CIN, and positive cytology and HPV at 6 months follow up.

(LLETZ- Long Loop Excision of Transformation Zone)

Study Design –Nested cohort study.

Setting – London Teaching Hospital

Methods – 524 women who had LLETZ treatment during the last 17 months were included in our study. Study parameters were retrieved from the hospital colposcopy database. Data was compiled on Excel and analysed. Statistical values were calculated from MedCalc software program. We excluded fragmented LLETZ specimen as difficult to calculate cone volume.

Results – Mean cone volume was 1.08 cm³, median of 0.82 cm³ and SD of 0.84 cm³. Minimum cone volume was 0.47 cm³ and maximum was 7.2 cm³. 70% had a clear cone margin.

A cone volume of greater than 2.0 cm³ had lower positive cytology and HPV at 6 months follow up compared to cone volume lesser than 2.0cm³. RR-1.42, 95%CI (0.677 to 2.982), P Value of 0.35.

11% had positive cytology and 25% positive HPV at 6 months follow up with clear margins, compared to 19% positive cytology and 38% positive HPV with involved cone margins, RR-1.6, 95%CI (0.94 to 2.69), P Value of 0.077.

Percentage of margin involvement was same (30%) for cone volume of above 2.0 cm³ and cone volume below 2.0 cm³. In both groups, 70% had clear cone margins. RR – 1.0 with low statistical significance (P Value – 0.986).

Conclusion – Our study and results demonstrate that in addition to achieving clearer cone margins, it is important to have an adequate cone volume excised for an optimum outcome with lower residual abnormality.

O-9

PRIOR COLPOSCOPIC DISCHARGE TO ROUTINE RECALL AND CLIMBING TREATMENT RATES: ARE THEY LINKED?

Madeleine Macdonald, Rachel Lyon, John Smith, John Tidy, Julia Palmer

Sheffield Teaching Hospitals NHS Foundation Trust, UK

Background:

The number of women undergoing LLETZ treatments at the Colposcopy Unit in Sheffield increased by 19% between 1st April 2014 and 31st March 2015. There was concern this increase was due to women re-entering the service who had been discharged to routine recall with high risk HPV (hrHPV) and low-grade cytology during their previous screening cycle three to five years previously.

This study aims to assess the reasons for our significant increase in treatment rates.

Methods:

Retrospective cohort study performed between 1st April 2012 and 30th June 2015 at the Jessop Wing Colposcopy Unit, Sheffield, UK.

Results:

1765 women underwent treatment by LLETZ during the study period. Seventy-two (4%) had previously been discharged from colposcopy to routine recall; 56 of whom (3%) had been seen within the previous three to five years with hrHPV and low-grade dyskaryosis.

There were no cases of invasive disease in the previously discharged group.

There was a significantly higher likelihood of a 'negative' LLETZ; no evidence of high grade CIN at histology ($p=0.0066$) in those women previously discharged to routine recall as compared with those not previously seen in colposcopy. Lower rates of CIN2 or worse were also identified in those previously discharged.

Conclusion:

Previous discharge to routine recall did not appear to have any major influence on treatment rates in this study. The finding of no invasive disease; lower rates of CIN2 or worse; and a significantly higher likelihood of a negative LLETZ in those women previously discharged to routine recall is reassuring and further reinforces the safety of HPV triage pathways.

O-10

DySIS SERVICE EVALUATION IN WALES. PATIENT AND COLPOSCOPIST FEEDBACK*Srividhya Budithi¹, Richard Peevor¹, David Pugh², Manolis Papagiannakis³, Simon Leeson¹**¹Ysbyty Gwynedd, Bangor, UK, ²Royal Glamorgan Hospital, Llantrisant, South Wales, UK, ³DySIS Medical, Livingston, UK***Introduction**

Dynamic Spectral Imaging (DSI) uses a monocular digital colposcope (DySIS™; DySIS Medical Ltd, Livingston) to quantify acetowhitening and calculate a colour-coded map which may assist identification, localization, grading and subsequent biopsy of suspicious lesions.

Design and setting

This prospective service evaluation (5/2014-5/2015) of colposcopy with DySIS at five clinics in Wales (Cardiff and Vale, the Royal Glamorgan Hospital, Ysbyty Glan Clwyd, Ysbyty Gwynedd and Wrexham), assessed the clinical performance. In parallel, questionnaires collecting feedback on colposcopy with DySIS were given to patients and colposcopists immediately after each examination.

Results

Overall, 426 patients were enrolled; 68 patient and 45 colposcopist questionnaires were returned.

In total, 86% (58/68) of patients agreed or strongly agreed that the images shown on DySIS helped them understand what colposcopy is and why the examination was needed. 87% (59/68) agreed or strongly agreed that having the additional information provided by the DSI map reassured them that they were getting the best care. Only 3% (2/46) of the patients that had a prior colposcopy agreed or strongly agreed that colposcopy with DySIS lasted too long compared to previous colposcopies. Only 13% (6/46) of them found the examination with DySIS more uncomfortable than previous colposcopies.

For colposcopists, in 96% (43/45) of the responses, they agreed or strongly agreed that they were confident about colposcopy and their decision making in selecting biopsy sites. In 57% (25/44) they agreed or strongly agreed that the DSI map helped identify additional acetowhite areas to biopsy that had not been identified during the standard colposcopic exam and 55% (24/44) agreed or strongly agreed that the DSI map improved colposcopic evaluation.

Conclusion

DySIS made a positive impression on patients and colposcopists found it assists in their colposcopic evaluation and identification of sites for biopsy.

O-11

A RANDOMISED TRIAL TO IMPROVE UPTAKE OF CERVICAL SCREENING IN YOUNG WOMEN: FINAL RESULTS OF STRATEGIC

Henry Kitchener¹, Margaret Cruickshank², Emma Crosbie¹, Alastair Gray³, Matthew Gittins¹, Christopher Roberts¹, Oliver Rivero-Arias³, Apo Tsiachristas³, Loretta Brabin¹, David Torgerson⁴, Alex Sargent⁵

¹University of Manchester, UK, ²University of Aberdeen, UK, ³University of Oxford, UK, ⁴University of York, UK, ⁵Central Manchester University Hospital Trust, UK

Background:

In the UK, declining participation in cervical screening has been linked to the rising incidence of cervical cancer in women under 35 years of age. The aim of the STRATEGIC study was to measure the feasibility, effectiveness and cost effectiveness of a range of interventions to increase uptake of cervical screening by young women.

Design:

This cluster randomised trial based on general practices had two phases. In Phase 1, women who were receiving their first invitation to cervical screening were randomly allocated to receive/not receive a pre-invitation leaflet and to have/not have access to online booking. After six months, any non-attending women were entered into Phase 2, and were randomly allocated to one of five interventions: vaginal self-sample kits (SSK) sent unrequested or offered on request; timed appointments; nurse navigator (NN); or the choice between NN or a SSK. The primary outcome was uplift in screening compared with control practices, at three months post invitation in Phase 1 and 12 months post invitation in Phase 2.

Results:

A total of 20,879 women in 276 practices were cluster randomised in Phase 1. Neither the pre-invitation leaflet nor access to online booking increased uptake of cervical screening. Uptake was higher amongst HPV vaccinees at three months (OR 2.07, 95% C.I. 1.69-2.53, $p < 0.001$). In total, 10,126 non-attenders entered Phase 2. Amongst non-attenders, SSK sent increased uptake at 12 months (odds ratio 1.51, 95% C.I. 1.20-1.91, $p = 0.001$), as did timed appointments (OR 1.41, 95% C.I. 1.14-1.74, $p = 0.001$). A health economic analysis found both timed appointments and unsolicited SSK carried a high certainty of being cost-effective.

Conclusion:

Timed appointments for women offered cervical screening and SSK sent to non-attenders at six months are likely to be cost-effective means of increasing uptake. HPV vaccination is associated with increased uptake of cervical screening by young women.

O-12

CIN AND CERVICAL CANCER AMONG WOMEN ATTENDING COMMUNITY BASED HEALTH CAMPS IN BANGLADESH

Ashrafun Nessa, Quayuma Khanam, Romena Afroz, Sadia Mahbuba, Israt Farhana Farhana

Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh

Objectives:

To find out cervical pre-cancer and cancer among women attending health camps at upazila health complexes (UHCs) with existing services of cervical cancer screening. To follow their management and observe constrains for availing the screening services.

Methods:

A cross sectional study was carried out at 96 health camps at UHCs in 40 districts from June 2012 to June 2014. A total of 52651 women attended the 3 or 4 days long health camps for screening cervical pre-cancer and cancer by Visual Inspection of cervix with Acetic Acid (VIA). VIA positive women were referred to the colposcopy clinic of BSMMU and nearer medical college hospitals for further management.

Results:

On an average 548 women attended each health camp. Among 52651 screened women, 4.7% were VIA positive and among them attendance of 890 (35.9%) in the colposcopy clinics could be recorded. On colposcopy examination 36.5% had low grade lesions, 15.3% had high grade lesions and 1.1% had cervical cancers. 24.0% women with cervical pre-cancers were managed by LEEP and 12.8% were managed by cold coagulation. About half of the screen positive women did not attend the colposcopy clinics of which, about half could not be communicated over telephone.

Conclusion:

The non-attendance to colposcopy clinics might be too much distance to the colposcopy clinics, attendance to the other health care services, financial crisis, lack of family support and social stigma. Colposcopy and treatment services as 'one stop service' along with the referral of difficult cases to colposcopy clinics may be effective for reduction of cervical pre-cancer and cancer.

POSTER ABSTRACTS

P-1

HIV SCREENING IN WOMEN WITH HIGH GRADE DYSKARYOSIS ON CERVICAL CYTOLOGYA SNAPSHOT AT THE BRADFORD EXPERIENCE

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¹Bradford Royal Infirmary, UK, ²St James's University Hospital, Leeds, UK

There is a debate about the value of offering HIV testing to all women attending colposcopy clinic. It is thought this will increase early diagnosis, reduce treatment morbidity and disease transmission. However the logistics and take-up of this programme can be enormous. We tried to implement offering HIV testing to women with high grade disease.

A **snapshot** at our practice for the year 2015 is below:

Initial referrals = 200 Women offered testing = 31

Women who accepted test = 5 (none tested positive): 1 woman was currently HIV +ve on HAART. Of the 24 test declines, 5 had an unknown recent (the last 0-4 yrs) HIV status

Discussion:

Identified factors behind the low uptake include

- 1) Staff attitude: This includes forgetting to offer the test in a rather busy clinic and some degree of anxiety whilst counselling the women.
- 2) Patient's reluctance: efforts to reduce anxiety by counselling which ate into the already short clinic time have not been effective.
- 3) Logistic problems: no in-house phlebotomists, budgetary pressures and time pressures in busy clinics
- 4) HIV stigmatisation: could offering HIV test to all new patients to the colposcopy clinic enable "normalisation" as has been seen in Antenatal care. More detailed information could then be sent out with all new appointments about HIV testing.

According to the NHSCSP Colposcopy PAG meeting report March 2015, section 11.9:....."All colposcopists should be cognisant of the increased risk of HIV infection in women with multifocal disease and early recurrence of disease. Consideration should be given to offering HIV testing in this setting. The routine screening of women attending colposcopy clinics is under review by the Advisory Committee on Cervical Screening and further advice from will follow in due course. "This advice may well provide a realistic approach to our challenges as detailed above.

P-2**THE COLPOSCOPY OUTCOMES FOR NEW REFERRALS OF HIGH RISK HPV SMEAR WITH NEGATIVE CYTOLOGY REVIEW OF 12 MONTHS' REFERRALS TO COLPOSCOPY SERVICES IN CUMBRIA**

Oudai ALI, Corene Veitch

Northcumbria University Hospitals, Cumbria, UK

Introduction

Since introduction of screening by HPV in 2012 there appears to be group of referrals where the smear is HPV high risk is positive however the cytology is negative.

Methods

This is a year sample of new referrals (total number 129 cases) of HPV positive smears and cytology negative included from October 2014 to October 2015 in Cumbria involving two centres at West Cumberland hospital and Cumberland infirmary. The colposcopy conclusion was followed up as well the histology.

Results

There were 10/129 (7.75%) failed to attend on two appointments. Out of the attended cases there 35/119 (29.4%) cases there was previous smear abnormality in the past not related to the new referral; 25 cases high grade, 4 cases low grade, one case CGIN and one micro invasion, and 4 unknown results of previous history. The colposcopy opinion of the 119 cases was as follow; high grade lesion 3/119 (2.5%), HPV 74/119 (62%), low grade lesion 21/119 (17.65%), no abnormality 15/119 (12.6%), unsatisfactory 6/119 (5%).

80/119 (67.2%) had cervical biopsy done and no see and treat LLETZ was done. Biopsy result were as follows; CN1 15/80, CN2/3 10/80, HPV 36/80, normal 19/80.

Out of a total of 119 referrals with actualised attendances there were 10 cases where loop treatment was recommended in which 8 had later confirmed high grade one low grade and one declined treatment.

Conclusion

This new group of referral apparently increased the workload of the colposcopy service with noted increased anxiety on the patient side. There was 10 high grade lesions proved on biopsy out of the 119 patients seen. It is difficult to explain why the cytology was negative in cases where there was high grade lesion found. This study supports the value of primary screening with HPV over cytology.

P-3**AUDIT OF OUTCOME OF WOMEN REFERRED TO THE COLPOSCOPY CLINIC AT WEST SUFFOLK HOSPITAL (WSH) WITH A NEGATIVE SMEAR AT TEST OF CURE (TOC) AND POSITIVE TEST FOR HIGH RISK HUMAN PAPILOMA VIRUS (HR-HPV)**

Nada AL-Shammari, Rukhsana Mohammed, Malini Prasad

West Suffolk Hospital, Bury ST Edmunds /Suffolk, UK

Aim:

To see whether colposcopic assessment is required for women with a negative smear and positive HR-HPV test at TOC.

Background:

As recommended by NHS Cervical Screening Programme all women who have been treated for CIN should undergo test of cure with a cervical smear at 6 months. If cytology is negative the specimen is tested for HR-HPV and if this test is positive they should be referred for colposcopic assessment. This has led to an increase in colposcopy referrals.

Material and Methods:

Retrospective clinical audit included all the referrals to the colposcopy clinic with a Negative smear and Positive HR-HPV. Audit period- 1.4.2014 to 29.12.2015.

Data collected using Cyres, Evolve system and notes.

We looked at the demographic variables such as age, smoking and history of previous treatment for abnormal smear.

Results:

Out of 1959 referral to the colposcopy clinic during this period, 220 (11%) were directly referred from the screening programme with a negative smear and positive HR-HPV at TOC.

220 included

* 113 (51%) had normal colposcopy.

* 75 (34%) had CIN1 and required a repeat smear in 12 months.

* 4 (1.7%) required further treatment, out of these 50% are non-smoker, all of them they have no previous treatment for abnormal smear and 75% are less than 35years old.

Conclusion:

As only 1.7% of women referred with a negative smear needed treatment we suggest a smear be repeated in 12 months rather than referral to colposcopy to reduce pressure on clinics

P-4

AN AUDIT OF THE CLINICAL REFERRALS TO COLPOSCOPY CLINIC IN WIRRAL UNIVERSITY TEACHING HOSPITAL*Khadija Ashraf, Nahid Gul**Wirral University Teaching Hospital, UK***Introduction**

The NHS CSP guideline 20 recommends that women with symptoms of cervical cancer and an abnormal cervix should only be referred for colposcopy if other common causes have been excluded and they have been examined by a gynaecologist experienced in the management of cervical diseases.

Method

It was a retrospective audit. The aim of the audit was to see compliance with national guideline for the clinical referrals and incidence of cytological abnormalities in these referrals. The duration was 12 months between Jan - Dec 2014. Data was collected from the info view data collecting system. There were 280 women referred with suspicious looking cervix and 250 with suspicious symptoms during this duration.

Result

There were only 47/530 (8.8%) patients who were referred from gynaecology clinic.

Among the women referred with suspicious cervix on colposcopy findings were of invasion in 3 (1%), high grade in 10 (3.5%), low grade in 15 (5.3%) and glandular in 3(1%). Biopsies were done in 73 cases (26%). The result of the biopsy showed invasion in 2 (0.7%), CIN3 in 2(0.7%), CIN2 in 2 (0.7%) and CIN 1 in 13 cases (4.6%).

Among the women referred with suspicious symptoms on colposcopy findings were of High grade in 14 (5.6%), low grade in 27 (10%) and glandular in 1(0.4%). Biopsies were done in 90 cases (36%). The result of the biopsy showed no invasion, CIN3 in 2(0.8%), CIN2 in 7 (2.8%) and CIN 1 in 22 cases (8.8%).

Conclusion

Most of the patient being seen in colposcopy clinic were not seen by a gynaecologist before referring. The incidence of finding cytological abnormalities was low in clinical referrals. This audit demonstrates a need to highlight correct referral routes in primary care relating to clinical abnormalities of the cervix.

P-5**AN AUDIT TO SEE COMPLIANCE OF LARGE LOOP EXCISION OF TRANSFORMATION ZONE CARRIED OUT IN WIRRAL UNIVERSITY TEACHING HOSPITAL WITH NATIONAL STANDARDS**

Khadija Ashraf, Nahid Gul

Wirral University Teaching Hospital, UK

Introduction

The Cervical Screening Programme (CSP) aims to reduce the number of women who go onto develop cervical cancer by detecting and treating pre-invasive disease which may otherwise lead to cancer. Incidence and mortality rates in England have fallen considerably over the past 20 years.

Aim

To measure the compliance of our large loop excision with the standards set by National Health Service Cervical Screening Programme (NHSCSP) document 20.

Method

It was a retrospective audit. The aim of the audit was to see if we are compliant with the standards set by NHS CSP. The duration was 12 months between Jan – Dec 2014. Data was collected from the info view data collecting system.

Result

There were 227 excisions done during this time period at our hospital.

- The specimen was removed as single sample in 96.4%.
- In 94.2% of ectocervical lesions a tissue depth of greater than 7 mm was removed.
- When treatment at first visit was done for borderline and mild dyskaryosis CIN was identified in 89% cases.
- There was only one woman over the age of 50 years who have CIN 3 at the endocervical margin and she had repeat excision performed.
- All women needing treatment were informed that treatment will be required and their consent, either written or verbal, recorded.
- All women needing treatment had a colposcopic assessment.
- All treatments were recorded.
- The proportion of women managed as outpatients with local analgesia was 96%.
- The proportion of women treated at the first visit who have evidence of CIN on histology must be 97.3%

Conclusion

We were compliant with most standards. There were only two standards where we were marginally non compliant. The results were discussed in our audit meeting and sent to the colposcopist to increase compliance.

P-6

MANAGEMENT OF HG LESION (CIN2) AT COLPOSCOPY CLINIC, UNIVERSITY HOSPITAL LEWISHAM

Olabisi Folayan, Yuliya Ashton, Dhiraj Uchil, Dante Zamblera, Adeboye Jolaoso

University Hospital Lewisham, London, UK

Aim of audit

To review a cohort of women who have been diagnosed CIN2 during Colposcopy Visit

To calculate the proportion of women with focal CIN2 on punch biopsy

To assess how many women once diagnosed CIN2 on Punch Biopsy were treated by local excisional biopsy and HG lesion is confirmed on final histology.

To observe how accurate was colposcopic prediction of HG lesion in cases of focal CIN2

To compare obtained results in our department with similar national statistics data

Method

4 years retrospective cohort study (2010-2014)

Composcope, Radius and Open Exeter systems were used to collect the data

Spreadsheet Excel 2013 was used to analysed data

Audit benchmarking document NHS CSP Colposcopy management programme, 2nd revision, 2010

Findings

A group of women with focal CIN2, had Treatment for CIN2 lesion by excisional biopsy after MDT review, in the histology report HG lesion was confirmed in 15 (60%) of cases

Accuracy of detecting of focal CIN2 lesion at colposcopy was 6 cases out 15 (40%) compared to the accuracy of detecting of extensive CIN2 lesion - 53 out 92 (58%)

P-7

CONSENT PRIOR TO LLETZ*Trevor Balling, David Semple**The Countess of Chester Hospital NHS Foundation Trust, UK*

At present in our unit written consent for loop excision is only required for patients undergoing the procedure under general anaesthesia. Prior to loop excision under local anaesthesia in clinic verbal consent is obtained by a tick box on the colposcopy database. We had concerns that varying degrees of information were being received regarding risks of loop excision depending on whether local or general anaesthesia was being used. Particular concern was around the varying information given in relation to risks to future pregnancy after loop excision

Methods

A retrospective audit of all loop excisions during 2014 was undertaken. All patients undergoing GA loop excision had formal written informed consent taken. All patients having loop in clinic had given verbal consent but in only 8/235 were risks formally documented in the casenotes.

Recommendations

All patients undergoing loop excision regardless of anaesthetic must have full written consent

Actions

Procedure specific consent form designed for loop excision to be used for all patients to make the process of consent more efficient and standardise risk.

Procedure specific consent form to include risk to future pregnancy and possibility of cervical length scanning in any future pregnancy.

Re-audit in 12 months

P-8

PREGNANCY TESTING PRIOR TO LOOP EXCISION IN OUTPATIENTS*Trevor Balling, David Semple**The Countess of Chester Hospital NHS Foundation Trust, UK*

Current Trust guidance on “Pre-operative detection of pregnant patients undergoing interventional procedures” states that women having a procedure under local anaesthetic only require a pregnancy test if it might have a direct impact on pregnancy. The guidance specifically mentions loop excision. Patients undergoing loop excision under general anaesthetic have a routine pre-op pregnancy test as part of the WHO theatre checklist the practice in clinic was felt to be variable.

Method

A retrospective audit of all patients undergoing a loop excision in clinic in 2014 was undertaken. 235 pre-menopausal patients were included in audit. Only 6 had a formal pregnancy test done prior to loop excision. 140 had documented on the colposcopy database that the patient stated that she was not pregnant but none had this confirmed by pregnancy testing. The remaining 89 had no documentation at all in relation to possibility of pregnancy although 52 had their LMP documented and only 4 had contraception documented.

Recommendation

All pre-menopausal patients must have pregnancy testing prior to loop excision under local anaesthetic regardless of LMP and contraception history to meet trust guidance.

Actions

All pre-menopausal women to have a documented negative pregnancy test prior to loop excision under local anaesthetic.

Colposcopy database to be amended to include pregnancy testing as mandatory drop down box.

Contraceptive history and LMP also to be mandatory fields on database.

P-9

COLPOSCOPY MDT AUDIT AT GSTT

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Background:

Colposcopy and Programme-Management-Guideline-20 set standards for improving quality of care for women referred to colposcopy for challenging cases like mismatch between cytology/histology, glandular abnormalities, cervical cancer, difficult cases, management under 25years old etc. There is emphasis on frequency of meetings, attendance, teaching and training.

Aim and Objective:

GSTT has the largest colposcopy unit in London aim is to provide high-standard of care for local population. Objective was to evaluate whether we are compliant with the standards.

Methodology:

Local SOP for colposcopy MDT was reviewed and data captured over 6 months January-June 2015. Resources used were electronic records of MDTs and colposcopy database Viewpoint.

Results:

There were nine colposcopy MDT meetings. The number of cases discussed were (n=109) average 13/session. Average age was between 25 to 30years. Discrepancy between cytology/histology/colposcopy was the main reason (n=60). Cytology over recall 7% (n=12), cytology under recall 11% (n=6), cytology concordant 77% (n=44). Histology overall 2% (n=1), under recall 11% (n=5) concordant 87% (n=39). MDT decisions: conservative approach 52% (n=30), treatment 24% (n=14), HPV testing 15% (n=9), discharge 9% (n=5). Young girls under 25 years with CINII (n=7) mainly conservative approach and only three were treated as abnormality persisted. Colposcopy team Consultants, nurses, cytologists and histopathologist attended >50% of the meetings compared to gynae-oncologists and trainees who were able to attend <50% of the meetings.

Conclusion: Colposcopy MDT is providing high quality of care. However gynae oncologists and trainees were unable to attend 50% of the meetings. All cancer cases and glandular abnormalities were also discussed in gynae oncology MDT as GSTT is a cancer centre.

Recommendations: A colposcopy MDT proforma developed to capture indication, discussion and outcome to be filed in the notes. Ensure outcomes entered in colposcopy database Viewpoint as well as circulated in electronic format to relevant team members.

P-10

USE OF DIGITAL SPECTRAL IMAGING SYSTEM (DySIS) IN COLPOSCOPY- A QUALITY IMPROVEMENT PROJECT

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Objective: To validate that:

DySIS colour coded map is more sensitive than conventional colposcopy in detecting high-grade lesions in low grade referral smears and can provide improved guidance for biopsy.

Materials And Methods:

Prospective trial- Jan- March 2015

Women referred for colposcopy with low grade smears were examined with DySIS.

The colposcopy impression and DySIS assessments were compared with consensus histology reports of biopsies.

Focused on LG referrals (Borderline and Mild smears)

Results:

We had 298 cases. We focused on LG referrals (Borderline and Mild smears), and the data showed:

52 had a biopsy; 6 had CIN2; 3 had CIN3, so a total of 9/52 (17%) had High-grade disease on histology.

Of these 9 cases who had biopsies, the DySIS map indicated "High grade changes" in 7/9 (78%); the Colposcopist had indicated "High grade changes" in only 3/9 (33%) by conventional assessment.

Conclusion:

DySIS is more sensitive than colposcopy in detecting high-grade lesions in the background of low grade cytology and can provide improved guidance for biopsy. Use of DySIS for detecting high grade lesion would mean that treatment can be offered sooner rather than offering repeated follow up examinations. This would release capacity in the colposcopy service and also reduce the anxieties for the patients associated with multiple attendances in the colposcopy clinic.

P-12

REPORT REVIEWING REFERRALS TO THE COLPOSCOPY CLINIC AT BRADFORD TEACHING HOSPITALS FOUNDATION TRUST TO INVESTIGATE IF THE CERVICAL SCREENING PROGRAMME IS PROVIDING AN EQUITABLE SERVICE TO THE POPULATION FROM WHICH IT SERVES

Suzanne Taylor¹, Anne Connolly²

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“Screening is the process of identifying individuals who appear healthy but may be at increased risk of disease or condition. The process is not perfect and in every screen there are a number of false positives and false negatives. The NHS cervical screening programme is available to women aged 25 to 64 in England. All eligible women who are registered with a GP automatically receive an invitation by mail”. Cervical Screening Programme Overview, Public Health England April 1st 2015

The purpose of this study is to undertake a retrospective pilot audit of the first 100 new referrals made to the colposcopy clinic at BTHFT from November 2015 onwards and compare it to the first 100 new referrals from November 2012. The aim of this short audit is to assess whether the ethnicity of women attending the colposcopy service reflects that of the Bradford population and to use any evidence to ensure that the cervical screening access to the different population groups is equitable and appropriate.

Following the audit the aim would be to share any results with local CCG's and PHE in order to instigate and promote review of the cervical screening programme locally and Nationally in order for it to be considered an equitable screening programme.

P-13

REVIEW OF CINII MANAGEMENT AT GSTT AUGUST 2014-2015

Matthew Denham, *Gulnaz Majeed*

Guys and St Thomas NHS Foundation Trust, London, UK

Background:

There is uncertainty regarding natural-history of CINII. Several-studies suggest CINII behave more like CINI rather than CINIII with 50% chance of regression and 50% chance of progression. In young-nulliparous women, its worthwhile to follow conservative-approach with close follow-up till cytology/histology reverts back to normal. Little is known about regression-rates for CINII in women >25years. NHS-Public-Health has set a key-performance-indicator for HSIL (CINII-III) to be treated within 4-weeks of colposcopy receiving the result of diagnostic-biopsy-histology at $\geq 90\%$ of cases.

Aim and Objectives:

To assess the number of CINII confirmed in the unit, review management and assess Units performance against KPI.

Methodology:

All women diagnosed to have CINII at some stage were identified by Unit-Colposcopy-Database-Viewpoint introduced in Aug 2014 for 13month-period. Data captured on a proforma, results cross-checked on EPR.

Results:

Number of patients diagnosed with CINII(n=374).

Age range: 19-65years average-age 30years

Referral indications:

Abnormal cytology(n=349), borderline(n=102), mild(n=145), moderate(n=58), severe(n=44)(invasive n=2)

Clinical indications (n=25)

Conservative-approach (n=34)

MDT-discussions(n=22)

LLETZ (n=334), GA(n=21) LA(n=313), complete excision(n=215)

Ablation (n=6)

Time interval between

Clinic appointment and diagnostic biopsy: 0-46 days, average-agreed 7days

Histology on EPR: (0-18 days), average <7days

Diagnostic biopsy and treatment within 4weeks (n=79) 24% vs standard $\geq 90\%$

Clinic appointment and treatment within 4 weeks (n=25) 7.5%

TOC normal (n=162), HPV+ve (n=44), mild (n=3), borderline (n=1)

Conclusion

Only 9 % (n=34) of CINII were managed conservatively, majority 89% (n=334) had excision. Only 2 % (n=6) were treated with ablative-techniques. Treatment within 4 weeks of the colposcopy receiving the result was in 24% of cases.

Recommendations:

A national audit of management of CINII needs to be undertaken.

Each unit need to agree with Histopathology-Department timeframe for reporting/recording in colposcopy unit (7days).

Internal audits to confirm compliance/explore reasons when breached.

Reference.

1. NHS public Health Functions agreement 2015-16. Service specification 25 Cervical Screening

P-14

AUDIT OF CGIN FINDINGS: HOW IS IT DIAGNOSED AND HOW CAN THIS INFLUENCE TREATMENT?*Linda Farahani, Alexander Laziridis, Deirdre Lyons**St. Mary's Hospital, London, UK***Background**

HGCGIN (high-grade glandular disease): how is it diagnosed in Colposcopy practice?

Aims

To assess whether HGCGIN is increasing, investigate the route to diagnosis, and the treatment outcomes. We assessed the contribution of punch biopsy to the diagnosis.

Methods

Audit proforma created and Excelicare database accessed to identify patients diagnosed with CGIN between 2006-2015

Age, referral cytology, treatment, treatment outcomes and follow-up data were collated.

Results

72 patients were diagnosed with HGCGIN on excision biopsy. The majority of these (61) were diagnosed on punch biopsy prior to treatment

The rate appears to be increasing with 15 diagnosed with HGCGIN in 2014 and 2015.

The referral cytology for 32 patients was atypical glandular cells (AGC), and 8 with borderline glandular. The remaining 32 patients with a final diagnosis of HGCIN did not have a glandular abnormality on cytology (44%).

Mean age was 29 years old. Every patient diagnosed with HGCGIN had cervical excision, barring one who refused.

Five patients had repeat cone biopsies for incomplete excision (2 had negative repeat cone biopsies). One patient had 3 excisions prior to agreeing to hysterectomy, as CGIN remained present at the endocervical margin on the third cone biopsy. One patient had clear margins after third cone, awaiting follow-up. 1 carcinoma was diagnosed after 2 previous treatments elsewhere.

NETZ was the preferred treatment for CGIN and yielded an acceptable clearance rate. Diathermy artefact was not a difficulty in margin assessment.

All patients were discussed at MDT and follow-up for those with clear margins showed LGCIN in 5%, but no recurrence of HGCGIN.

Discussion

Whilst we do not advocate punch biopsy as a method of assessment of women referred with of AGC, the finding of HGCGIN on punch biopsy influenced both length and type of treatment excision. Rates of HGCIN appear to be increasing

P-15

PATIENTS EXPERIENCE OF COLPOSCOPY AT LEWISHAM HOSPITAL COLPOSCOPY OUTREACH CLINIC, BARING ROAD*Olabisi Folayan, Shasi Arora, Dante Zamblera**University Hospital Lewisham, London, UK***Introduction:**

There is evidence that women suffer negative psychological effects from receiving an abnormal smear result and the need for subsequent investigation. Women have negative reactions to the intrusiveness of gynecological examination and those attending for Colposcopy are particularly anxious. Provision of information regarding the procedure aids compliance and may alleviate anxiety.

Aims:

This study was designed to gain insight into women's experience of Colposcopy to ascertain whether changes to practice or environment were required.

Methods:

50 women attending Colposcopy were given a questionnaire. They were encouraged to recommend and suggest changes to improve the service.

Results:

Written information regarding colposcopy was received by 98% of women with the appointment letter. 80% received reminder letters for colposcopy and 80% found reminder letter useful.

At colposcopy, 98% of women received verbal information regarding the procedure. 80% were seen on time, and 10% within 15 minutes. All the patients found the department clean and tidy. Information detailing aftercare was received by 96% and 90% found procedure as uncomfortable as expected, 100% felt their dignity was respected. 100% found reception staff friendly and welcoming.

Some of the women recorded extra ethnicity codes that were not included on the questionnaire as their ethnicity and suggest we add them to the options for patients to choose from. The patients found the clinical staff nice and helpful.

Conclusion:

Most women were happy with the care they received. However, there remains scope for improvement in waiting times.

P-16

COLPOSCOPY FOLLOW UP IN WOMEN WITH NORMAL SMEAR AND POSITIVE HPV TEST IN A DISTRICT GENERAL HOSPITAL

Ballari Ghosh, Malcolm Padwick, Radhika Vikram, Ade Sanusi

Watford General Hospital, UK

Introduction

The NHS Cervical Screening Programme for England announced that from April 2011 HPV testing would be incorporated into the programme. All women who are negative for high risk HPV DNA, including women with borderline changes or low grade, are discharged back to routine screening. We did a retrospective study in a District General Hospital to follow up women with normal smear and positive HPV test.

Objectives

Colposcopy follow up of women with normal smear and positive HPV between January - December 2015.

Methods

The study analysed info-flex generated data between January 2015 and December 2015. Total number of women referred to colposcopy in this period were 99.

Results

Age range of patients referred were between 20 - 60 years of age.

Among the 99 patients, 12 had previous LLETZ treatment for CIN1/2.

Colposcopy findings in this group showed normal colposcopy in 11 (91.6%).

Biopsy showed HPV positive in 1 patient (8.3%).

Out of the 87 patients remaining, 17 patients (19.5%) had low grade colposcopic appearance. Biopsy findings in this low grade group showed 3 (17.6%) patients with CIN1, 5 (29.4%) with HPV 9 (52.9%) patients had normal biopsy results.

Out of the remaining 70 patients 3 had unsatisfactory colposcopy.

Out of 67 patients 2 had biopsy (uncertain reason) which was normal. One patient had HPV.

No cases of high grade colposcopy findings or CIN 2/3 or invasive cancer were detected in this group.

Conclusion

The aetiological relationship between the high risk oncotypes of the human papillomavirus (HPV) and cervical cancer means that the presence of high risk HPV in the cervix increases risk of CIN and its absence implies virtually no risk at that time. Our study demonstrated that the national guidelines have been adhered to in our unit.

P-17

COLPOSCOPY OUTCOME AND FOLLOW-UP OF WOMEN LESS THAN 25 YEAR OLD: A RETROSPECTIVE STUDY OVER 1 YEAR IN A DISTRICT GENERAL HOSPITAL

Ballari Ghosh, Malcolm Padwick, Selvi Radhika Vikram, Ade Sanusi

Watford General Hospital, UK

Introduction

The NHSCSP invites women at 25 years of age for their first cervical smear.

Objective

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

Methods

The study analysed the info-flex generated data between January 2015 and December 2015. The total number of colposcopy referrals in 2015 were 3359. The data was then further analysed to achieve our objectives.

Results

We analysed the data for 75 patients who were GP referrals for persistent post-coital bleeding as per the NHSCCP referral criteria.

2 patient details were missing on Info-flex.

Average age of the referral group was 20 years (Range 16-24 years).

Colposcopy findings were 44% normal, 24% low grade, 5.3% high grade, 13.3% cervical ectropion, 6.6% cervicitis, 1.3% HPV changes.

Of the low grade group (18/75), 16.6% normal, 27% had HPV changes, 44.4% had CIN1 on biopsy. 11.1% did not have a biopsy done.

Of the high grade group (4/75), 2 patients were normal, 1 patient had CIN2, 1 patient refused biopsy.

Conclusion

Of the group studied 44% had normal colposcopic findings.

In the low grade group 44.4% had CIN1 on biopsy.

In the high grade group only 1 patient had CIN 2.

In this group of patients no case of invasive cervical cancer was detected.

This study supports the NHSCCP criteria of referring woman under 25 years to the colposcopy unit for post-coital bleeding.

P-18

WHAT ARE WE NOT TELLING WOMEN? AN EXPLORATION OF THE TOPICS DISCUSSED ON INTERNET FORUMS BY WOMEN ATTENDING COLPOSCOPY

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Background

Internet discussion forums have grown in popularity and are frequently used to discuss health related issues, to seek advice and to ask questions about other people's experiences of a condition or treatment. Reviewing such discussion forums may help identify areas where current information provision is weak or lacking. We investigated discussions about colposcopy on internet forums.

Methods

We reviewed recent discussions on two internet discussion forums, and identified those which related to colposcopy. Thematic analysis was used to explore what topics participants discussed, and how these were discussed.

Findings

A common theme related to women who had been referred for colposcopy seeking information as to what to what they should expect to happen. We will present information about the type of information they were looking for, and they type of information that was posted in response to the query. We will also present other common themes emerging from the data.

Implications

The questions that are being asked on discussion forums may help us identify gaps in the type of information that is routinely provided to women.

P-19

THE NURSE-LED POSTCOITAL BLEEDING CLINIC

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Sheffield Teaching Hospitals NHS Foundation Trust, UK

Introduction:

A dedicated nurse colposcopy led PCB service was developed and commenced on the 13th June 2014.

This service review assesses the functionality of the PCB service over its first twelve months of practice.

Methods:

Analysis of the PCB database, including all women attending the PCB clinic between 13th June 2014 and 13th June 2015. Data analysed using baseline statistics.

Results:

362 women seen over 53 clinics; DNA rate 8.5%; New to follow up appointment ratio of 44:1

Majority of referrals via primary care (91%); 29 women internally referred from gynaecology.

66% referred with PCB but referral indications often complex in nature with patients presenting with a multitude of complaints.

Diagnoses at clinic were varied but as expected no woman attending had a diagnosis of cancer.

Level of consultant input at first visit was lower than expected at only 2%. Consultant required for results review in 86 cases (24%); all of which were either for scan or pipelle biopsy results.

46% discharged at first appointment; 93% discharged as a final outcome once all awaited results had been sanctioned.

Conclusion:

The nurse-led PCB clinic provides a valuable service relieving pressures on both the consultant-led fast track service and colposcopy clinic by seeing and treating patients that have historically been inappropriately referred to either service respectively.

A minimal amount of consultant involvement was required.

New to follow up ratios, DNA rates, and direct discharge rates are excellent and the nurses have shown to provide an excellent 'one stop' service.

P-20

AUDIT ABOUT (LLETZ) LARGE LOOP EXCISION OF THE TRANSFORMATION ZONE PROCEDURES IN MAFRAQ HOSPITAL

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Mafraq Hospital, Abu Dhabi, United Arab Emirates

Background:

Cervical cancer is second common cancer in women worldwide, Treatment at early stage is advantageous for pts & community,

Objectives :

To compare performance of LLETZ Procedures in Mafraq Hospital with standard set by NHSCSP,HAAD(Health Authority Of Abu Dhabi)in collaboration with BSCCP .

Designs:

Retrospective study collected from OR register book, date was entered into Performa sheet, results were analyzed manually.

Patients and Methods:

Sample size consisted of 16 pts underwent Colposcopy and LLETZ for abnormal colposcopy & histology during January 2014 March /22/2015 Demographic details of pts entered in Excel, age, parity, symptoms, contraception, smoking, index smear, colposcopy, biopsy, Loop excision, follow up. Histology was taken as gold standard.

Results :

6pts20-30yrs(37.5%),6pts30-40yrs(37.5%),4pts40-50yrs,25%.6 pts< P2 (37.5%),7 ptsP2-5(43.75%),3Pts grand multiparous(18.7 %).6pts symptomatic(37.5%),10pts asymptomatic (62.5%)1pt had end stage renal failure on dialysis(6.25%).2pts lactational amenorrhea(12.5%),6pts on contraception(37.5%),4 pts smoker advised to stop smoking (25%).3 pts had ASCU-H on smear(18.75%),3pts had ASCUS,HPV+ve(18.75%),3 pts had LSIL (18.75%),6pts HSIL (37.5%),1pt AGUS(6.25 %).low grade lesion(colpsocopy)4 pts (25%) had LLETZ(unsatisfactory colposcopy) and maternal age,CIN 2 in 8pts (50%),high grade lesions4 pts (25%).punch biopsy(colposcopy)10 pts(62.5%)6 had LLETZ(37.5%).CIN1(histology)2pts(12.5%).CIN 2-3 8pts(50%).LLETZ biopsyCIN3in10pts(62%),CIN2 in1pt(6.25%,CIN1in2 pts(12.5%).3pts -ve biopsy(18.75%)2 high grade lesion,1low grade lesion(colposcopy)&cytology, samples were reviewed by2reviewers who were blinded to original diagnosis, multidisciplinary histopathology and cytopathology team .Complete excision in13pts (81.25%)incomplete excision in3 pts(18.75%).

Follow Up:

5pts had -ve pap smear at 6/12(31.25%).3 pts defaulted clinic (18.75%),2 pts were pregnant (12.5%),6 pts under follow-up (37.5%).no test of cure HPV was done for previous pts .

Conclusion:

Success rate of LLETZ were as high as 81.5%,excellent compared to NHSCSP, complete excision & negative pap smear at 6 months follow up in half of pts, no test of cure HPV was implemented in 6 months follow up.

Recommendations:

Needs proper follow up of pts and education regarding course of disease, natural history of disease, implement HPV testing as test of cure. continue to audit rate of -ve loop excisions and results of colposcopic follow up.

References : BSCCP , NHSCSP Guideline cervical Screening Programme.

P-21

COMPARISON BETWEEN LLETZ VERSES FISCHER CONE IN THE TREATMENT OF CIN

Nada Hakkj, Sam Goerge

CLCH, London, UK

Audit was carried on for all cases who were treated for CIN from June 2014-2015 by LLETZ verses Fischer' Cone in achieving free margen during the excisional treatment. The conclusion was in achieving free margen was observed more than in the Fischer's Cone treatment than in the LETTZ group. The limitation was the size of cases of Fischer's cone cases were much less in number than the LETTZ group mainly due to the fact that the majority of the colposcopists were using the LETTZ rather than the Fischer for CIN treatment. Therefore another audit will be following from June2015-June 2016 to include more cases to study.

P-22

HOW ARE PATIENTS SUBSEQUENTLY DIAGNOSED WITH CERVICAL CANCER REFERRED TO COLPOSCOPY?*Phillippa Jackson, Sue Calvert**Bradford Royal Infirmary, UK***Introduction**

Previous audits have shown that only a small proportion of women with Fast Track referrals to colposcopy have positive histology, however we know this service plays a vital role in identifying them from primary care. The aim of this audit was to look at the route via which patients found to have cervical cancer have this diagnosis made, and potentially to improve our route of referral pathway.

Methodology

This was a retrospective audit, looking at all patients with histologically confirmed carcinoma of the cervix (01/01/13 to 31/12/15). Data was collected with regards to patient demographics, presenting symptoms (and time to diagnosis), smear history and recent smear results, and the department of initial referral.

Results

17/30 (57%) referred to colposcopy with abnormal smears directly from cytology /by the GP via the fast track pathway following the finding of a suspicious cervix (9 found to be symptomatic). 1 patient re-referred to colposcopy with abnormal smear, having originally presented with PMB 7 months prior.

Other routes of referral:

3 via Hysteroscopy, referred 2 week wait for PMB (unclear if cervix examined by GP)

3 Referred from other teams (urology/gastroenterology) after investigation for symptoms

3 acute gynaecology admissions

1 Follow up colposcopy after second LLETZ for CGIN

Conclusions

Although only a small number investigated via colposcopy are found to have positive histological diagnosis, it is clear that this service is an effective and important way of identifying these women from primary care.

Unfortunately we recognise a delay in referral - 3 patients were referred via hysteroscopy for PMB when examination revealed a frankly malignant cervix, and a failure to recognise key gynaecological symptoms such as PV bleeding outside an O+G setting. This highlights the importance of education of other professionals in order to identify and refer these women at the soonest opportunity.

P-23

DOES MODIFYING THE HPV TRIAGE FLOW CHART BY ADDING MORE COLPOSCOPY JUSTIFY THE EXTRA COST?

Michael Jones¹, Janka Briestenska¹, Wendy Dugmore², Marianne Wood¹, Paul Carter¹, Naheed Tahir¹

¹St George's Hospital, London, UK, ²Darent Valley Hospital, Dartford, Kent, UK

Introduction

Many colposcopy units throughout the UK have developed their own local protocols which are at variance with National ones. This study aims to address the question about whether modifying the HPV Triage Flow Chart with a higher level of colposcopy surveillance makes any difference to the clinical outcome in women presenting with low grade smears.

Material and Methods

610 patients were recruited from a District General Hospital (DGH) and 965 from a Teaching Hospital (TH). All had been referred with low grade HPV positive smears. The DGH followed the Triage protocol and the TH followed a modified triage of colposcopy surveillance rather than repeat GP smear at 12 months. From the computer database the final outcome measures were recorded.

Results

In the DGH setting, of the 610 colposcopy patients 73% had evidence of disease. In the TH 77% of 956 patients had disease. At the DGH 60% of patients were discharged to their GP for repeat cytology in 12 months. At the TH all patients remained under colposcopic surveillance regardless of whether they needed treatment. The average number of colposcopy visits was 3 per patient.

The DGH patients having repeat cytology at 12 months had a normal smear in 70% of cases and a low grade smear in 30%. None needed referral for further colposcopy. There was no difference in clinical outcome in the two groups.

Conclusion

In a DGH setting HPV Triage works well and avoids further colposcopic intervention in 60% of eligible patients. Local modification of HPV Triage resulted in more colposcopy visits and no difference in clinical outcome despite the extra cost involved both to the patients and the NHS.

Colposcopy services should aim to follow the National HPV Triage Flow Chart and discharge the majority of patients back to Primary care after the first colposcopy visit.

P-24

DOES CERVICAL BIOPSY HAVE AN EFFECT ON THE COLPOSCOPIC OUTLOOK FOR WOMEN REFERRED TO COLPOSCOPY WITH LOW GRADE SQUAMOUS CYTOLOGICAL ABNORMALITIES?

Ronald Joseph, Ballari Ghosh, Radhika Vikram, Ade Sanusi

Watford General Hospital, UK

Background

Colposcopy and directed cervical biopsy is the initial assessment done for women seen in colposcopy with cervical abnormalities. Conservative management is routinely offered to women diagnosed with HPV and CIN1. We wanted to establish if biopsy alone has an effect on the colposcopic outlook for women a year on following their first clinic visit.

Aim

We want to assess the effect of biopsy on the cervix based on colposcopy

Methods

We performed a cohort retrospective study on women referred to the colposcopy clinics at West Hertfordshire Hospitals between 1st January and 31st December 2014. Only women with low grade cytological abnormality and who had a biopsy were included. We looked at their colposcopy findings before biopsy and again 12 months later. All missing data were excluded. Women who were discharged or had treatment were also excluded. Data were obtained from the Trust colposcopy data base.

Results

There were 872 new patients with low grade cytological abnormalities. We looked at 255 cases before and 242 cases after biopsy 12 months on. At the initial review, the colposcopy assessment were; 100 (39%) normal, 153(53%) low grade, 17(6.6%), 3 (1%) other. A year later the colposcopic findings were; 103(42.6%) normal, 91(37.7%) low grade, 16(6.6%) high grade and 32(13%) other. Of the 32 cases biopsies were done in 2 cases. In 13 cases there were no data. These women were, pregnant, moved out of area, or had no data input. Before biopsy 59.6% of women had a gradable cervical abnormality compared to 44.3% a year on following biopsy.

Summary

Based on our findings it appears that having a cervical biopsy in women with low grade squamous cervical abnormality a year on biopsy could positively influence the colposcopic findings.

P-25

PATIENT EXPERIENCE AND REASSURANCE AFTER COLPOSCOPY WITH DySIS

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¹Bedford Hospital NHS Trust, UK, ²Princess Royal University Hospital (Orpington), Kings College Hospital NHS Foundation Trust, London, UK, ³Southend University Hospital NHS Foundation Trust, UK, ⁴Circle Health Nottingham NHS Treatment Centre, UK

Introduction

Patient experience is important for the UK cervical screening system that relies on compliance. Colposcopy is an intimate examination that technology could make more patient-friendly. The DySIS colposcope (DySIS Medical, Livingston, UK) allows mapping the cervical acetowhitening and provides advanced digital tools that can educate and reassure patients.

Design and setting

We used two patient questionnaires (June-December/2015) at four colposcopy clinics that adopted DySIS; one was given to patients having their first colposcopy ever, and another to patients that had prior colposcopy. Responses on a 1-10 scale, grading anxiety before/during/after the examination, perception about examination duration, feedback on device and the map, and whether it would be a colposcope-of-choice. Results are reported as median values.

Results

Overall, we collected 520 responses. Patients having their first colposcopy, thought that colposcopy with DySIS didn't take longer than their smear (median score 4); patients with prior colposcopy experience felt that this examination didn't take longer than their previous (median score 1). The self-reported level of anxiety, for all patients, dropped considerably after the examination. All patients reported that they understood the DySIS map (median score 9) and found that seeing it was reassuring (median score 9). Patients with previous experience, declared they preferred having it with DySIS (median score 10). Finally, patients reported that they would prefer to have any future colposcopies with DySIS (median score 10) and would recommend it to family/friends requiring colposcopy (median score 10). Results were consistent across the four hospitals.

Conclusion

DySIS was very well received by patients and was not considered intimidating or requiring longer examination times. Our findings indicate that it's a tool that improves patient experience and helps them understand better their condition, which is valuable in improving their overall experience and potentially helpful in reducing non-attendance rates at colposcopy clinics.

P-26

REVIEW OF 31/62 DAY WAITS FOR CERVICAL SCREENING PATIENTS AND SURVEY OF LONDON COLPOSCOPY UNITS INPUT IN THE PATHWAY

Deirdre Lyons

Imperial College Healthcare NHS Trust, London, UK

31/62 Day waits for Cervical Screening requires all referrals with high grade favours moderate dyskaryosis and above and cytology referrals suggestive of glandular neoplasia to be entered onto 'Cancer Waits' Pathway.

This survey aimed at London Colposcopy Units, looked at who obtained the patient level data and who entered it onto the Cancer Waits database. It also explored when and who took patients 'off' Cancer Waits pathway and how and when this decision was made.

A Survey was sent to all london Colposcopy Units with questions exploring the above. Respondents were from all 5 London areas (relatively evenly split). 44% were HBPC's and 20% Lead Colposcopists, 18% Colposcopy Co-ordinators and 37% CNS. Some of Lead Colposcopists and CNS were also HBPC's.

88% respondents knew about requirements for HG dyskaryosis and above cytology referrals to be added to 'Cancer Waits' pathway.

In most Units, Colposcopy Co-ordinator or CNS identifies patients to be added to the database. 18.75% respondents - Colposcopy Co-ordinators actually added the patients to the Cancer Waits database. The time taken to obtain the patients for the database entry was on average 1-2 hours per week.

The Cancer Services team takes patients off Cancer Waits in 81% of Units. There appears to be no consensus as to when patients are taken off Cancer Waits - with 76% respondents saying it was 'dependent on the case' and only 11% saying it was after Colposcopic opinion deemed 'not' cancer.

23% said that they were only removed after colposcopy MDT in all cases. 59% felt they had good communication with the Cancer Services team, with 31% only 'when Cancer Services team required information'.

A recent survey sent to Chief Executives in London about Cytology screening and Cancer Waits was only communicated to the Colposcopy team in 50% units.

P-27

RE-AUDIT: LLETZ IN ST.JAMES UNIVERSITY HOSPITAL, LEEDS*Vijayakumari Marimuthu, Hany Nagib**St James University Hospital, Leeds, UK***Initial audit:**

Initial retrospective audit between Dec 2009- Feb 2010 revealed improvement in obtaining single Loop (LLETZ), complete excision of CIN/CGIN and include macroscopic description in all cases.

Re-Audit Objectives:

To ensure women are managed in accordance with national guidelines, action plans from previous audit and for quality assurance in Colposcopy service.

Re-audit Methods:

A retrospective cohort of 204 patients who had undergone LLETZ between Dec 2011- Feb 2012 were identified through Colposcopy database and our theatre management system. Data were extrapolated from the Colposcopy database. Anonymised data was entered in excel sheet and analysed.

Results:

Of 204 patients seen in our Colposcopy clinic during the audit period, 79% referral seen for High Grade dyskaryosis, 10% referral for Borderline Nuclear Changes, 7% for Low Grade Dyskaryosis. 93% LLETZ performed under local anaesthetic compared to 87% in previous audit. In 88% cases, the Loop biopsy (LLETZ) was removed as a single specimen compared to 85% in previous audit. Histology confirmed CIN/CGIN in 171 cases (84%), Squamous cell carcinoma 7 (3%) cases. No abnormality identified in 26 (13%) cases. No difference noted on comparing to previous audit. Complete excision of CIN/CGIN found in 146 (84%) cases compared to 44%.

Among the follow up cases post LLETZ, 186 cases had cytology up to 18 months, 135 (66%) cases had cytology performed < 8 months, 16 patients failed to attend for the cytology. 96% had negative dyskaryosis noted in those who had cytology. 6 cases (3%) had repeat LLETZ between 3-6 months. High Grade CIN only in 3 cases with repeat LLETZ. All the cases had macroscopic description given in histology.

Conclusion:

Significant improvement noted in complete excision of CIN/CGIN but still room for improvement to obtain single loop specimen. We noted only 13% LLETZ performed by our Consultant Oncologists. Those with dyskaryosis were appropriately assessed by Colposcopy as recommended by BSCCP. Improvement in obtaining the follow up cytology.

P-28

AUDIT: QUALITY ASSURANCE IN THE COLPOSCOPY CLINIC*Karen Meadley, Ibraheem Hamoodi, Sikhar Sircar**NHS Lanarkshire, Wishaw, UK***Introduction:**

Colposcopy should be organised as a quality assured service and colposcopy clinics must work to meet the standards outlined in the NHS CSP Document 20.

Aim:

Two colposcopy clinics in two hospitals in NHS Lanarkshire were audited to ensure they are meeting national colposcopy quality standards.

Method:

The new referrals during the period between January and March 2015 were identified. Data included the date of referral cervical smear; date of referral to colposcopy clinic; date seen at colposcopy; grade of referral cervical smear; colposcopic opinion; biopsy results and treatment at first visit for the new referrals

Results:

The referral cervical smears consisted of 40% low grade, 26% borderline, 30% high grade and 4% glandular abnormalities.

The waiting time from date of referral to the date of colposcopy clinic shows that not all patients are being seen within the referral wait time recommended. 81% of the high grade cervical smears were seen at colposcopy within the two weeks and only 12% of the low grade and borderline cervical smears were seen within the 6 weeks as recommended.

All patients had either a directed biopsy or an excisional biopsy. The patients treated at their first visit had a high grade lesion on histology. The colposcopic opinion for high grade lesions had a positive predictive value of 71%.

Discussion:

The NHS CSP Document 20 sets clear standards. The referral wait time for high grade and glandular cervical smears should be 2 weeks and for low grade or borderline cervical smears should be 6 weeks.

The proportion of women treated at the first visit who have evidence of high grade lesion on histology must be >90%. In this audit all patients had a biopsy and those treated at first visit had a high grade lesion.

The positive predictive value of a colposcopic diagnosis should more than 65%.

P-29

AUDIT OF INVASIVE CERVICAL CANCER 2014: DIAGNOSIS, MANAGEMENT AND MORTALITY IN A LONDON TERTIARY REFERRAL CENTRE GUY'S AND ST THOMAS NHS FOUNDATION TRUST

Vikash Mistry, Savithri Rajkumar, Geoffrey Lane, Gulnaz Majeed

Guy's and St Thomas NHS Foundation Trust, London, UK

Introduction:

Regional Quality-Assurance-Reference-Centre (QARCs) provide data for an annual-nationwide-audit of Invasive-Cervical-Cancer, highlighting any deficiencies in the screening/diagnostic pathway. Disclosure of the review to patients has also been advised as Duty-of-Candour-Guidance. Hence an audit was undertaken at GSTT Cancer Centre to evaluate our performance.

Aims and Methodology:

Primary objectives were to assess the caseload of Cervical-cancer in 2014, analyse contributory factors (non compliance vs fault in screening/diagnostics), treatment pathway and compliance with the Duty of Candour guidance.

Secondary objectives were to assess epidemiological features and mortality rate.

Audit data was collected on all patients diagnosed with invasive cervical carcinoma at GSTT in 2014 from medical notes, Electronic-Patient-Record and the 'Open-Exeter' database.

Results:

Patients diagnosed with invasive cervical cancer (n=20). SCC (n=16, 80%) and adenocarcinoma (n=4, 20%)

Screen detected (n=9, 45%); 8 of these had a FIGO stage $\leq 1B$. Diagnosed secondary to symptoms (n=11, 55%) of which 2 had a FIGO stage $\leq 1B$.

Compliance with the NHSCSP was: (n=4, 20%) complete, (n=8, 40%) incomplete and (n=8, 40%) never had a smear.

FIGO stage $\geq 3B$ at diagnosis was only seen in those with either incomplete or no screening history.

Further review of past-screening confirmed cytological undercall (n=2) and delayed review interval following an index borderline smear (n=1).

Disclosure letter was offered to 85% (n=17) patients and only (n=3, 15%) accepted review of results.

All patients were appropriately treated.

Mortality rate was 10% (n=2) and both these women never had a cytology test prior to diagnosis.

Conclusion:

Screen-detected patients presented at a less advanced stage than those presenting with symptoms, confirming that NHSCSP is effective. In this audit only 20% of women adhered to the recommended screening intervals. The quality-review displayed a small number of cases of cytological undercall and acceptance of the disclosure review was low.

P-30**HIGH RISK HPV TESTING FOLLOWING TREATMENT FOR CERVICAL INTRAEPITHELIAL NEOPLASIA**

Maura Molloy

University Hospital Galway, Ireland

Aim

To determine the results of combined cytology and high-risk human papilloma virus (HRHPV) tests at 6 and 18 months postcolposcopy treatment at one Irish colposcopy centre.

Methods

All women who attended the centre's colposcopy smear clinic for a co-test 6 months (initial test) posttreatment were included in the audit (n=251).

Results

The results revealed negative HR HPV for 79% (n=198) of women tested 6 months after treatment and positive results for 21% (n=53). HR HPV testing was more sensitive than cytology and led to early detection of residual disease. No women with negative HR HPV had high- grade cytology.

Conclusion

HR HPV testing is more sensitive than cytology for the detection of persistent CIN. However, 19 women with positive HR HPV had a normal colposcopy with no persistent CIN detected. A national cost-benefit analysis is recommended to determine the value of the second co-test.

P-31

CONSERVATIVE MANAGEMENT OF CIN 2

Catherine Muggeridge, Gareth Beynon, Neitah Prietzel-Meyer

Frimley Park NHS Foundation Trust, UK

In 2012 a small audit was completed at Frimley Park Hospital, looking at conservative management of young nulliparous women with biopsy proven CIN 2. This demonstrated high rates of regression, following intense Colposcopist surveillance.

Following this, a further audit has been completed, looking at all patients with biopsy proven CIN 2 over a 5 year period. In total 63 patients were identified in this cohort. We report the results of this audit and discuss the role of conservative management of CIN 2 in this cohort of patients.

P-32

THE FOLLOW UP OF COLPOSCOPY PATIENTS FOLLOWING A FAILED TEST OF CURE SMEAR

Catherine Muggerridge, Gareth Beynon, Neitah Pietzel-Meyer

Frimley Park Hospital NHS Trust, UK

According to the NHSCSP a Colposcopy unit should expect 25% of patients to 'fail' the HPV test of cure (TOC) cervical smear six months post LLETZ treatment. In 2014, only 17% of patients, who had a LLETZ treatment at Frimley Park Hospital, had a 'failed' TOC smear. Nearly half of these patients (49%), had a negative smear, but were positive for high risk HPV.

NHSCSP guidance recommends Colposcopy for this group of patients. We report our results of the Colposcopic assessment for these patients.

P-33

COLPOSCOPIST PERFORMANCE

Catherine Muggeridge, Neitah Prietzel-Meyer

Frimley Park NHS Trust, UK

The aim of the audit was to establish if the department and each Colposcopist individually, met 4 specific NHSCSP standards. The study was retrospective, looking at patients Colposcoped between January - December 2014 using the data inputted onto Colposcopy database.

The standards audited were:

- The proportion of women treated at their first visit, who have evidence of CIN 2/3 or CGIN on histology, must be $\geq 90\%$.
- Excisional techniques should remove tissue to a depth >7 mm (95%)
- At least 80% of cases should have the specimen removed as a single sample
- Results communicated to the patient <4 weeks - 80% of the time or <8 weeks - 100% of the time

The department, as a whole, achieved the majority of the targets; however, it raised questions as to why some individual Colposcopists did not. The audit puts into question the value of each standard for an individual Colposcopist, examining the reasons behind why an individual Colposcopist may not achieve a standard, whilst still providing sound Colposcopic care.

P-34

A REVIEW OF PATIENTS WITH A HISTOPATHOLOGICAL DIAGNOSIS OF HIGH GRADE CERVICAL GLANDULAR INTRAEPITHELIAL NEOPLASIA (HG CGIN) OVER A 4 YEAR PERIOD IN THE WESTERN TRUST

Catriona Nugent, Tina Newell, Daniel Douglas

Altnagelvin Area Hospital, Northern Ireland, UK

Aim

To review cases whereby a histopathological diagnosis of HG-CGIN was reported and to ascertain if the appropriate management was adhered to according to NHSCSP Guidelines.

Background

Cervical Glandular Intraepithelial Neoplasia is the pre-invasive stage of cervical adenocarcinoma and exhibits similar morphological appearances to adenocarcinoma. Colposcopy itself lacks the sensitivity for diagnosing glandular lesions. The entire endocervical canal is at theoretical risk of glandular changes but 95% of CGIN extends within 25mm of the external os. Treatment has shifted from radical to more conservative management, depending upon the patient's desire for fertility.

Method

42 pathology report (39 patients) were identified with CGIN from March 2011-April 2015. Pathology reports and Electronic Care Records were used to gather information.

Results

Age ranged from 25-29, with 43.5% of patients being nulliparous. 25.6% of patients referred had a positive glandular neoplasia cytology. Only 1 of these patients was seen within 2 weeks. 11 referral smears were borderline and 15 demonstrated severe dyskaryosis. There were 3 incidental findings of CGIN in polyps/uterine specimens.

16 of 39 women had previously attended Colposcopy, 4 had a prior CGIN diagnosis. 6 punch biopsies and 33 LLETZ procedures were performed, 39.3% of these had adequate excision depths. Following LLETZ treatment, 54.5% had clear margins but 27.2%(9) still had CGIN involvement. 5 of these had further excision, 3 underwent hysterectomies with 1 patient awaiting follow-up.

Post-procedure cytology demonstrated 21 normal results (53.8%), 7 borderline changes, 2 severe dyskaryosis, 9 not yet performed and 1 DNA. No endometrial biopsies were taken.

Conclusion

It is imperative that clinicians follow the Two Week Pathway for urgent Colposcopy referrals regarding glandular cytology results. This only occurred in 10% of patients within this Trust. Over 25% of patients had persisting CGIN present within margins following LLETZ, however this was acted upon by re-excision/hysterectomy.

P-35

CERVICAL HPV TESTING REDUCES COLPOSCOPIC ACCURACY TO 50%: A COMPARISON OF THE ACCURACY OF COLPOSCOPIC ASSESSMENT AND TREATMENT OPTIONS BASED ON HISTOLOGY OUTCOME BEFORE AND AFTER THE INTRODUCTION OF HPV GENOTYPING

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¹Warwick Hospital, UK, ²University Hospitals, Coventry and Warwickshire, UK

A prospective assessment of colposcopic findings and correlation with histological diagnosis was undertaken in South Warwickshire (UK). Data was collected for the first year of HPV testing. All HPV Triage patients (first instance of 'mild dyskaryosis' or 'borderline' cytology) were tested for the HPV virus, and if positive were referred for colposcopic assessment. Accuracy of colposcopic assessment and correlation of colposcopic findings with results of histology. The assessment of the 'Positive Predictive Value' of colposcopy was calculated. The value of HPV genotyping as a prediction of high grade CIN was assessed.

When high grade disease was assessed colposcopically, only 51.3% of the biopsies confirmed CIN 2/3 or worse. For colposcopic low grade lesions, 40.6% of biopsies showed CIN 2/3. Even when the colposcopic appearance was HPV/ Inflammation, 16.7% of punch biopsies still showed high grade CIN. The positive predictive value (PPV) of a high grade colposcopic assessment for high grade CIN was 51% (20/39). The overall PPV at Warwick in the first year of HPV testing for all cytology referrals dropped to 71.8%. Where high grade disease was found on a punch biopsy, only 57.4% of subsequent LLETZ specimens confirmed the CIN 2 or 3. The subsequent LLETZ was negative for high grade disease in 42.5%, and negative for CIN in 4.25%. HPV genotyping can be a useful predictor of high grade disease HPV 16 - PPV 58.6%, HPV "Other" 16.5%.

In South Warwickshire 25.4% of women referred to colposcopy with minor cytological abnormalities and a HPV positive result have high grade disease, although the lesions are often small, and more difficult to assess. This results in a reduction of the accuracy of colposcopic assessment (PPV). Smaller areas of high grade disease may not always require a LLETZ. Testing for HPV genotype may help with future screening strategies.

P-36**ANALYSIS OF PATIENTS OF PERIMENOPAUSAL AGE REFERRED WITH HIGH GRADE DYSKARYOSIS TO COLPOSCOPY DEPARTMENT IN A DGH**

Nazima Parveen, Susan Wood, Ajay Sharma

Barnsley District General Hospital NHS Foundation Trust, South Yorkshire, UK

OBJECTIVES:

To study the outcomes of colposcopy in perimenopausal women who are referred with high grade dyskaryosis.

METHODOLOGY:

A Retrospective study of women referred for colposcopy with high grade smears between 2012 to 2015. Data was obtained from case records and colposcopy database in 52 cases.

FINDINGS:

Referral to colposcopy was made for severe dyskaryosis in 55.76%, moderate dyskaryosis in 38.46% and invasive in 3.84% of cases. Postmenopausal status was noted in 76.92% of cases and 9.6% were premenopausal. Smoking status was not recorded in 42.30%, while 21.15% of patients were smokers and 36.53% were non-smokers. Previous abnormal smears were noted in 23.07%, normal smears in 36.53% and was not recorded in 40.35%. Colposcopy findings were normal in 17.30%, high grade changes were noted in 57.69%, unsatisfactory colposcopy in 9.61% of women. LLETZ was performed in 51 of 52 cases, depth of loop was ≥ 7 mm in 82.35% and < 7 mm in 17.64%. Excision was incomplete in 44.44% of loops < 7 mm and in 30.95% of loops ≥ 7 mm. Histopathology showed high grade changes in 61.53%, invasive in 5.76% and normal in 26.92% of cases. Follow up smear in 6 months was normal in 69.23% and abnormal in 15.38%. High risk HPV was positive in 19.44%. Patients were referred for routine recall in 57.69% of cases, 19.23% were referred for repeat colposcopy, hysterectomy was offered in 7.69% and tertiary referral was made in 3.84% of cases.

In Patients with normal histology, colposcopy findings were normal in 28.57%, high grade changes in 50% and equivocal/unsatisfactory in 21.42% cases. They had normal smear history in 42.85% of cases and MDT discussion was done in 57.14%.

OUTCOMES:

As many as 27% of women had normal histology at LLETZ.

P-37

CLINICAL AUDIT OF WOMEN UNDERGOING LARGE LOOP EXCISION OF THE TRANSFORMATION ZONE (LLETZ) AT A DISTRICT GENERAL HOSPITAL DUBLIN*Tabassum Perveen**Tallaght Hospital, Dublin, Ireland***Objective**

To assess the quality of the LLETZ procedure in our colposcopy clinic.

Methodology

Medical records of 109 women who underwent the LLETZ procedure over a 3 month period in 2015 at Tallaght Hospital, Dublin, were reviewed. Data was collected on Microsoft Excel sheath

Results

None of them required hospital stays due to complications (Achieved).

Over 80% of patients were managed as outpatients (95%) (Achieved)

75% of patients treated with LLETZ were referred to our clinic with moderate to severe dyskaryosis, glandular neoplasia or invasive disease. 23% women had ASCUS or mild dyskaryosis were referred to colposcopy clinic for urgent review because of suspicious looking cx.(Achieved)

All LLETZ were performed by trained colposcopist Nurse and consultants colposcopist (33%).

In 94% cases LLETZ was done as single piece.(Achieved)

The specimens were suitable for histological interpretation (100%)

(Achieved)

The number of inconclusive histology reports for the completeness of excision at the endocervical and ectocervical margins was seen in a third of cases 37% **(failed to achieve)**

The proportion of excisions that were to a depth of 7mm or greater (37%) **(failed to achieve)**

The accuracy of colposcopic findings in our audit was 80%. (Achieved)

34%(37/109)of women were treated on first visit as see and treat and all most all have confirmed CIN on the histopathology specimens of LLETZ.(achieved)

21% were defaulted from the colposcopy clinic **(failed to achieve)**

Conclusion

LLETZ is carried out with minimal complications in our colposcopy clinic. Out of 11 reviewed standards, we achieved 8 standards as compare to 3 standards in which we failed to get the benchmark.

P-38**AUDIT OF COLPOSCOPY PERFORMANCE USING EUROPEAN FEDERATION FOR COLPOSCOPY (EFC) STANDARDS AT THE ROYAL STOKE UNIVERSITY HOSPITAL (RSUH)**

Charles Redman, Guy Calcott, *Hannah Pierce*

Royal Stoke University Hospital, UK

Objectives:

To use EFC standards to audit a UK colposcopy service.

Method:

A retrospective case review was performed of all patients receiving colposcopy between 1st April to 30th June 2014. Data was collected and evaluated against five key standards.

Results:

During the study period there were 384 colposcopy appointments. Of these, 316 appointments had a patient episode recorded and 88 patients underwent treatment for the first time in the referral process. RSUH's performance is outlined below.

Patients should have colposcopy prior to treatment; target 100%, actual performance 100%. This was not surprising given that the data was collected from a colposcopy clinic.

SCJ status should be recorded; target 100%, actual performance 93% (82/88). It is possible that this information was recorded on the paper performa but not transcribed onto the electronic system. In addition, if patients are included where the transformation zone (TZ) was recorded but not the SCJ then performance rises to 97% (86/88).

Treatment specimens should contain CIN2+; target 85%, actual performance 80% (70/88). However, once this is corrected for patients with pre-treatment histological diagnosis of CIN2 by direct punch biopsies then performance rises to 91% (80/88).

Treatment specimen biopsies should have clear excision margins; target 80%, actual performance 25% (22/88). However, the validity of this standard is to be debated given that it was derived from expert opinion using a Delphi exercise.

Women should have no dyskaryosis after treatment; target 90%, actual performance 93% (66/71).

Conclusion:

Five standards were evaluated. Of these, performance was compliant in two standards. Performance approached the required target in two other standards and in one the standard was met if data was corrected. Performance did not even approach the final standard but this standard may be invalid, as explored in an independent multicenter trial in Europe.

P-39

STUDY TO DETERMINE IF APPOINTMENT REMINDERS VIA A TEXT MESSAGING SERVICE AFFECT ATTENDANCE RATES AT COLPOSCOPY CLINIC AT THE ROYAL STOKE UNIVERSITY HOSPITAL (RSUH)

Jill Ramsden, *Hannah Pierce*, Charles Redman

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Background

The cost of non-attendance to the NHS is multitude and includes financial losses, subsequent increases in waiting times and increased administrative costs (NHSEngland, 2014). Hence, strategies to improve attendance are of considerable value to the service.

Aim

To assess if appointment reminders via text message are a good use of financial and work force resources.

Method

The study was set up as a prospective randomised control trial which enrolled women receiving follow up colposcopy appointments between the 24th January 2012 and the 29th April 2014. These women were then randomly assigned to one of two groups; an intervention group receiving an additional text message reminder and a control group receiving only a postal notification of appointment.

Results

Due to the introduction of HPV test of cure at the time of study, the study numbers were lower than expected as fewer patients required follow up appointments. Overall 90 participants were included in the trial with 26 women being randomised to the intervention group and 64 to the control group. Of the 64 participants in the control group, 8 had to be excluded due to lack of information on the consent form, 1 participant cancelled her appointment and 55 participants attended their appointments. Of the 26 patients randomised to the intervention group, one woman rearranged her appointment and all women attended their appointments.

Conclusion

All participants of the study attended their colposcopy appointment regardless of whether they received a text message reminder or not. It can therefore be concluded that a text message reminder service would not be of benefit in reducing DNA (Did Not Attend) rates in the colposcopy clinic at RSUH.

References

NHSEngland. (2014, March 5). NHS England using technology to beat cost of missed appointments. Retrieved December 20, 2015, from NHS England: <https://www.england.nhs.uk/2014/03/05/missed-appts/>

P-40

VULVAL CANCER AUDIT*Lubna Jamal Qureshi, Amy Neville, Sandhya Rao, Sharon Harrison**St Helen's & Knowsley Teaching Hospitals NHS Trust, North West, UK***Background**

Vulval cancer is uncommon

Crude incidence rate: 3.7 / 100, 000, 20th most common female cancer

Incidence in women aged 40~49 years rose twofold

Related to increased Human Papillomoma Virus (HPV) infection

Predominately remains an 'elderly' disease (women >50years)

Relation to vulval skin disorders

4% risk of developing invasive disease with Lichen Sclerosis

Up to 60% with untreated vulvar intraepithelial neoplasia (VIN)

Aims & objectives of Audit

To examine the number & types of cancers associated with vulval disease/disorders seen in our clinics in 5 & half years period (01/04/2008--31/12/2013) and their management.

Methodology

A retrospective health record review of vulval cancer, Cohort: N39

Findings:**Age at presentation**

Majority 49 to 89 years of age (average 67) confirming old age disease.

Mode of Referral

Majority (77%) from GP practice, Gynaecology OPD (17%), other specialities (6%).

Previous relevant history

Most (53%) no known vulval disease, 17% associated Lichen Sclerosis, 7% with VIN, 15% other diseases e.g. paget's, Bartholine cyst, warts.

Presenting symptoms

Majority (66%) pruritis, soreness, burning sensation & pain. (38%) swelling, colour change, warty lesion, skin ulcer with odour/bleeding.

On physical examination**Disease limited to Vulva- 19**

Groin Node involvement- 2

Perineum involvement-14 (some with vulval involvement)

Biopsies

- 72%, inpatient

- 28%, vulval clinic

Type of cancer identified:

Squamous cell carcinoma-30 (76%)

Basal Cell Carcinoma-3

Adenocarcinoma- 3 (includes one from vulval Paget's disease)

Melanoma-1

Sarcoma / Mesenchymal-1

Merkel cell / Neuro-endocrine tumour-1

Stages of different types of Vulval Cancers:

20/39 cases were confined with vulva (stage 1a-1b).

Nature of initial management:

32/39 = wide excision first, then;

4/32 + chemo & radio -

3/32 + radio only

5/32 + palliation

Conclusions

Vulval clinic provides an effective model of care for investigating, managing vulval skin disorders and cancers with long term surveillance.

P-41

AUDIT OF MANAGEMENT OF LOW/BORDERLINE SMEARS*Anupama Ram Mohan, E Flloyd, A Collings, K Nakade**Milton Keynes University Hospital, UK***Introduction:**

HPV testing can be clinically useful for risk assessment either in managing borderline cytology results or in predicting risk of treatment failure, and even as a primary cervical screening test in place of cytology.

Aim:

To review low/borderline smears and evaluate the management of these cases.

Method:

Retrospective audit January 2010 to April 2013. Patient list and was information obtained from colposcopy data base. These cases were all HR/HPV positive.

Results:

Total cases studied were 106. 2 cases did not have any data entered on system.

58 % cases referral smear was low and 42% was borderline.41% of these women were nulliparous.31% were using pill as contraception.25% were smokers.83% had no previous treatment on cervix.colposcopic examination was normal in 18%, unsatisfactory in 2%,ectropion in 13%,CIN 1 in 58%,warts in 56%, CIN 1/2 in 3%,CIN and warts in 24% and CIN 2 in 7% .73% had biopsy , 1% had LLETZ and 25% had no procedure done.51% showed CIN 1,normal histology in 8%,HPV in 1 %,CIN 2 in 7%, CIN 3 in 2%,CIN1/2 in 5%,CIN2/3 in 1% and insufficient sample in 1%.

59% were advised follow up smear in 12 months, 3% in 6 months, 20% smear in 3 years, and 17% had LLETZ after cervical biopsy.

When looked at final histology after LLETZ - CIN 2 in 7%, CIN 1 in 4%, CIN 3 in 3%, CGIN in 1%, CIN1/2 in 1% and HPV in 1%.

Conclusion:

This audit revealed that low/borderline smears with HR/HPV positive needs evaluation and colposcopy as 51% showed CIN 1 on biopsy, CIN 2 in 7% and CIN2 in 5% cases. Only 20% were discharged to 3 years follow up.59% of cases were called for smear in 12 months these cases can be reaudited to improve the follow up.

References :

NHS CSP publication no 20.

P-42

AUDIT OF TEST OF CURE SMEARS*Anupama Ram Mohan, E Ffloyd, A Collings, K Nakade**Milton Keynes University Hospital, UK***Introduction:**

Test of cure was introduced in United Kingdom to follow up women after LLETZ treatment. All cases who are HR/HPR positive were referred for colposcopy examination. These cases were audited to see the management and risk of high grade disease in these women.

Aim:

To review test of cure smears who are HR/HPV positive and evaluate the management of these cases.

Method:

Retrospective audit January 2010 to April 2013. Patient list and information obtained from colposcopy data base.

Results:

Total cases studied were 33. 2 cases did not have any data entered on system. All cases were HR/HPV positive.

22% of these women were nulliparous. 26% were using pill as contraception. 6% were smokers. Colposcopic examination was normal in 81%, unsatisfactory in 4%, CIN 1 in 3%, and CIN 1 and warts in 3%. 10% had biopsy, 3% had LLETZ and 90% had no procedure done.

Biopsy histology showed CIN 1 in 6% and CIN 2 in 3%. Final histology of LLETZ sample showed CIN 1.

65% were discharged to routine follow up in 3 years, 29% were advised smear in 12 months and 3% smear in 6 months.

Conclusion:

Out of 31 patients who came back for test of cure only one patient showed CIN 2 and one patient who had LLETZ showed CIN 1. And colposcopy examination was normal in 81% women. So it is worth thinking about to call these women back for test of cure as it is associated with psychological stress and there are cost implications.

This audit revealed 29% were called for a repeat smear in 12 months and this group can be reaudited and to see if they can be discharged to 3 yearly follow up.

References: NHS CSP publication no 20.

P-43

TO READ OR NOT TO READ: WOMEN'S EXPERIENCES OF COMMUNICATION WITH THE CERVICAL SCREENING PROGRAMME

Roshini Ravindran, *Seonaidh Cotton*, Maggie Cruickshank

University of Aberdeen, UK

Background

In Scotland, invitations for cervical screening are sent by post to a woman's home address. The invitations ask women to make an appointment for screening at their GP practice. Cervical screening results are also sent by post, along with a leaflet explaining what the different results mean. Anecdotal evidence from other studies of young women eligible for screening suggests that many young women may not receive their screening invitation because they are no longer resident at their "registered" address. This may contribute to the decreased uptake of cervical screening seen across the country. Therefore, consideration of other ways of communicating with women – for example online or by text – may help to address the issue of screening uptake.

Objective

To explore how women engage with the cervical screening programme. In particular, we are focussing on the means of communication - in respect to both invitation and delivery of results.

Methods

We are carrying out a qualitative study design using semi-structured face-to-face or telephone interviews with women of screening age. Women attending women's health clinics (including colposcopy, cystometry, heavy menstrual bleeding) are approached and invited to participate. Interviews are guided by a topic guide and cues are used to generate discussion. Interviews are audio recorded, fully transcribed verbatim. Thematic analysis will be used to analyse the data.

Results and conclusions

Data collection for the study is ongoing. Data analysis is scheduled to be completed by April 2016.

P-44**REVIEW OF CYTO-HISTOPATHOLOGY/COLPOSCOPY MULTIDISCIPLINARY MEETINGS (CPC MDM) AT ST RICHARD'S HOSPITAL, CHICHESTER**

Mayurika Sinha, Peggy Khine

St Richard's Hospital, Chichester, UK

Background

Cyto-HistoPathology/Colposcopy multidisciplinary meetings (CPC MDM) are one of quality assurance activities and an important management tool in the NHSCSP. NHSCSP Document 20 recommends that CPC MDM should be a part of patient management & should include histopathology, cytology & colposcopy reviews to ensure high quality of care.

Objective

To review whether the outcomes of CPC MDMs at St Richard's Hospital were incorporated into final patient management.

Methods

Retrospective review of the cases at CPC MDM held between January 2013 and February 2015. Data collected from minutes, Colposcopy Database and patient hospital notes.

Results

In our unit, CPC MDM has occurred 6 times per year at bimonthly intervals, an average of 6- 9 cases were discussed at each meeting. Total of 91 cases were discussed in 12 CPC MDT meetings over the study period. There were at least one colposcopist, a cytologist and a histopathologist present at MDM. Formal minutes were recorded for 83 cases. Only half of the colposcopists had adequate attendance of 50%. Referral reasons for MDM met the criteria set up by the NHSCSP guidelines; discordance between cytology & histology being the main indication for referral (35%). Concordance in cytology in 92% of cases & histology in 93% were noted after review. The CPC MDM decision was implemented in final patient management in 97% of cases.

Conclusion

We are encouraged by these audit findings that our CPC MDM met the minimal standard set up by NHSCSP; the decisions made at CPC MDM were implemented in the final patient management in most cases; and there was good communication of outcomes to the patients and clinicians involved.

References:

1. NHSCP (May 2010) Colposcopy and Programme Management: 2nd Edition.
2. Clinical points Release as a meeting report of the National Colposcopy PAG meeting (February 2015)

P-45

COLPOSCOPY UNDER GENERAL ANAESTHESIA- EXPERIENCE OF A TEACHING HOSPITAL IN SCOTLAND

Rashmi Srivastava, Christine Godley, ME Cruickshank

Aberdeen Royal Infirmary, UK

Objectives

To determine number, referral criteria, validity, treatment modality and completeness of treatment of colposcopy cases undergoing treatment under general anaesthesia.

Design

Retrospective analysis of colposcopy data over one year from January to December 2014.

Methods

Data captured from National Colposcopy Clinical Information and Audit System and analysed in Microsoft excel.

Results

Out of total of 607 treatment episodes 26 were done under GA, which is 4.28% of the total. The decision to treatment under GA interval after the index visit, ranged from 1 to 42 weeks with a mean of 16 weeks and the primary operators were consultant colposcopists. The indications for treatment under GA were patient anxiety, previous treatment, glandular abnormality, multifocal disease, suspected invasion and large transformation zone with patient anxiety topping the list.

Colposcopy impression under GA concurred with referral cytology in most cases with invasion not previously suspected being diagnosed in additional 3 cases. These were with unsatisfactory initial colposcopy, multifocal disease and glandular abnormality respectively. Of the treatment modalities laser ablation and straight wire excision of the transformation zone were done preferentially under GA. Treatment was deemed complete in 65 percent, 17 out of 26 cases, with 9 cases requiring further follow up.

Conclusions

Over 95% of cases are being treated under local analgesia in this unit. Patient anxiety remains the driving factor in offering GA as a choice of analgesia. Colposcopy under GA did not seem to confer significant diagnostic advantage except when there is multifocal disease or diagnostic uncertainty at initial colposcopy. Choice of treatment modality, which in turn is decided by the extent and site of lesion, influences the choice of analgesia.

References:

NHSCSP Publication No 20. May 2010

DR Swancutt, DM Luesley, JL Eastaugh, S Wilson. Anaesthetic choice in colposcopy clinic: a retrospective analysis of routinely collected data. *BJOG* 2008;115:646-652.

P-46

LONGITUDINAL REVIEW OF PATIENTS WITH CIN 2 ON BIOPSY - A THREE YEAR REVIEW OF OUTCOMES AND TREATMENT

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CIN 2 on biopsy, especially in young women is a topic of much discussion at present in Colposcopy. Papers citing regression rates of up to 50% in young women with CIN 2, would question whether more conservative management of CIN 2 is a safe option. However these papers did cite a 10% DNA rate, which is a cause for concern.

All records of patients with CIN 2 on biopsy over a three+ year period (2012 -2015) were analysed, with a view to assessment of final outcomes. We looked at regression,'clearance', progression rates, excisional treatment rates and final outcomes on treatment histology.

600 patients were analysed over this time period. The mean age was 31 y.o. with a range of 23-55 y.o.

81% patients had an excisional treatment on final outcome, however only 44% had treatment after first diagnostic visit, with treatment performed between 3 and 7 visits on the rest of patients (mean number of weeks to treatment was 23 weeks with a range of 2 to 200 weeks)

Treatment histology was \leq CIN 1 on 21% of excisional treatments and these patients were analysed separately. The remaining patients showed CIN 2 in three quarters of their histology. The rest showed CIN 3 on final treatment histology, with one CGIN. No invasive cancers were found.

Clearance as defined by negative cytology/ colposcopic impression/ negative HPV screen occurred in 6.2% with 'improvement' defined as less than CIN 2 on histology occurred in 8.5% of patients. Persistence of CIN 2 on histology occurred in 2%. These patients were all discussed at MDT. The remaining patients DNA'd - no further data.

Most patients with CIN 2 on biopsy were treated but 37% of these were initially managed conservatively. The outcome of a fifth with LG histology on cone biopsy is a cause for further evaluation.

P-47

HOW OFTEN DOES POST COITAL BLEEDING HERALD SIGNIFICANT PATHOLOGY?*Michelle Godfrey, Daljit Kaur, Kalpana Rao, Vincent Oon, Rashna Chenoy, Jamna Saravanamuthu**Newham University Hospital, London, UK***Background**

Women experiencing post coital bleeding (PCB) are frequently referred for colposcopy. The aims of this study were to review the underlying pathology in women with PCB, with a latest smear test result of either borderline, inadequate, negative or never had a smear test before.

Method

Retrospective case note audit of women attending colposcopy at a busy London district hospital with PCB from January 2008 until March 2015. Women with mild, moderate or high grade dyskaryosis on referral smear test were excluded.

Results

A total of 655 women with either a negative smear (n=435)/ no previous smear (n=177)/ inadequate (n=23) or borderline smear test (n=20) were referred for colposcopy for post coital bleeding. Age range was from 17-71 years, with 67.4% of women were aged between 20-39 years.

Smear tests were performed at colposcopy for 212 women, who did not have a recent negative smear test, and 229 women had a cervical biopsy. Moderate dyskaryosis was present on 4 smear test results and severe dyskaryosis on one smear test result. Low grade lesions were confirmed on 46 biopsies (7.0%) and high grade lesions in 13 biopsies (2.0%).

Cancer was found in four women (0.61%). Three women were diagnosed with cervical cancer, one had a recent negative smear, the second had a recent inadequate smear test, the third had never had a smear test. The other cancer case had a normal colposcopy and a pipelle revealed a uterosarcoma.

Benign findings which may be causing the PCB included ectropion (n=117), cervicitis (n=61), cervical polyps (n=18) and atrophy (n=11).

Conclusion

This study demonstrates that the vast majority women with post coital bleeding will not have a serious underlying pathology, however post coital bleeding should continue to warrant colposcopic assessment as we found 2.0% women had a high grade lesion and 0.61% had cancer.

P-48

ABNORMAL SMEAR AFTER HPV VACCINATION -A CASE REPORT

Sonali Guha

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A Luthenian woman had her first smear in UK which shows BNA with high grade HPV DNA. She gave history of HPV vaccination in her own country.

Colposcopic examination revealed High Grade abnormality. Punch Biopsy revealed Squamous metaplasia with chronic cervicitis. This was discussed in MDM. Decision to repeat smear and colposcopy was taken.

P-49

LONDON REVIEW OF CIN 2 ON BIOPSY - REVIEW OF ONE YEAR OUTCOMES - AN INITIAL ASSESSMENT

Deirdre Lyons¹, Julie Mungovan², Joe Llahi³, Heather Evans⁴, Ashfaq Khan⁵, Ali Kubba⁶, Nisrin Marcus⁷, Tania Adib⁸, Tony Hollingworth⁹, Theresa Freeman-Wang¹⁰

¹Imperial College Healthcare NHS Trust, London, UK, ²Homerton University Hospital Foundation Trust, London, UK, ³North Middlesex Hospital, London, UK, ⁴Royal Free Hospital, London, UK, ⁵Whittington Hospital, London, UK, ⁶Guy's & St Thomas NHS Trust, London, UK, ⁷King's College Hospital, London, UK, ⁸Croydon University Hospital, London, UK, ⁹Whipp's Cross Hospital, London, UK, ¹⁰Screening Quality Assurance Service, London, UK

The study is designed to review one year's worth of patients with CIN 2 on biopsy.

There is much discussion at present about the management of CIN 2 and whether we can be more conservative in the management of patients with this histology report on biopsy.

Many Colposcopists now review most CIN 2 diagnoses in young women at MDT prior to a decision on conservative management or treatment. There has been a trend towards more conservative management in the past few years, but little is known about individual Unit's practices and how patients managed conservatively are followed up and how long the follow up is for.

Also MDT discussion should be analysed and how long patients are planned to have follow-up prior to a decision on treatment.

We decided to undertake a review of patients attending London Colposcopy Units who were diagnosed on biopsy with CIN 2. An audit proforma was created and circulated to London Units. The time period requested for Audit was from 01/04/2013 to 31/03/2014. This time period was taken, because it allowed for some follow-up (1 year plus).

In London 4154 patients were diagnosed with CIN 2 on biopsy in that time period. There are 26 Colposcopy Units in London and 10 returned data. Review of these patients with CIN 2 on biopsy is ongoing and fuller data will be available for presentation.

In most Units, patients with CIN 2, did undergo treatment, but there is a trend towards more conservative management. This is more visible in younger women. However treatments earlier were more likely in Units with higher workloads.

The treatment rate of patients with CIN 2 varied from 44% to 85%, with most being treated within the first year of follow-up.

Detailed breakdown of units and regions of London will be available for meeting

P-50

CLINICAL EVALUATION OF BIOPSY-PROVEN CIN2 IN NORTH LONDON POPULATION*Emma Nash¹, Fotodis Malamas¹, Ashfaq M Khan^{1,2}**¹Whittington Hospital, London, UK, ²UCL Medical School, London, UK***Aim**

To study the outcome of patients who were diagnosed with CIN2 by colposcopy directed punch biopsies of the cervix.

Background

Studies have shown that CIN2 is an intermediate entity between CIN1 and CIN3 with an average regression rate of 43%, while in young patients rates may be even higher. As a result controversy exists regarding optimal management of CIN2.

Material-methods

Retrospective data collection from Mediscan database of all biopsy proven CIN2 in 2014.

Results

185 patients were included. 118 patients (92%) were referred with an abnormal smear. 68.2% of the referral smears showed borderline/mild dyskaryosis and 31.8% showed moderate/severe dyskaryosis. All the patients had a colposcopic examination and 46.5% of them had a colposcopic diagnosis of HGCIN. Excisional treatment was performed in 69.7% cases, 2.7% had ablation and 27.5% had no treatment. The results of the excisional biopsy showed 36.4% CIN1, 43.4% CIN2 and 16.3% CIN3 (in total 59.6% HGCIN) while there was one case of adenocarcinoma in situ. Of the 51 patients who had no treatment, 25 had a repeat biopsy and 8 out of 25 (32%) showed persistence of high grade disease.

Conclusions

In the majority of cases a CIN2 punch biopsy is related with HGCIN, however, it was not detected in a significant number of cone specimens. While in the small group who had repeat biopsies the lesion regressed in the majority of cases.

Factors such as age, volume of lesion, parity and previous history have to be taken into account before management of CIN2. Treatment carries the risk of overtreatment in a significant number of cases. Conservative management also carries risks of delaying the treatment or lost to follow up.

P-51

SIGNIFICANCE OF DEPTH OF EXCISION AND FOLLOW UP CYTOLOGY. EXPERIENCE IN A SMALL DISTRICT HOSPITAL

Zoona Saeed, Franz Ndumbe

Scunthorpe General Hospital, UK

Objectives:

Retrospective review to assess depth of LLETZ (Large loop excision of the transformation zone) specimens performed from January to December 2014, for high grade Cervical Intraepithelial Neoplasia (CIN) and follow up cytology results.

Methods:

131 patients were identified with the help of local hospital based system and Exeter, national IT system. The data was entered and analysed via Excel database. The following parameters were assessed; Reason and date for performing LLETZ, depth and volume of LLETZ specimen; excision margins; date and results of follow up cytology.

Results:

For complete excision specimens, depth ranged from 5-21mm with a mean value of 10.38mm. Amongst incomplete excision specimens depth ranged from 5-20 mm with a mean of 10.857 mm. In not assessable group, depth range was 6-11mm with a mean of 8.33mm.

There were 77 cases (58.7%) in the complete excision group (CEG). Follow –up cytology IN CEG showed 52 cases were negative, 3 showed borderline changes, 5 were HPV positive and for 17 cases there were no follow up results. In Incomplete excision group (IEG) 43 cases (33%) cases were recorded. On follow up cytology of IEG, 22 were negative, 1 showed borderline changes, 2 had dyskaryosis, 6 were HPV positive and there were no results for 12 cases. 10 cases (7.6%) were in “not assessable” group which on follow-up cytology showed 6 negative, 1 borderline, 2 HPV positive and 1 case with no documented result.

Conclusion:

Mean depth of excised tissue in complete and incomplete excision groups were similar therefore raising the question whether depth matters. On follow-up cytology there were 2 cases of high grade dyskaryosis in the incompletely excised group and none in the completely excised and not assessable group. This justifies having follow-up cytology and HPV assessment.

P-52

ANALYSIS OF 58 REFERRALS WITH ABNORMAL LOOKING CERVIX TO THE RAPID ACCESS GYNAECOLOGY CLINIC IN WEST CUMBERLAND HOSPITAL*Oudai ALI, Veitch Corene**North Cumbria University Hospital, UK***Introduction**

The standard of referral with suspicion of malignancy is for the patient to be seen in 14 days at the secondary care. One of the indications to refer is lesion on the cervix suspicious of cancer.

Aim and Methods

This is to look at the outcome of such referrals over 18 months' period in west Cumberland hospital from April 2014 to October 2015. All cases were analysed with regard to the associated symptoms, clinical findings and clinic outcomes.

Results

Out of 690 total referrals to the rapid access gynaecology clinic over 18 months there 58 cases (8.4%) referred with suspicious cervix. The average age was 40.38 years (SD; 10 years). The associated symptoms were intermenstrual bleeding in 9/58, postcoital bleeding 21/58 (of those three had associated postmenopausal bleed). 6/58 cases did have an abnormal severe dyskaryosis smear with suspicion of neoplasia on referral.

Clinical assessment including colposcopy assessment indicated 9/58 polyps, 16/58 were described as reassuringly normal, low grade lesion 7/58, ectopy 15/58, cervicitis 4/58, high grade lesion 3/58, cancer 5/58 cases. 4 cancer cases were later proved by biopsy and three of them had an associated smear with suspected invasive cancer. All the cancers were at stage 1 and all were referred to tertiary centre for primary surgery. There was one case of CGIN out of the cases with high grade seen on the cervix.

Conclusion

The cancer pick-up rate for such indication was 5/58 (8.6%), however there was much benefit in identifying other pathology including low grade and high grade precancer of the cervix outside the normal call of the cervical cytology screening system. Other benign conditions were sorted at the rapid access clinic including polyps, inflammatory conditions as well as gynaecologic conditions like adenomyosis. Managing rapid access clinic will require the faculty and facilities to offer colposcopy.

P-53

DySIS SERVICE EVALUATION IN WALES. FINAL DATA FROM 5 SITES*Srividhya Budithi¹, Richard Peevor¹, David Pugh², Manolis Papagiannakis³, Simon Leeson¹**¹Ysbyty Gwynedd, Bangor, UK, ²Royal Glamorgan Hospital, Llantrisant, South Wales, UK, ³DySIS Medical, Livingston, UK***Introduction**

Dynamic Spectral Imaging(DSI) uses a monocular digital colposcope (DySIS™; DySIS Medical Ltd, Livingston) to quantify acetowhitening and calculate a colour-coded map which may improve detection of at least high-grade cervical intraepithelial neoplasia (CIN2+) by assisting identification, localization, grading and subsequent biopsy of suspicious lesions.

Design and setting

This prospective service evaluation of colposcopy with DySIS at five clinics in Wales (5/2014-5/2015), assessed the performance of colposcopy before (conventional) and after adding the DSI map for identifying CIN2+. Final data is presented from Cardiff and Vale, the Royal Glamorgan Hospital, Ysbyty Glan Clwyd, Ysbyty Gwynedd and Wrexham.

Results

In total, 426 cases were enrolled as new colposcopy referrals. Of these, eight were non-cervical exams and 24 are missing data; 394 are included in the analysis.

For all referral types (including patients with no/unknown histology) the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) for colposcopy with DSI in predicting CIN2+ were 85%, 62%, 31% and 95%. For conventional colposcopy they were 52%, 92%, 57% and 90% respectively. For the 237 low-grade (LG) referrals (including patients with no/unknown histology) the sensitivity, specificity, PPV and NPV for colposcopy with DSI were 86%, 62%, 19% and 98%. For conventional colposcopy they were 27%, 94%, 32% and 93% respectively.

There were in total 69 cases of CIN2+, with a yield of CIN2+ of 16.2%. Ten of the CIN2+ cases had a normal colposcopic impression pre-DSI map. Among the LG referral patients, 58% had biopsy, 22 had CIN2+ and the yield of CIN2+ was 9.6%. Sixteen of these 22 cases had a normal/LG final colposcopic impression; three had a normal/LG DSI map indication.

Conclusion

Colposcopy with DySIS results in improved sensitivity to detect CIN2+ and maintains a high negative predictive value for all referrals and especially for those with LG referral cytology.

P-54

WOMEN UNDER 25 YEARS REFERRED TO THE COLPOSCOPY UNIT AT GSTT*Neelima Dadavi, Leah Wong, Gulnaz Majeed**Guys and St Thomas NHS Foundation Trust, London, UK***Background:**

NHS CSP recommends cervical-screening should commence after 25 years of age as screening is not effective below that age. There is more potential for harm in terms of anxiety, high prevalence of HPV, low-grade abnormalities, referral to colposcopy and over treatment. The treatment may itself increase the risk of mid-trimester miscarriages and preterm-labour. The number of referrals are likely to fall as HPV-vaccinated young women reach screening age.

Aim and Objectives:

To review number of women referred to colposcopy under 25 years of age with abnormal-cytology and clinical-indications.

Methodology:

Identification and data collection from Colposcopy- Database-Viewpoint from August- Dec 2014 compared to August- Dec 2015.

Results:

Patients referred to colposcopy under-25 years in 2014 (n = 154/1176) 13% vs in 2015 (n=71/1302) 5.4%. In 2014 Ninety-nine with abnormal-cytology (low-grade n=83) (high-grade n=16) only (n=15) had HSIL. LLETZ was performed on 12 patients. In 2015 thirty-six were referred with abnormal-cytology (low-grade n=32) (high-grade n=4) only (n=9) had HSIL. LLETZ performed on 7 patients.

Only eight patients were confirmed to have HPV immunisation in 2014 vs 13 in 2015.

Patients referred with clinical-indications in 2014 were (n=55) 36% vs in 2015 (n=39) 55%.

Cold-coagulation was performed for 13 patients in 2014 and none in 2015.

Conclusion:

None of the patients had cancer. Hence, referral should be per DOH Clinical Practice Guidance Assessment of Young Women aged 20-24 with abnormal bleeding to colposcopy. Overall referrals under 25 year old have reduced (154 vs 71). The referrals for abnormal cytology reduced from 13% (2014) to 5.4% (2015) where as referral for clinical indications increased from 36% to 55%.

Recommendations:

Discussed with Primary care practitioners at GSTT GP evening, workshop and further events planned to ensure provision of good practice

References:

- Clinical Practice Guidance for the Assessment of Young Women aged 20-24 with Abnormal Vaginal Bleeding (2010).

P-55

CROSS SECTION SURVEY OF PAP SMEAR TESTING IN A LEBANESE POPULATION*Mazen Fakh, Mona Khadra**Hammoud Hospital University Medical Center, Saida, Lebanon***Introduction:**

Cervical cancer screening is currently recommended for sexually active women between the ages of 25 and 60 years by PAP smear or HPV PCR testing. It should be done every 3 years.

Methods:

A 9-question survey was administered orally to a group of 500 women between the age of 17 and 73, randomly chosen in the South of Lebanon, from September till November 2015. Survey items included demographics, PAP smear status, and PAP smear data. Statistical analysis of the results was conducted via IMB SPSS v14.

Results: 57% of married women between 17 and 73 years of age reported to have never done a PAP smear. 73.1% of women who did not have a pap smear were between the age of 26 and 50 years. The two most common cited reasons for not doing the PAP smear were "not being informed by the doctor to do it" (44.5%) and personal neglect (14.5%). Of those who did a PAP smear, 32% of them did it on a yearly basis as opposed to the 3 year recommended interval.

Discussion:

There is a mixture of personal neglect and omission from the woman's primary physician concerning regular PAP smears when indicated. Several steps are being taken to ensure public awareness is increased as well as local seminars for medical personnel to reiterate the common practices for cervical cancer screening. A colposcopy clinic has been set up in a major tertiary care center in the South of Lebanon and educational material is being provided to the visiting women.

P-56

GENETIC ASSOCIATIONS BETWEEN CERVICAL INTRAEPITHELIAL NEOPLASIA AND SPONTANEOUS PRETERM BIRTH

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Background

A minority of women infected with HPV will develop CIN or cervical cancer, suggesting the presence of innate factors predisposing to chronic infection or tumor development. CIN has been associated with spontaneous preterm delivery (PTB), but the causal pathway remains unclear. We conducted a genome-wide association study to identify underlying genetic risk variants which might predispose to both outcomes.

Methods

Using Finland's nationwide Registers and Northern Finland Birth Cohort 1966 (NFBC66) we identified 353 women with CIN or cervical cancer and 1868 controls without a history of any cytological abnormalities. Women were genotyped using Illumina arrays. In the first stage we ran genome wide analyses, for the dichotomous outcome CIN or cervical cancer. In the second stage we reran the analyses for PTB (122 cases and 1813 controls) only for the SNPs considered at least suggestive for CIN or cervical cancer ($p < 1 \times 10^{-5}$).

Results

We identified ten SNPs ($p < 5 \times 10^{-8}$) associated with increased risk of CIN or cervical cancer. Two of the top variants were intronic or upstream variants for three protein-coding genes at the same locus: PIBF1, BORA and MZT1 all with roles in pregnancy, mitotic cell division and/or cancer development. Among the 234 SNPs analysed in the second stage, two remained significant for PTB and were associated with protein coding sites: at SEPT8 (regulator of cytoskeletal organization, associated with cellular polarity and carcinogenesis) and one at CAPN1 (associated with both human carcinogenesis and low birth weight in animal models).

Interpretation

We observed variants significantly associated with CIN or cervical cancer as well as loci suggesting a presence of shared genetic susceptibility to both outcomes in this cohort. The protein-coding genes in the identified loci are suggested to have roles both in aetiology of carcinogenesis and regulation of pregnancy. These results are promising but require external replication for confirmation.

P-57

IMPLEMENTATION OF HR-HPV TRIAGE FOR LG CERVICAL CYTOLOGY: A RETROSPECTIVE EVALUATION OF COLPOSCOPY CLINIC PRACTICE & RESULTS OF LONG-TERM FOLLOW UP

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Taunton and Somerset NHS Trust, UK

Introduction:

National Health Service Cervical Screening Programme (NHSCSP) implemented HR-HPV triage for LG cervical cytology in April 2012. Up-to-date, minimal data exists on real-world implementation and long-term follow up for this population.

Aim:

To evaluate practice in an NHS colposcopy clinic, assess long-term follow-up outcomes and compare to the Sentinel Sites Study results.

Methods:

Women referred to Musgrove Park Hospital, Taunton with LG cervical cytology and HR-HPV positive, from 1st May until 31st of October 2012, identified via our electronic database.

Results:

A total of 158 women were included. Of those, 144(91.1%) had a biopsy and 32(20.3%) were found to have HG histological abnormalities compared with 62% and 16% respectively in the Sentinel Sites Study. All women with HG lesions on biopsy were treated. For women without HG lesions (122), 63(51.6%) were discharged after first visit and 59(48.4%) were seen more than once. 102(83.6%) women attended for cytological follow up which found 23(9.8%) with LG HR-HPV positive results (2 of which had a HG lesion) and 5(4.9%) with HG cytology (all had CIN2+). This equals to a total of 7(6.9%) of women found to have HG disease at 3-year follow-up. The overall sensitivity, specificity, PPV and NPV of colposcopy for detection of CIN2+ lesions was 35.5%, 88%, 44% and 84% respectively.

Conclusions:

A higher prevalence of HG disease was found at first visit compared with the Sentinel Sites Study. Whilst this may be a result of the higher initial biopsy rate, it has led to a lower disease rate on follow-up and therefore a reduced number of follow-up visits; suggesting a cost analysis based on multi-centre results could guide us towards optimising and standardising practice.

P-58

CERVICAL CANCER SCREENING IN UNDERSERVED WOMEN IN OYO STATE, NIGERIA. CHALLENGES AND PROSPECTIVE

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Background:

Cervical cancer is the commonest cause of cancer-related deaths among women in Nigeria despite it being highly preventable. In developed countries population-based screening has led to marked reduction in cervical cancer incidence and mortality. However, this success has not been replicated in developing countries due to lack of population based screening programme. We report our organization experience in providing a state-wide cervical, population-based cervical cancer screening programme.

Method:

Access to Basic (Medical) Care (ABC) Foundation, a non-profit, non-governmental organization conducted HPV-based (cobalt 4800 by Roche) cervical cancer screening exercise in October 2014 at designated screening centre in each of the 33 Local Government Area of Oyo state of Nigeria. This was followed by recall of participants that were positive for any of the high risk HPV (Hr-HPV) for VIA, cytology and colposcopy in July 2014. All the participants at this second phase had cervical biopsy the result of which served as gold standard.

Results:

A total of 1320 women aged between 30-65 years were tested of which 244 (18.5%) were positive for Hr-HPV. HPV16/18 were found in 19.2% of the Hr-HPV positive group. However, only 50 (14.0%) of this subset returned for follow-up at which 100% of those positive for HPV16 or/18 and 20% of those for other Hr-HPV had colposcopic changes suggestive of dysplasia. There was no statistical significance from the histologic findings.

Conclusion:

This evaluation of the first state-wide HPV-based cervical cancer screening exercise in Nigeria showed that the method is feasible and correlate well with other screening methods. The low return for follow-up could have been associated with centralization of the process and the time-lag between the initial screening and the follow-up evaluation suggesting the need for a decentralized screening strategy for maximal impact.

P-60

PERSONALIZED MANAGEMENT OF WOMEN WITH CERVICAL ABNORMALITIES USING CLINICAL DECISION SUPPORT SCORING SYSTEM

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Objectives:

To develop a clinical Decision Support System (DSS)(Scoring System (SS))based on Artificial Neural Network (ANN) for personalized management of women with cervical abnormalities.

Methods:

During 2007-2014 in three University Hospitals we prospectively collected detailed patient characteristics, colposcopic impression and performed a series of biomarkers using a liquid-based cytology sample. These included HPV DNA typing, E6&E7 mRNA by NASBA or flow cytometry and p16INK4a immunostaining.

We used ANNs to combine Pap test and biomarkers and develop a clinical DSS to improve the diagnostic accuracy and quantify the individual's risk for various histological diagnoses. We used histology as the gold standard.

Results:

We analysed data from 2267 women that had complete or partial dataset of clinical and molecular data during their initial or follow up visits (N=3565). Accuracy parameters (sensitivity, specificity, positive and negative predictive value) were assessed for the cytological result and for the SS. The ANN predicted with higher accuracy the chances of high-grade (CIN2+), low-grade (HPV/CIN1) and normal histology. The sensitivity for prediction of CIN2 or worse was 93.0%, specificity 99.2% with high positive (93.3%) and negative (99.2%) predictive value.

Conclusions:

The SS based on an ANN of Multi Layer Perceptron (MLP) type, can predict with the highest accuracy the histological diagnosis in women with abnormalities at cytology when compared to the use of tests alone. A user-friendly software based on this technology could be used to guide clinician decision making towards a more personalized care.

P-61

IMMEDIATE REFERRAL TO COLPOSCOPY VS. CYTOTOLOGICAL SURVEILLANCE FOR LOW-GRADE CERVICAL CYTOLOGICAL ABNORMALITIES IN THE ABSENCE OF HPV TEST: A SYSTEMATIC REVIEW AND A META-ANALYSIS OF THE LITERATURE

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Background:

Minor cytological abnormalities in primary cervical screening are common and often difficult to manage. The aim of this review was to explore the optimum management strategy for women with ASCUS or LSIL cytological abnormalities at primary screening in the absence of HPV DNA test.

Methods:

We conducted a comprehensive literature search for randomised controlled trials comparing immediate colposcopy to cytological surveillance in women with borderline nuclear changes or low-grade dyskaryosis. The main outcomes studied were the default rates and the histological status of biopsies within immediate colposcopy compared to biopsies taken on completion of surveillance. We calculated pooled relative risks (RR) and 95% confidence intervals using random-effects model and assessed inter-study heterogeneity using Cochrane's Q-test and I²-test.

Results:

Six RCTs met the inclusion criteria. Compliance to follow-up declined over time and was significantly lower than to immediate colposcopy throughout the follow-up, RR 3.85, 95% CI 1.27-11.63, already at 6 months. After 24 months of surveillance the incidence of low-grade lesions was significantly elevated after immediate colposcopy compared to surveillance: RR for any CIN 2.02, 95% CI 1.33-3.08, and for CIN 1, RR 2.58, 95% CI 1.69-3.94. Incidence of clinically more significant high-grade lesions was not statistically significantly elevated after same surveillance period: RR for CIN 2+ 1.14, 95% CI 0.66-1.97, and for CIN 3+ 1.02, 95% CI 0.53-1.97.

Conclusion:

The higher incidence of low-grade CIN detected by immediate colposcopy might be explained by spontaneous regression of these lesions and could lead to unnecessary interventions and overtreatment. We did not observe significant differences in CIN 2+ or CIN 3+ incidence between the management modalities. However, the risk of default from cytological surveillance significantly increased over time, which may increase the defaulters' risk of invasive cervical cancer.

P-62

TARGETING CERVICAL SCREENING NON-ATTENDERS OPPORTUNISTICALLY IN PRIMARY CARE TO OFFER SELF-SAMPLING FOR HPV TESTING

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Objective

Self-sampling for HPV testing overcomes most barriers to conventional screening and has already been shown to increase screening uptake. However, the optimal approach for offering self-sampling kits remains unclear. Response rates for posting kits to women or asking women to order kits vary between 6%-39% and are lowest in England. We assessed a more targeted approach of offering self-sampling kits to overdue women when they consulted primary care.

Methods

Six general practices in London (England) offered self-sampling kits during consultation to women aged 28-64 who were at least 6 months overdue cervical screening. Eligible women were flagged automatically by the electronic medical record system. Women collected samples either in clinic or at home (flocked swab transported dry, analysed using Roche cobas®4800).

Results

Between Jan-Dec 2014 (mean duration 9.5 months) 3,131 of approximately 5,000 overdue women consulted. Of the consulters 21% (652) were offered kits, 14% (443) accepted and 9% (292) returned a self-sample: 14% HPV positive.

The proportion of consulters invited varied considerably between practices (11%-36%). The proportion returning a sample increased with increasing proportion invited (correlation coefficient $r=0.8$, $p=0.04$).

85% (33/39) of women who tested HPV positive on a self-sample attended for follow-up cytology: 25 normal, 6 abnormal (2 severe dyskaryosis, 4 borderline) and 2 not reported. All 6 with abnormal cytology attended colposcopy, two of whom were biopsied: 2 invasive cancers (stage 2A1 and 1A1) and 1 CIN1.

Conclusions

Offering self-sampling to cervical screening non-attenders opportunistically in primary care when they consult is feasible. Uptake is higher when more women are offered kits. Further research is needed to better understand the reasons for variation between practices and to identify the optimal approach for offering self-sampling kits.

P-63

A SHIFT IN EXPECTATIONS?: MANAGEMENT OF HPV POSITIVE WOMEN WHO HAVE UNSATISFACTORY COLPOSCOPY. A QUALITATIVE STUDY*Kristyn Manley^{1,2}, Rachna Bahl^{1,2}, Sarah Platt¹, Amit Patel¹, Rebecca Simms¹*¹University Hospitals Bristol NHS Trust, UK, ²University of Bristol, UK**Introduction:**

Human papillomavirus (HPV) causes 99% of cervical cancer and screening now incorporates testing for high risk (HR) subtypes. Colposcopic assessment is directed towards identifying high grade disease but when the cells of interest are not visible (unsatisfactory colposcopy), colposcopists may rely on HPV status to determine who requires treatment. This study aimed to analyse colposcopist's decision making towards women who have unsatisfactory colposcopy and a HR HPV result.

Method:

A qualitative study, utilising a series of focus groups. Participants were colposcopists in units across an English region. A topic guide was compiled by the researchers and three expert colposcopists; this aimed to analyse decision making when reviewing women with unsatisfactory colposcopy, specifically the value attached to a HR HPV result and how this influences their management. Audio recordings were transcribed and assessed for respondent validation. Using an iterative approach, thematic analysis was performed.

Results:

Twenty-four colposcopists from four units participated in four focus groups. Four key themes were identified. A positive HPV test was likely to result in earlier referral to colposcopy with potential earlier over-treatment. There was a perceived increase in the proportion of women having high grade histology when referred with a low grade cytology / HR HPV result. Therefore unsatisfactory colposcopy provoked strong concerns of missing high grade disease prompting a short cytology follow up timeframe. Colposcopist's management decisions appear primarily to be affected by their experience.

Conclusions:

A lack of national guidance in this cohort, combined with patient choice, may account for a higher rate of treatments in women with low grade cytology than previously anticipated. Decision-making may be improved by predictive modelling or new techniques that sample an endocervical transformation zone in women with low grade cytology, HR HPV and unsatisfactory colposcopy. National guidance is required to aid management of this patient group.

P-64

MANAGEMENT OF UNSATISFACTORY COLPOSCOPY IN WOMEN WITH LOW GRADE CYTOLOGY: A QUALITATIVE STUDY*Kristyn Manley^{1,2}, Rebecca Simms¹, Sarah Platt¹, Amit Patel¹, Rachna Bahl^{1,2}*¹University Hospitals Bristol NHS Trust, UK, ²University of Bristol, UK**Introduction:**

The incidence of unsatisfactory colposcopy (transformation zone type 3) is approximately 20%. The inability to visualise and histologically identify transforming HPV infections has been shown to deter long-term conservative follow up. Decision making is compounded by a lack of national guidance in this cohort. The aim of this study was to assess colposcopists' experience of managing these women to compile a set of recommendations that may aid management.

Method:

A qualitative study, utilising a series of focus groups. Participants were colposcopists in units across an English region. A topic guide was compiled by the researchers and three expert colposcopists with a view to analyse decision making when reviewing women with unsatisfactory colposcopy. Audio recordings were transcribed and assessed for respondent validation. Using an iterative approach, thematic analysis was performed.

Results:

Twenty four colposcopists from four units participated in four focus groups. There was an agreement that there was no indication for repeating cytology at the first colposcopy appointment. Decision to treat was easier in certain cohorts such as heavy smokers, poor attenders, older women, those who had completed their family and women opting for treatment. Where decision making was more complex, a multi-disciplinary (MDT) approach was used to guide management. The usefulness of oestrogen was minimal in terms of improving the adequacy of the colposcopy. There was lack of consensus on length, place or technique of conservative follow-up.

Conclusions:

A lack of national guidance means that colposcopists are guided by their experience and MDT support when making decisions regarding excisional treatments for women with low grade cytology and unsatisfactory colposcopy. There is a need for consensus opinion or guidance on conservative follow up of these women. A questionnaire, based on the themes identified, is being developed to assess national opinions and recommendations.

P-65

AUDITING THE CLINICAL IMPLICATIONS OF CERVICAL CYTOLOGY SAMPLING IN WOMEN UNDER 24 YEARS OLD

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Background:

The NHS-CSP guidelines report that the start age for cervical screening should be the age of 25. Nevertheless, there are occasions where cytology testing has been performed contrary to this guidance. Our objective was to record the clinical implications of this practice.

Methods:

Retrospective retrieval of data from our colposcopy database for women under the age of 24 with cytology testing. We analysed the clinical setting where these were taken and whether they resulted in a change in practice.

Results:

Over the five-year study period (2010-2014) we identified 269 samples being taken. Of these, 4 were done privately and 265 were NHS samples. Among the NHS samples, 207 (78.1%) were taken in GP surgeries, 10 (3.8%) in peripheral GUM clinics, and 48 (18.1%) at our hospital NHS Trust. Only 2 from the 207 (0.9%) samples taken in the GP surgeries were high-grade and referred to colposcopy services but none required treatment. For the 48 samples taken within the hospital setting 23 were taken in colposcopy clinics and 23 in general gynaecology outpatient's clinics, with missing data for the other 2 samples. Only 12 out of the 48 (25%) women had treatment, with 3 cases having LLETZ treatment (1 with CIN3, 1 with CIN2, and 1 with CIN1), 1 case had cold-coagulation for CIN2, and 8 cases were treated with cryotherapy.

Conclusion:

Our audit has shown that the majority (78.1%) of cytology samples were taken in GP practice and led to no treatments. In contrast, the cytology samples taken in the hospital setting (18.1%) led to the identification of a small number of cases that ultimately required treatment.

P-66

THE UTILITY OF ELECTRICAL IMPEDANCE SPECTROSCOPY (EIS) IN THE DETECTION OF HIGH GRADE GLANDULAR NEOPLASIA (HG-CGIN)

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Aims

To establish the performance of colposcopy with ZedScan in women referred with abnormal glandular cytology or diagnosed with HG-CGIN. To establish the electrical impedance spectra (EIS) associated with CGIN.

Methods

Women underwent both colposcopic and ZedScan examination at five colposcopy clinics as part of the investigation of an abnormal cervical cytology sample including women referred with abnormal glandular cytology.

Results

24 women were referred with cytology showing either glandular neoplasia/AGC (9), borderline changes in endocervical cell/AGUS (14) or adenocarcinoma (1). 15 were found to have CIN/CGIN, of whom 14 had HG-CIN/CGIN. A further 6 women were found to have CGIN (5 had HG-CGIN) on biopsy or LLETZ following investigation of an abnormal squamous cytology sample or clinical indication. There was a total of 10 cases of pure HG-CGIN. 89% of HG-CIN/CGIN was detected by a colposcopic impression of high grade disease and a positive ZedScan result. 90% of pure HG-CGIN was detected by a colposcopic impression of high grade disease and a positive ZedScan result. Two cases of pure HG-CGIN were detected only by a positive ZedScan result. Two cases of pure LG-CGIN were detected only by a positive ZedScan result. EIS data for pure HG-CGIN is different from normal glandular tissue and similar to EIS for HG-CIN.

Conclusions

The performance of colposcopy in detection of HG-CGIN has previously been shown to be poor with a sensitivity of 9.8%. Many women (47-87%) have HG-CGIN despite a normal colposcopy. ZedScan may help in the management of women with glandular neoplasia and can detect cases of HG-CGIN in the absence of CIN.

P-67

INCREASED DETECTION OF CIN2+ BY ELECTRICAL IMPEDANCE SPECTROSCOPY (EIS) IS INDEPENDENT OF HR-HPV GENOTYPE*John Tidy¹, Brian Brown², Jamie Healey³, Rachael Lyon⁴*

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Aims

To study the impact of hrHPV genotype on performance of ZedScan (EIS) with colposcopy and colposcopy alone in detection of CIN2+ within a routine colposcopy service.

Methods

1052 unselected women were evaluated by six colposcopists, three nurse colposcopists two consultants and a trainee. 92% of the women were evaluated by nurse colposcopists. HPV genotyping was performed using Roche COBAS 4800. Results are given as HPV16, HPV18 and HPV Other (O) All data were collected prospectively. Fisher's exact test, two tailed, was used.

Results

883 women were referred with abnormal cytology, 169 had other indications including 89 referred after a positive hrHPV/cytology negative result. 284 (27.0%) had high grade cytology, 599 (56.9%) had low grade cytology. 337 women were found to have CIN2+, 38 of these women were identified as having CIN2+ by ZedScan alone resulting in a 12.75% increase in the detection of CIN2+ ($p < 0.0001$). In women referred with low grade cytology the detection of CIN2+ increased by 57.4%. HPV genotyping was available for 291(33%) women; 230 abnormal cytology, 43 hrHPV positive cytology negative and 18 other. Single infection with HPV16 was found in 58 cases, HPV18 15 cases and HPV0 149 cases, there were 180 cases of multiple HPV infection. The addition of ZedScan increased the detection of CIN2+ from 86.7 to 95.6% in women with HPV16 associated infections (either single or multiple) ($p = 0.2663$) and in women HPV18 or HPV 0 infections there was a significant increase from 80.5% to 95.6% ($p = 0.0291$).

Conclusion

Performance of ZedScan (EIS) with colposcopy significantly exceeds the performance of colposcopy alone. There was a significant increase in the detection of CIN2+ by ZedScan in women with non HPV16 infections. The detection of CIN2+ by ZedScan is independent of HPV genotype. EIS data are not dependent on visual aceto-white changes on the cervix.

P-68

INCREASE IN DETECTION OF CIN2+ BY ZEDSCAN WHEN USED IN COLPOSCOPY CLINICS IN ENGLAND AND EUROPE*John Tidy¹, Brian Brown²**¹Sheffield Teaching Hospitals NHS Foundation Trust, UK, ²Medical Physics, University of Sheffield, UK***Aims**

To determine whether ZedScan can provide performance benefits in different colposcopy practices

Methods

Unselected women referred for colposcopy underwent both colposcopic and ZedScan examination at 5 colposcopy clinics in England (2), Ireland and Germany (2) according to local protocols. Biopsies, including endo-cervical curettage, were taken when indicated by colposcopic impression and/or ZedScan or local protocols. No random biopsies were taken. Colposcopic data was collected in real time and prior to the availability of biopsies results. Fisher's exact test, two tailed was used.

Results

1313 women were examined. 1170 were referred with abnormal cytology. Across the entire population, ZedScan identified an additional 56 women who were confirmed as HG CIN even though they had a normal/low grade CI; this is a 12.9% increase in the number of confirmed HG CIN cases ($p=0.025$). The referral populations differed markedly in the prevalence of high-grade cytology (6-83%) and confirmed HG CIN (19-79%). The increased detection due to ZedScan similarly varied (4-35%).

A major benefit of using ZedScan is the significant increase in the detection of HG CIN in women referred with low grade cytology (borderline/low grade dyskaryosis or ASCUS/LSIL). There were 757 women referred with low grade cytology and the prevalence of biopsy-proven HG disease varied from 11 to 32% in the different clinics; however the use of ZedScan consistently led to a significant increase in the detection of high grade disease of between 58% (50-71%) ($p=0.001$).

Conclusion

The use of ZedScan significantly increases the detection of high-grade disease in all women referred to colposcopy. ZedScan is particularly of help in women referred with low grade cytology regardless of the screening population and the prevalence of disease.

P-70

A LIFESTYLE BASED ALGORITHM MAY PREDICT CIN2+ IN SCREENED POPULATIONS

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Aims

To investigate whether the use of various lifestyle factors known to have an impact on the risk of HPV persistence and the development of pre-invasive disease could be of value in predicting CIN2 or worse disease in women with abnormal findings at cytology-based screening.

Material and Methods

In all women, who have undergone treatment with LLETZ (1980-2015) in a single colposcopy clinic of a University Hospital, prospectively collected lifestyle factors at the time of treatment were extracted. These included the number of sexual partners, condom use, smoking, age of sexual life onset, HPV vaccination (in the last decade). By employing Random Forests, we developed computational intelligence models for the combination of the results of cytology and/or HPV DNA testing with the aforementioned lifestyle factors.

The ability of these factors to predict, alone or in combination, high-grade disease (CIN2+) together with the cytology or colposcopy findings or molecular markers was calculated and was compared to the gold standard (histology of the transformation zone). We calculated accuracy parameters like sensitivity, specificity, positive (PPV) and negative predictive value (NPV) for various combinations.

Results

4106 women who had LLETZ were included and had recorded characteristics. HPV vaccination before the sexual debut was the single most protective factor for the development of high-grade disease. The commonest factors associated with CIN2+ at histology was the lack of vaccination and the number of partners. The intelligent models produced more accurate results and balanced sensitivity and specificity compared to cytology alone, HPV DNA testing or co-testing.

Conclusion

An algorithm incorporating individual risk and protection life style factors, (with each one's different weight/power of effect) may consist a simple, cost free, reasonable and rationale triage option for, at least some sub-groups, of the screened (either with pap- or HPV DNA tests) positive populations.

P-71

HPV PRIMARY SCREENING PILOT STUDY

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HPV testing plays an important role in cervical cancer prevention strategies, in particular in the context of HPV vaccination populations. Primary HPV screening is more sensitive than cytology based screening. However, while HPV DNA testing is more sensitive than cytology for identifying CIN2+, the specificity is lower. Thus, a key challenge with HPV primary screening is to find the optimal balance between sensitivity and specificity, and avoid large numbers of unnecessary follow-ups of HPV-positive women. This can be achieved by using more specific HPV tests and appropriate triage algorithms. Previous studies suggest that reflex cytology is a good option for triage of HPV DNA positive women. An alternative approach is to triage with secondary biomarkers. Several biomarker options exist which may prove useful in this regard including detection of HPV E6/E7 mRNA transcripts, genotyping for HPV 16/18, p16INK4a/Ki-67 and methylation markers. In partnership with CervicalCheck, The National Cervical Screening programme, CERVIVA are undertaking a longitudinal HPV primary screening pilot study which will evaluate several different triage strategies for management of a HPV-positive primary screening test. Cervical cytology samples from approximately 15,000 women undergoing routine cervical screening will be tested for HPV DNA and mRNA. All HPV-positive women will be further assessed with cytology and a panel of molecular tests including HPV16/18 genotyping, E6/E7mRNA, p16INK4a/Ki-67, and specific methylation markers. The performance of different triage strategies will be examined both cross-sectionally and longitudinally over two screening rounds for detection of CIN3+. Here we introduce the study concept and design and will provide an update on recruitment to date.

P-73

IFCPC DISTANCE LEARNING COLPOSCOPY COURSE; VALIDATION OF COLPOSCOPY TRAINING

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Cervical cancer remains a global problem with the burden of disease in low and medium resource countries. HPV vaccination or cervical screening are 2 approaches. Even with 'See and treat' approaches, some women will need further assessment of possible disease. The standard and use of colposcopy is widely variable. Access to a comprehensive training programme with an experienced preceptor in a busy colposcopy service is difficult where cervical cancer rates are high, where screening programmes just beginning and where the need for colposcopy training is most urgent.

The IFCPC has supervised 2 pilot distance learning courses in English. The courses consisted of 25 lectures by global experts which were delivered on line over a year. A MCQ was set after each lecture and had to be answered to progress. Participants completed a colposcopy clinic observership prior to sitting an OSCE exam (Capetown 2013 and London 2014).

Methods:

A questionnaire was emailed to all participants in October 2015 to evaluate the course and identify benefits and challenges to becoming a practicing colposcopist.

Results:

To date 6 questionnaires have been returned. 5/6 were using colposcopy in their hospitals with screen positive or symptomatic women. The online course and observership were highly rated but not all were able to travel and would like to see locally delivered colposcopy practice and training.

Conclusions:

There remains a number of challenges to skilling local staff in colposcopy to support developing screening programmes. The IFCPC aim to provide more online resources to increase colposcopy recognition skills and management decision making. The next initiative is to support training of regional colposcopy trainers.

P-74

CHALLENGES OF COLPOSCOPY TRAINING IN LOW RESOURCE SETTINGS, WITH NO SCREENING PROGRAMME AND NO ESTABLISHED COLPOSCOPY CLINICS; A REPORT ON COLPOSCOPY TRAINING DONE IN GHANA AT KORLE BU TEACHING HOSPITAL POLYCLINIC, JANUARY – NOVEMBER 2015

Theodora Pepera

St George's Hospital, London, UK

Background:

Amongst key requirements of colposcopy training in the International Federation for Cervical Pathology and Colposcopy (IFCPC) guidelines:

- 1) "Direct supervision of 50 cases in a colposcopy clinic, including 50% high grade."
- 2) "A case management module delivered partly in a recognized busy colposcopy clinic with devoted trainers".

For low resource settings with no screening programme, no local trainers, and no dedicated colposcopy service, these two conditions present challenges that require a different approach.

In Ghana >3000 new cases of cervical cancer are diagnosed every year and at least 2/3 of them will die.

At present, few centres offer VIA (visual inspection with acetic acid) and cervical cytology; certainly not enough cases to support the current colposcopy training programme criteria.

Training module in Ghana 2015:

Initial 3 day workshop with ½ day intensive lecture, followed by 2.5 days of practical training on how to use a colposcope and the basic principles of colposcopy. It was made clear to participants that this workshop alone, did not certify them as colposcopists. Participants were encouraged to keep a log book and enrol in an online colposcopy course.

A screening clinic was set up in the Primary Care Polyclinic of Korle Bu Teaching Hospital; the country's busy teaching hospital.

The next challenge was to deliver further practical colposcopy training.

Results

Over 30 working days, seeing approx. 5-10 patients per day, I was able to perform direct supervision of 166 colposcopies.

DrA 85 cases, DrB 57 cases, Nurse 24 cases. Colposcopically 6 low grade and 1 high grade.

4.2% abnormal.

The process in this setting, was extremely labour intensive and expensive, therefore a viable alternative must be sought.

Conclusion:

Newer media technologies, incorporating image capture, should be considered to facilitate cloud-based log books, with indirect supervision, supported by trainers worldwide, followed by an OSCE exam.

P-75

VOLUME OF LLETZ SPECIMEN. DOES SIZE MATTER?*Zoona Saeed, Franz Ndumbe**Scunthorpe General Hospital, UK***Objectives:**

Retrospective review to assess volume of LLETZ (Large loop excision of the transformation zone) specimens performed from January to December 2014, for high grade Cervical Intraepithelial Neoplasia (CIN).

Methods:

131 patients were identified with the help of local hospital based system and Exeter, national IT system. The data was entered and analysed via Excel database. The following parameters were assessed; Reasons for performing LLETZ, date LLETZ was performed; depth and volume of LLETZ specimen; excision margins; date of follow-up cytology and follow up cytology results.

Results:

In 44%, cases LLETZ procedure was performed due to high grade changes on biopsy; 24% due to high grade dyskaryosis on cytology and 22% due to high grade changes on colposcopy.

In complete excision, volume range of tissue removed was 0.449-4.975 cm³ with a mean value of 1.97cm³. In incomplete excision volume range was 0.403-4.609 cm³ with mean value of 1.98 cm³. In LLETZ samples with "not assessable" excision margins, the volume range was 0.622-1.9 cm³ with mean value of 1.0509 cm³.

There were 77 cases (58.7%) in the complete excision group(CEG). In Incomplete excision group (IEG) 43 cases (33%) cases were recorded. On follow up cytology of IEG, 2 had high grade dyskaryosis. 10 cases (7.6%) were in "not assessable" group.

Conclusion:

Mean volumes of excised tissue in complete and incomplete excision groups were similar. This showed that that volume of LLETZ specimen cannot predict completeness of excision.

On follow-up cytology there were 2 cases of dyskaryosis in the incompletely excised group and none in the completely excised and not assessable group.

P-76

COMPARING COLPOSCOPY TRAINING IN THE REPUBLIC OF IRELAND AND THE UK; HOW CAN WE IMPROVE TRAINEES COLPOSCOPIC EXPERIENCE?

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As trainees with similar levels of experience our exposure to colposcopy in the UK and Republic of Ireland has differed significantly.

In the UK our experience is there is little emphasis on acquiring colposcopic skills in the training programme. Trainees may have observed one colposcopy only over the seven year training programme. Colposcopy training has to be proactively sought-I was the only BSCCP trainee in my last two training jobs and other colposcopy trainees report similar experiences. Concerningly the colposcopy ATSM is within the bottom three with regards to national uptake. This has significant implications for trainee experience, patient management and the future of gynaecology.

In the ROI colposcopy is more ingrained in the training programme. It is common for registrars to attend colposcopy clinics and the majority of trainees undergo colposcopy training, with the BSCCP, prior to completion of their residency schemes. Subsequently at the end of their O&G training the majority of trainees are proficient at colposcopy.

So how can we encourage UK trainees to develop colposcopic skills? We believe that there should be more emphasis on colposcopy as part of the RCOG curriculum. We need a recruitment drive to publicise to junior trainees that BSCCP training is available as an interesting and relevant adjunct to the training programme. The Colposcopy ATSM is currently being revised in order to improve uptake and we propose that once this has been finalised the RCOG host a 'premiere' where it can be promoted to trainees.

P-77

INSULATED SPECULUM USE WITHIN A COLPOSCOPY SETTING. ARE INSULATED VAGINAL SPECULUM SAFE?

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Many Colposcopists use insulated vaginal speculae, in the belief that this will afford protection from stray electrosurgical energy. This belief can result in inadvertent burns to the vaginal mucosa, as a result of insulation failure.

Diathermy was first used as far back as circa 1923. Since then numerous developments in surgery and medicine have been transformed by diathermy, or to give its correct name Electrosurgery. Unfortunately, the required knowledge and understanding of Electrosurgery is still poor, in most cases.

As with all therapeutic thermal devices, injury to patients and staff still occur, in spite of numerous safety features used in modern technology.

One of the prime examples which evidences the lack of understanding, can be found in Colposcopy. When Electrosurgery is used in the Vaginal Introitus, using an insulated speculum, an assumption is made that if the speculum is insulated, this is all that is required to protect the patient from the risk of a thermal injury.

This paper is aimed at all Colposcopists who perform therapeutic interventions, with the objective of raising the levels of safety awareness and thus preventing further unnecessary thermal injuries, to both patients and staff.

Speculae are often used when performing a LLETZ (Large Loop Excision Transformation Zone) procedure.

The use of an insulated Cusco style Vaginal Speculum is fairly common practice in Colposcopy. The belief being, that the insulation will protect the patient undergoing a LLETZ procedure. "Unintended electrosurgical injuries are preventable complications that may be a direct result of an insufficient fund of knowledge pertaining to electrophysics and electrosurgical equipment".²

Conclusion:

The use of insulated Cusco design speculum does not afford protection against burns to the

P-78

FOLLOW UP CYTOLOGY IN PATIENTS WITH LOW GRADE DYSKARYOSIS AND HR HPV DETECTED AND NORMAL COLPOSCOPY*Meera Adishesh, Susan Manuel, Jay Scanlon, Bridget Decruze**Liverpool Women's Hospital NHS Trust, UK***Introduction:**

Since NHSCSP/BSCCP Guidance in 2008, patients referred with low grade dyskaryosis with HR HPV detected and found to have normal colposcopy appearance are discharged back to the normal 3-year recall. This study was performed to assess effectiveness of the recommendation.

Method:

We identified in the 6-month period, Jan – Jun 2012, 197 patients were referred with low grade dyskaryosis and HR HPV present were referred to Liverpool Women's Hospital. Of those, 17 patients were examined and discharged back to 3-year recall as they were found to have normal colposcopic appearance of their cervix.

Results:

Of these 17 patients, 8 attended for follow up cytology. 5 had negative cytology, 2 had borderline and HR HPV negative and 1 had borderline and HR HPV positive. The latter patient was re-referred to colposcopy and found to low grade colposcopic findings and underwent a LLETZ 4 months later and histology showed CIN 1. 8 patients did not attend for screening after their 3-year recall and one patient died.

Conclusion:

This study has shown that no cases of high grade disease were missed with this management. However, only 50% of the patients attended when recalled for their next smear.

We plan to expand the study period and assess a larger cohort for presentation to the BSCCP.

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COLD COAGULATION FOR THE TREATMENT OF CIN, HPV TEST OF CURE SUCCESS RATES

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Background:

HPV test of cure (ToC) for patients who have undergone treatment to the cervix for cervical intra-epithelial neoplasia (CIN) has recently been introduced to the UK. The majority of the pilot studies prior to the introduction of HPV ToC focused on patients who undergo excisional treatments. The use of cold coagulation is well established at the Shrewsbury and Telford NHS Trust (SaTH) and a small number of other units are beginning to implement it for the management of CIN. This is the first large audit of 159 cases that have undergone cold coagulation to establish the HPV status and treatment success rates following this form of treatment.

Objective:

Determine the HPV ToC success rate in patients who have undergone cold coagulation for the treatment of CIN and to identify any pregnancies following treatment. To establish preterm birth rate and any complications following treatment.

Setting:

Colposcopy clinic at the SaTH. Treatments performed for CIN between 2012 – 2015 with HPV ToC testing at ~ 6 months post treatment.

Main results:

Our cohort of patients included 159 women who have all undergone cold coagulation for CIN. The mean age for patients undergoing treatment was 26.7 (range 20-48), with 69% of those having high grade dyskaryosis on the referral cytology and 93% of all the patients having high grade CIN on pre-treatment histology. On follow up of all patients 67% were HPV negative which is comparable to published rates for patients who have undergone excisional treatments.

There were no complications for this group of patients who have undergone cold coagulation.

Author's conclusions:

Patients who undergo cold coagulation have a low complication rate and comparable HPV ToC rate to those who undergo excisional treatments such as LLETZ. Consideration of a greater use of cold coagulation for the treatment of CIN should be made.

P-80

BEYOND CIN; THE CHALLENGES IN MANAGING HIGH-GRADE VAIN

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Background

The risk of developing vaginal intra-epithelial neoplasia (VAIN) in women treated for high-grade (HG) cervical intra-epithelial neoplasia (CIN) has been reported as high as 6.8% post hysterectomy and 2.5% following laser treatment to CIN. Assessing vaginal disease is challenging due to poorer access and the presence of multiple foci of VAIN. Currently there is a lack of consensus on how to manage women with VAIN. We present a retrospective case series of women diagnosed with HG VAIN within the Homerton Anal Neoplasia Service.

Methods

A retrospective case note review was conducted identifying women diagnosed or referred with HG VAIN within the Homerton Anal Neoplasia Service. Medical records were reviewed to capture data including; medical history, referral details and history of CIN. Treatment outcome data was recorded including; date of first intervention, number of interventions, follow-up period and histological outcome.

Results

In total six women were identified, aged 40 to 62 (median 44 years). All had evidence of immuno-compromise and previous cervical disease, half had undergone hysterectomy. HG VAIN was present in 4/6 women at referral, 2/6 were referred with vulval intra-epithelial neoplasia (VIN) and were later diagnosed with HG VAIN. Treatment details, using laser ablation, were available in 5/6 cases. The total number of treatments per woman ranged from two to eight (including all lower genital tract sites), treatments targeted to the vagina ranged from 1-3. Total follow-up duration in months was 8 to 44 (median 16) months.

Discussion

This case series highlights the fact that women treated for HG CIN remain at risk of HG VAIN. The management of HG VAIN is complex and patients may require a number of treatments both intra and extra-vaginally to prevent cancer. Ideally this should take place within a specialised multi-disciplinary team with access to colposcopy, vulvoscopy, high resolution anoscopy and theatre.

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CERVICAL INTRAEPITHELIAL NEOPLASIA 2: LARGE LOOP EXCISION OF THE TRANSFORMATION ZONE VS CONSERVATIVE MANAGEMENT*Melissa Bradbury¹, Diane Hemming², Ann Fisher¹, Christine Ang¹**¹Northern Gynaecological Oncology Centre, Queen Elizabeth Hospital, Gateshead, UK, ²Pathology Department, Queen Elizabeth Hospital, Gateshead, UK***Background**

Current national UK guidelines recommend standard treatment of high grade cervical intraepithelial neoplasia (CIN2 or 3) with a large loop excision of the transformation zone (LLETZ). Several studies have suggested that CIN2 could behave like CIN1 and resolve spontaneously. However, there is uncertainty as to whether CIN2 should be managed conservatively in selected cases. We aimed to evaluate the predictive factors for the treatment of CIN2 with LLETZ vs surveillance.

Methods

Prospective study of women diagnosed with CIN2 at the Northern Gynaecological Oncology Centre (Gateshead) between January 2014 and May 2015. All women with abnormal cervical screening cytology were directly referred for colposcopy and underwent a punch biopsy for histology. Data was collected on women's age, parity, smoking status, referral cytology, colposcopic findings and management. Women were offered the option of treatment with LLETZ or surveillance with 6-monthly cytology and colposcopy (with or without biopsy). Logistic regression analysis was used to assess for predictors of treatment modality.

Results

A total of 109 women were diagnosed with CIN2, median age 27 years (range 24-55). Sixty-eight were treated with LLETZ (62.4%) and 41 were managed conservatively (37.6%). Simple logistic regression analysis showed that age ≥ 30 years (OR=5.7, 95%CI 1.8-17.9), parity ≥ 1 (OR=2.5, 95%CI 1.1-5.5) and presence of high-grade changes on colposcopy (OR=3, 95%CI 1.1-8.7) significantly increased the likelihood of having a LLETZ. Age ≥ 30 years (OR=5.2, 95%CI 1.6-16.8; * $p=0.006$) and high-grade colposcopic changes (OR=3.2, 95%CI 1.1-9.7; * $p=0.042$) remained significant predictors on multiple regression analysis.

Conclusion

Women diagnosed with CIN2 aged ≥ 30 years, who were parous and with high-grade changes on colposcopy were more likely to undergo a LLETZ rather than conservative management.

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CONSERVATIVE MANAGEMENT OF CIN 2Jennifer Byrom*Birmingham Women's Hospital, Birmingham, UK***Introduction**

The recent questionnaire issued by the BSCCP for the management of CIN 2 prompted me to perform a review of my unit's practice. Over the past ten years my unit has offered conservative management to women when biopsies have shown CIN 2. Our decision to offer conservative management was dependent on index cytology, age, parity, colposcopic opinion and patient choice. The aim of this study was to review the management of CIN 2 on biopsy and subsequent histology or cytology.

Methodology

I performed a retrospective review of cases over a two year period. Cases were identified from our colposcopy database and the case notes reviewed. Cytological results from women lost to follow-up were retrieved from the open Exeter database.

Results

Over a two year period (01/01/11- 31/12/12) 178 biopsies showed CIN 2. 71% went on to have LLETZ; 27.5% cytological surveillance and 1.5% cold coagulation. Of the women who had a LLETZ performed following their biopsy less than 50% (60/126) had CIN 3 on histology; 28% had HPV or CIN 1 only. There were no cases of invasive disease.

Of women managed conservatively with colposcopy and cytology at 6 months only 20% (10/49) went on to have LLETZ for persistent cytological abnormalities. Of these 60% showed CIN 3. 80% of women managed conservatively had cytology which reverted to normal within 18 months without the need for any treatment.

Conclusion

This small review shows that we appear to have selected cases of CIN 2 appropriately for conservative management and that it is a safe strategy. We may have been able to manage more women conservatively as 144 women were treated with a see and treat policy and only had CIN 2 in their LLETZ specimens.

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THE REBIRTH OF COLD COAGULATION IN AN ERA OF HPV TESTING*Elaine Coupar, Christine Baird, Wendy McMullen, Kalpana Ragupathy**Ninewells Hospital, Dundee, UK***Background:**

Our preliminary study (n= 839), showed Cold Coagulation(CC) has better success rate than LLETZ (Odds ratio of 1.7; p 0.003).

However, a similar percentage of women had negative dyskaryosis, but positive hrHPV on test of cure (TOC) in both groups (CC-16% and LLETZ-17%).

In England, this group will have colposcopy and if normal, returned to routine recall. This is different to practice in Scotland where patients will continue to have increased cytological surveillance.

AIM: Study cohort of women who tested negative for dyskaryosis, positive for hrHPV on TOC and assess if treatment failures were dependent on primary treatment and/or patient characteristics.

Methods:

Study period was between April 2012 and March 2014 (n=24months). Peta Odds ratio was calculated to assess likelihood of treatment failures within 12 months.

Results:

In the study group, primary histology was high grade CIN in 99%CCversus 81%LLETZ patients. Median age of women was 26 and 37, while smoking status was 50% and 51% in CC and LLETZ groups respectively. There was no high grade CIN in CC group within 12 months follow up while two patients in LLETZ group were treated for recurrent high grade CIN.

Conclusions:

Although a similar proportion of women in both treatment groups tested hrHPV positive/cytology negative at 6 months TOC, subsequent histologically confirmed failure rate was higher in LLETZ group compared to cold coagulation group (Odds ration 9.5). This difference is not due to smoking. This small study adds to the body of literature suggesting cold coagulation is a safe and effective treatment for young women with high grade CIN.

As our two treatment failures were detected on subsequent cytology following a negative colposcopy examination, this casts some doubt over practice elsewhere of discharging women in this group to 3 yearly recall on basis of a negative colposcopy examination.

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IMPACT OF TREATMENT FOR CERVICAL INTRAEPITHELIAL NEOPLASIA ON FUTURE PREGNANCY OUTCOMES: A LITERATURE REVIEW*Aisling Heverin^{1,2}, Mendinaro Imcha^{1,2}**¹University Hospital Limerick, Ireland, ²University Maternity Hospital Limerick, Ireland***Introduction**

The purpose of this review is to examine the impact of treatment for cervical intraepithelial neoplasia on future pregnancy outcomes. Obstetric outcomes include preterm delivery, miscarriage and low birth weight in infants born to women following cervical treatment.

Materials and Methods

A literature search was conducted using two electronic databases, Ovid Medline and EMBASE. Keywords included: pregnancy outcomes, premature birth, low birth weight, spontaneous abortion, LLETZ, ablation techniques and cervical intraepithelial neoplasia. Inclusion criteria included all studies with data on adverse obstetric outcomes in women treated for cervical intraepithelial neoplasia. Exclusion criteria included women who underwent treatment for cervical intraepithelial neoplasia during pregnancy and pregnancy achieved by assisted reproductive technology.

Results

255 articles in total were retrieved from both databases. The results showed an increased risk of adverse obstetric outcomes including preterm delivery, miscarriage and low birth weight infants following cold knife conisation and to a lesser extent cervical conisation. There is conflicting data regarding the risk associated with LLETZ. Laser ablation does not have a negative impact on future pregnancy outcomes.

Conclusion

Further studies are required to clarify the risk of adverse obstetric outcomes associated with the various ablative modalities. Further data is also needed to determine if LLETZ treatment causes an increased risk with future pregnancies. This may be achieved by carrying out a definitive randomised control trial.

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THE RISK OF PRETERM BIRTH AFTER TREATMENT FOR CERVICAL PRE-INVASIVE AND EARLY INVASIVE DISEASE INCREASES WITH INCREASING CONE DEPTH: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background:

To assess the effect of treatment for CIN on obstetric outcomes and to correlate this to the cone depth and comparison group used

Methods:

Design: systematic review and meta-analysis

Data sources: CENTRAL, MEDLINE, EMBASE

Selection criteria: Studies assessing obstetric outcomes in women with or without a previous local cervical treatment

Data analysis:

Studies were classified according to method and obstetric endpoint. Pooled risk ratios (RR) were calculated using a random-effect model and inverse variance. Inter-study heterogeneity was assessed with I² statistics.

Results:

Sixty-nine studies were included (6338982 participants: 63591 treated-6275391 untreated). Treatment significantly increased the risk of overall(<37weeks)(10.8 v 5.5%, RR=1.71[1.52,1.92]), severe (<34/32weeks)(3.5 v 1.4%, RR=2.45[1.96,3.06]) and extreme prematurity (<30/28weeks)(1.0 v 0.3%, RR=2.64[1.81,3.86]). The magnitude of the effect was higher for radical techniques (<37weeks: CKC (RR=2.11[1.24,3.57]), excision NOS (RR=2.13 [1.66,2.74]), LLETZ (RR=1.56[1.36,1.79]), ablation NOS (RR=1.46 [1.27,1.66]). Repeat treatment multiplied the risk (13.2 v 4.1%, RR=3.78[2.65,5.39]). The risk increased with increasing cone depth (≤10/12mm: 7.1 v 3.4%, RR=1.54[1.09,2.18]; ≥10/12mm: 9.8 v 3.4%, RR=1.93[1.62,2.31]; ≥15/17mm: 10.1 v 3.4%, RR=2.77[1.95,3.93]; ≥20mm: 10.2 v 3.4%, RR=4.91[2.06,11.68]). The choice of comparison group affected the magnitude of effect that was higher for external, followed by internal comparators and ultimately women with disease but no treatment. Untreated women with disease and/or pregnancies before treatment had higher risk of preterm birth (PTB) than the general population (5.9 v 5.6%, RR=1.27[1.16,1.39]). Spontaneous PTB, premature rupture of the membranes, chorioamnionitis, low birth weight, neonatal intensive care unit admission and perinatal mortality were also significantly increased after treatment.

Interpretation: Women with CIN have a higher baseline risk for prematurity. Excisional and ablative treatment further increases that risk. The frequency and severity of adverse sequelae increases with increasing cone depth and is higher for excision than it is for ablation.

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CONSERVATIVE MANAGEMENT OF CIN 2: RESULTS OF A NATIONAL SURVEY OF BSCCP MEMBERS

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Background

NHSCCSP guidelines currently recommend excision or ablation of high-grade CIN (CIN 2 & 3) despite a degree of uncertainty existing regarding the natural history of CIN 2 and a reportedly high rate of spontaneous regression.

This study aims to assess BSCCP members' attitudes towards the conservative management of CIN 2, including current national practice, and the identification of potential selection criteria for women deemed eligible for this management strategy.

Method

A questionnaire devised by the authors, was submitted to the BSCCP executive committee, agreed and accepted for distribution as a National BSCCP Survey. Distribution and analysis was performed using *Survey Monkey*TM software.

Results

Over 300 BSCCP members completed the survey. Over 50% already offered conservative management for selected women, although only 18% had formal written guidelines for this management strategy. The majority (75%) agreed that a conservative approach could lead to a more targeted treatment of persistent CIN 2.

Age over 40yrs, HPV16 positive, smoking, immuno-compromise, and a large lesion were felt to be relative contraindications for conservative management by the majority of respondents.

Six monthly monitoring was favoured by most, with excision the preferred method of treatment for persistent disease.

Almost all survey participants were agreeable to participation in a multicentre study on conservative management of CIN 2.

Conclusion

CIN 2 appears to be managed conservatively by many colposcopists throughout the UK, despite the lack of formal guidelines. Potential criteria to safely select women suitable for such management should be investigated with a multicentre study supported by the BSCCP.

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CERVICAL ANTIMICROBIAL PEPTIDES ARE DECREASED FOLLOWING EXCISIONAL TREATMENT FOR CERVICAL INTRAEPITHELIAL NEOPLASIA

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Introduction:

Excisional treatment for cervical intraepithelial neoplasia (CIN) increases the risk of preterm birth (PTB) in a subsequent pregnancy. Treatment may disturb the innate immune system. We examined the effect of antimicrobial peptides in response to excision.

Methods:

Human Beta Defensin-1 (hBD-1) and Secretory Leucocyte Protease Inhibitor (SLPI) levels were determined in cervicovaginal secretions using enzyme-linked immunosorbent assay (ELISA) and normalized to total protein content.

Results:

Two-hundred and seventy nine women with CIN and normal controls were sampled. Mean AMP ratios were lowest in healthy controls, rising with increasing disease severity (hBD-1: normal 4962pg/ml vs high-grade CIN 7173pg/ml ($p=0.083$); SLPI: normal 806422pg/ml vs high-grade CIN 850075pg/ml ($p=0.123$).

Eighty women were sampled 6 months following excision treatment. Levels of hBD-1 were significantly lower compared to pre-treatment (9073pg/ml vs 3838pg/ml, $p<0.0001$) and were also lower than healthy, untreated controls ($p=0.0143$). SLPI levels also decreased in the same manner (137800pg/ml vs 99270pg/ml), but this was not statistically significant.

Conclusions:

Excisional treatment leads to a reduction in the levels of antimicrobial peptides, which serve as a first-line defense against pathogens. Treated women may therefore be more susceptible to ascending infections in pregnancy, which are known to be a significant cause of PTB.

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LARGE LOOP EXCISION BIOPSY OF CERVIX: DOES SIZE MATTER?*Nalitha Mji¹, Mona Sharma², M. H. Jones^{1,2}**¹Darent Valley Hospital, Dartford, UK, ²St. Georges' Hospital, London, UK***Introduction**

Large loop excision biopsy of the cervix (LLETZ) is a well-established treatment modality for women with abnormal smear results. Currently, there is controversy as to whether the size of the loop matters in terms of damaging the cervix, if large or resulting in residual or recurrent disease, if small.

Aims

Our study aim was to evaluate whether the size of loop and completeness of excision are important in terms of finding residual or recurrent disease in women treated for High Grade CIN.

Methodology

The database of all women treated for High Grade CIN at a London Teaching Hospital, over 2 years, was examined. Information included: depth of loop, completeness of excision margins and results of post-treatment cytology (test of cure (TOC)).

Results

A total of 366 patients had a loop excision procedure followed by a TOC. 60% (222/366) of cases with high grade disease at colposcopy had a positive histological confirmation. 8.75% (32/366) had micro-invasive disease. 5.46% (20/366) had normal histology.

There was no significant difference in disease found at follow up in patients with loops greater or less than 10mm.

There was no significant difference in residual disease found in patients with complete and incomplete excisions (55% vs. 52% respectively).

A small percentage failed the TOC.

Conclusions

There is no relationship between size of loop and excision margin involvement in terms of risk of failed treatment in women referred with suspected high grade CIN. Treatment failure is rare regardless of size of the loop. The incidence of obstetric (cervical incompetence with second trimester pregnancy loss and preterm labour) and gynaecologic (menstrual difficulties) morbidities increase, the larger the size of the loop.

Recommendations

National standards for loop excisions for both size and margins should be revised in favour of smaller loops with less morbidity.

P-89

TO EXPLORE THE CERVICAL CANCER RATES WITHIN CHONGWE DISTRICT ZAMBIA

Charles Msiska

Ministry of Health, Chongwe, Zambia

To use the rates to inform policy and procedure to improve treating, screening and improving the services for 90,000 women.

P-90

DYNAMIC SPECTRAL IMAGING (DySIS) FOR LOW GRADE CYTOLOGY HIGH RISK HPV POSITIVE COLPOSCOPY REFERRALS: UP-TO-DATE OUTCOMES & POTENTIAL ROLE IN STANDARDIZATION OF CARE

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Background:

Women with Low-Grade (LG) smears who are high-risk (HR) HPV triaged/positive are a newly introduced population to the UK colposcopy clinics. Up-to-date, available data are limited to the Sentinel Sites study findings, as the NHS is just about to reach 4 years of implementing HPV triage. Therefore, compliance with guidelines, as well as impact of difference in practices amongst different departments and its effect both on cost and long term outcomes remains to be assessed.

Objective:

To assess the adjunctive aid of DySIS colposcopy in detecting or excluding High-Grade (HG) disease and investigate its potential role in standardization of care between different colposcopists/departments for this population.

Methods:

This is an observational ongoing study, including the above population, in the Northern Gynaecological Oncology Centre, Gateshead since 3/2013. Patients are examined using the DySIS digital colposcope. Colposcopic impression and potential biopsy sites are recorded before and after seeing the DySISmap. CIN2+ is considered primary outcome. A contemporaneous control group was used to validate results.

Results:

The study currently includes 287 women. Of those, 225(78.3%) were biopsied. Overall, 49(17%) women had CIN2+ histology. The sensitivity of standard colposcopy for CIN2+ was 27% improving to 82% with the incorporation of the DySISmap. Specificity was 91% and 36% respectively. Although Negative Predictive Value (NPV) cannot be accurately assessed, using directed biopsy results, the combined NPV of colposcopy and DySISmap for CIN2+ was 87%. The control group included 912 women who underwent conventional colposcopy. Overall, 156(17.10 %) were found with CIN2+ after biopsying 810(88.8%).

Conclusion:

Incorporating the DySISmap as an adjunct to standard colposcopy may improve sensitivity of colposcopy for this population. Additionally, DySIS could be used as a benchmark to standardize care between different centers and potentially reduce number of biopsies needed to pick up HG disease at initial presentation thus reducing future referrals.

P-91

CLINICAL AND ECONOMIC IMPACT OF ALTERNATIVE SCREENING POLICIES IN THE POST HPV VACCINATION ERA IN SCOTLAND

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Background/Objectives

With an established UK school based HPV immunisation programme, the approach to cervical screening requires modification to optimise cancer prevention, clinical and economic efficiency. Our study aims to create a simulation model to evaluate the impact of alternative screening strategies to inform future cervical cancer prevention policy.

Methods

A Markov simulation model has been constructed for a cohort of 35,000 women who are followed from age 12 until age 75. The model considers possible acquisition of HPV and regression or progression in a similar fashion to the natural history model of Choi, 2009. Women are assigned a risk level for sexual activity and a deprivation quintile. These impact on risk of HPV infection, uptake of vaccination and attendance at screening based on current national data.

The model estimates the rates of cervical cancer in the vaccinated cohort of women, rates of CIN, numbers of colposcopies per year and the relative costs of screening, diagnosis and treatment for cervical cancer of the different screening strategies from the UK NHS perspective.

Results

We will demonstrate results for alternate screening strategies for referral to colposcopy - primary HPV screening triaged by cytology and HPV testing alone. These are compared to the current practice of cytology only with HPV test of cure. We consider variation of the age and frequency of screening and examine the impact on the burden of cervical disease and estimate the potential for savings in NHS costs.

Conclusions

Whilst there are uncertainties present in the modelling process, the results of these models allow us to consider various "what if" scenarios and help to instruct policy on the future of the cervical screening programme in Scotland.

References

Choi et al, (2009) Transmission dynamic modelling of the impact of human papillomavirus vaccination in the United Kingdom. *Vaccine* 28: 4091-4102

P-92

MODERN MANAGEMENT OF EARLY STROMAL CERVICAL INVASION*Rachel Nicholson, Jeremy Twigg, Georgios Angelopoulos, Derek Cruickshank, Alison Roberts**James Cook University Hospital, Middlesbrough, UK***Introduction**

NHS CSP Guidance suggests that for patients who undergo LLETZ where early stromal invasion is identified but completely excised, "repeat excision should be performed to confirm excision of the CIN and to exclude further invasive disease".

We reviewed patients diagnosed with cervical cancer in our institution between 2010 and 2015 to determine the proportion managed according to this guidance.

Results

A total of 47 patients were diagnosed with carcinoma of the cervix. Nineteen patients had early stromal invasion (FIGO 1A1 disease) with co-existing CIN or CGIN in the LLETZ specimen. In 11 patients the invasive lesion was excised but co-existing CIN not fully excised. In 5 patients the invasive component and the CIN were fully excised. In 2 patients the invasive lesion was excised but CGIN not fully excised, and in 1 patient neither the invasive lesion, nor the CIN were fully excised.

All patients had their specimens reviewed at the central gynaecological oncology MDT and an ongoing management plan implemented.

In patients where a repeat excision was not performed 8/11 had positive endocervical/deep stromal margins. 3/11 patients had a positive ectocervical margin only. All 8 patients with positive endocervical / deep stromal margins declined a repeat excision and so had cytology follow up only. All patients had negative subsequent cytology at first follow up.

Conclusion

In this small cohort of patients, we suggest that it is not necessary to perform repeat excision for CIN present at the excision margin as long as the invasive focus is fully excised.

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AUDITING THE EXTREMES OF LLETZ CERVICAL TREATMENT: DEMOGRAPHIC FEATURES AND CYTOLOGY RECURRENCE RATES IN WOMEN WITH A SHALLOW (≤ 7 MM), NORMAL (8-14MM) AND DEEP EXCISION (≥ 15 MM)*Dimitrios Papoutsis, Matthew Wood, Jane Panikkar**Shrewsbury and Telford Hospitals NHS Trust, UK***Background:**

The NHS-CSP guidelines report that excisional techniques should remove tissue to a depth of greater than 7 mm. The objective of our study was to audit the extremes of cone depth and record the demographic features and cytology recurrence rates in women with a shallow (≤ 7 mm), normal (8-14mm), and deep excision (≥ 15 mm).

Methods:

This was a retrospective analysis of data retrieved from our colposcopy database. We included women with a single LLETZ treatment over a two-year period (2010-2011) that were followed up cytologically until 2013.

Results:

We identified 455 women with 46 (10.1%) having a shallow excision, 133 (29.2%) a deep, and 276 (60.6%) a normal excision. Women with a shallow excision were younger in age and had a higher percentage of being nulliparous. Before treatment, there were no differences in the percentage of high-grade pretreatment smears and punch biopsies among the three subgroups of women. Women with a deep excision had a higher percentage of high-grade appearance on pretreatment colposcopy, when compared to the other subgroups. Following treatment, women with shallow excision had significantly higher rates of incomplete endocervical margins and higher cytology recurrence rates. Women with deep excisions had similar recurrence rates with women of normal excisional depth, thus probably reflecting the greater lesion size in the subgroup of women with deep cones. The optimal cut-off of excision that significantly reduced the cytology recurrence was 9 mm. Removing more cervical tissue to depths greater than 15 mm did not further improve the cytology recurrence rates.

Conclusion:

Shallow excisions were more frequent in younger and nulliparous women and they resulted in higher rates of recurrence at follow-up. We identified that deeper excisions did not lead to less cytology recurrence and that the optimal cut-off point of excision should be only greater than 9 mm.

P-94

DO PATIENTS WITH CIN2 VERSUS CIN3 ON PRETREATMENT CERVICAL PUNCH BIOPSY HAVE LESS HIGH-GRADE CYTOLOGY RECURRENCE FOLLOWING COLD-COAGULATION TREATMENT? A RETROSPECTIVE COHORT STUDY*Dimitrios Papoutsis, Martyn Underwood, William Parry-Smith, Jane Panikkar**Shrewsbury and Telford Hospitals NHS Trust, UK***Background:**

Due to the high spontaneous regression rates of CIN2 in young women it has been suggested that conservative management of CIN2 may be considered in certain cases. The aim of our study was to lend support to this theory by investigating the high-grade cytology recurrence (moderate/severe dyskaryosis) following cold-coagulation in relation to the histology of the pretreatment cervical biopsy.

Methods:

This was a retrospective study of women having had cold coagulation between 2001-2011 in our colposcopy unit. Women with previous cervical treatment were excluded.

Results:

We identified 402 women with 260 (64.7%) cases of CIN2 and 142 (35.3%) cases of CIN3 on pretreatment cervical biopsy. In the total sample the mean age of women was 27.5 years (SD=4.9), 75.1% were nulliparous and 36.6% were smokers. Referral cytology and colposcopic appearance were high-grade in 62.7% and 57.1% of women, respectively. Endocervical crypt involvement in pretreatment cervical biopsies was found in 13.4%. The mean follow-up period was 2.8 years (SD=2.1). Women with CIN2 on pretreatment cervical biopsy had less frequently high-grade referral cytology and high-grade colposcopic appearances. They also had lower rates of crypt involvement and less pretreatment cervical biopsies taken. During the follow-up period, women with CIN2 on pretreatment cervical biopsy had less high-grade cytology recurrence when compared to those with CIN3 (1.9% vs 5.6%, $p=0.046$). Multiple stepwise Cox regression analysis showed that women with CIN3 on pretreatment cervical biopsy had 3.21 times greater hazard for high-grade cytology recurrence (95%CI:1.05-9.89) in comparison with CIN2 cases.

Conclusion:

We have found that women with CIN2 on pretreatment cervical biopsy have a less high-grade cytology recurrence following cold-coagulation treatment in comparison to those with CIN3. This finding lends support to the theory that CIN2 even though a high-grade abnormality might be considered a different entity in comparison with CIN3.

P-95

AUDITING THE OUTCOME OF CONSERVATIVE MANAGEMENT VERSUS SURGICAL TREATMENT OF PATIENTS DIAGNOSED WITH VIN2-3: A SMALL CASE SERIES FROM A SINGLE CENTER*Banchhita Sahu, Megan Godden, Dimitrios Papoutsis**Shrewsbury and Telford Hospitals NHS Trust, UK***Objective:**

We conducted a case series study in order to audit the management outcome of patients diagnosed with VIN2-3 (vulval intraepithelial neoplasia).

Methods:

We retrospectively reviewed the notes of n=21 patients who were diagnosed with VIN2-3 in our Department and have been either managed conservatively or have been surgically treated.

Results:

The 21 women in our cohort were diagnosed with VIN2 (9.5%) or VIN3 (90.5%) on vulval biopsies. The mean age of women at first diagnosis was 54.4 years (SD=3.8, range: 44-70), with 42.9% being post-menopausal, 19% being nulliparous, and all of them were of White British origin. These women mainly presented with symptoms of vulval itching (57.1%) and soreness (28.6%). They had high rates of being smokers (33.3%), of having concurrent lower genital tract HPV disease (cervical pathology: 57.1%, vaginal pathology: 4.8%), and of suffering from immunosuppressive conditions (42.9%). 5 out of 21 women (23.8%) were managed conservatively versus 16 out of 21 women (76.1%) who were managed with surgical excision treatment. The untreated VIN women were relatively younger in age. Those treated for VIN had a high recurrence rate (50%), a high margin positivity rate (68.8%) on vulval surgical specimen and were followed up for a longer time period. The median time from first diagnosis of VIN2-3 until surgical treatment was 8 months (range: 3-83 months). None of the women in either subgroup progressed to vulval cancer and they were followed up for a median of 5 years (range: 2-10 years).

Conclusion:

Our case series has shown that patients diagnosed with VIN2-3 have high rates of smoking, concomitant lower genital tract HPV disease, and co-existing immunosuppressive conditions. There was no progression to vulval cancer in our cohort both for those women who were managed conservatively and those who received surgical treatment.

P-96

VULVAL INTRAEPITHELIAL NEOPLASIA (VIN) TREATMENT - OUR EARLY EXPERIENCE WITH NEUTRAL PLASMA TECHNOLOGY*Deepa Shankari Velampalayam Subramanian, [Phil Chia](#)**Royal Bolton Hospital, UK***Introduction**

Vulval Intraepithelial Neoplasia (VIN) is an increasingly common problem particularly among women in their 40's & 50's. Treatment is recommended in all cases of VIN to reduce the risk of progression to squamous cell carcinoma. Choosing the best treatment for each woman involves balancing the importance of maintaining vulval anatomy and sexual function with the need to remove all abnormal cells.

Materials and methods

We report 5 cases of histologically proven VIN treated with neutral plasma technology delivered by the PlasmaJet® system, from September 2014 to January 2015. Age group varied between 25 and 52 years. They were all symptomatic with vulval pain/ itching and one of them had hyperkeratotic warty lesion. Biopsies confirmed VIN 2 in 1 and VIN 3 in 4 women. Smear was borderline in 2 women, 1 had past history of CIN and 2 women had normal smears. In our series, 3 women had persistent lesions after treatment with imiquimod cream.

Results

PlasmaJet® was used to vapourise the lesions to 1 mm depth with inclusion of normal tissue margin. All 5 women were followed up in the colposcopy clinic in 4 – 6 months when good symptom relief was reported and there was no clinical evidence of recurrence. Further follow up was arranged in 12 months.

Conclusion

In our experience, PlasmaJet treatment has been successful in treating women with VIN while retaining good cosmetic outcome. The maximum depth of the tissue effect is reached within about 5 seconds of application. There are no undesirable effects on the tissue and good cosmetic effect will appeal especially to the younger women.

These women need long-term follow up to monitor for the risk of recurrence or progression to malignancy. Further longitudinal studies with are required to enable us to recommend the use of PlasmaJet in routine clinical practice.

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SMART COLPOSCOPY

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