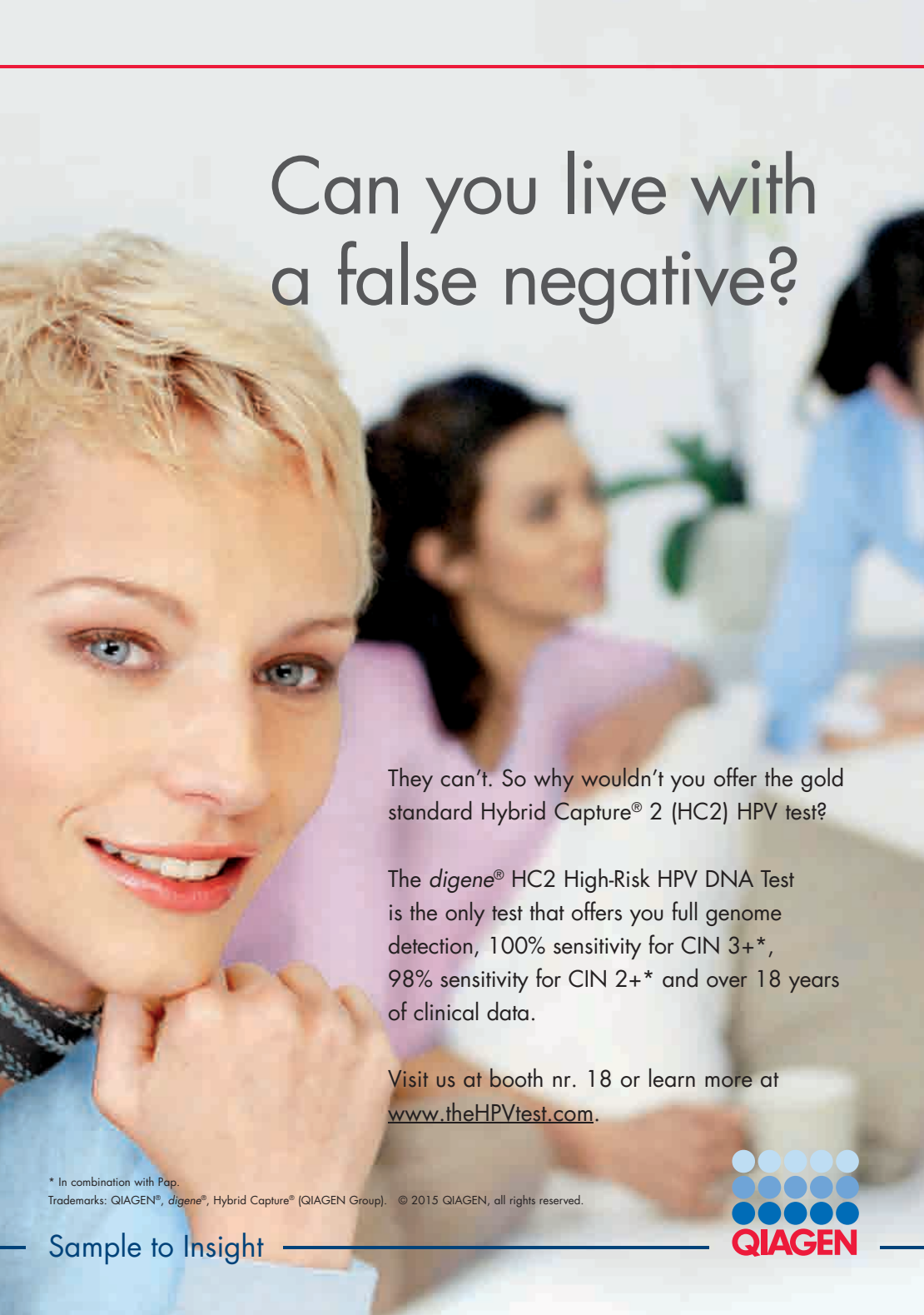
BSCCP2015

ANNUAL SCIENTIFIC MEETING

15TH-17TH APRIL, EAST MIDLANDS CONFERENCE CENTRE, (EMCC) NOTTINGHAM

FINAL PROGRAMME & BOOK OF ABSTRACTS

www.bsccpconference.co.uk
www.bsccp.org.uk
@TheBSCCP
#BSCCP2015


Can you live with a false negative?
They can't. So why wouldn't you offer the gold standard Hybrid Capture® 2 (HC2) HPV test?
The *digene*® HC2 High-Risk HPV DNA Test is the only test that offers you full genome detection, 100% sensitivity for CIN 3+*, 98% sensitivity for CIN 2+* and over 18 years of clinical data.
Visit us at booth nr. 18 or learn more at www.theHPVtest.com.
* In combination with Pap.
Trademarks: QIAGEN®, *digene*®, Hybrid Capture® (QIAGEN Group). © 2015 QIAGEN, all rights reserved.
Sample to Insight
QIAGEN

CONTENTS

WELCOME

On behalf of the local organising committee I would like to welcome you to Nottingham for the annual meeting of the BSCCP. We have organised a programme which encompasses all aspects of colposcopy from high science to more practical aspects of service delivery.

We have talks on screening, basic science, new technology, clinical care, and service access delivered by well known and distinguished speakers from the UK and overseas. There will also be a wide variety of excellent papers for oral and poster presentation and the quality of these has been high. We hope your time in Nottingham will be an enjoyable and informative one with hopefully some time to visit our vibrant city!

Local Organising Committee

Jafaru Abu, Mausami Das, Shilpa Deb, Suha Deen, Andree Ellis, Robert Hammond, Anita Juliana, Jane Marley, Sue Vryenhoef and Karin Williamson.

David Nunns

Nottingham University Hospitals Trust

Chair of the Local Organising Committee

NEXT MEETING

BSCCP 2016 Wednesday 13th - Friday 15th April

Life Centre Events, Bradford

CONFERENCE ORGANISERS

BSCCP 2015 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

SCIENTIFIC PROGRAMME

Wednesday 15th April 2015		EMCC
10.00 - 13.00	**Executive Committee Meeting** Invitation Only	Conference Suite 1
11.00 - 20.00	**Registration Open**	Atrium
14.00 - 17.00	**Trainers Seminar** Free to attend, but places MUST be pre-booked	Lecture Theatre
18.30 - 20.00	**Welcome Reception & Official Opening of the Exhibition**	Banqueting and Exhibition Suite

Thursday 16th April 2015		EMCC
08.00 - 17.30	**Registration Open / Speaker Preview Open**	Atrium/Conference Suite 1C
08.30 - 17.10	**Exhibition and Posters Open**	
09.00 - 09.10	**Welcome** David Nunns, Chair, Local Organising Committee & Maggie Cruickshank, BSCCP President	Lecture Theatre
09.10 - 10.55	**Plenary Session 1** Chairs: David Nunns, Nottingham University Hospitals Trust, UK and Maggie Cruickshank, University of Aberdeen, UK	
09.10 - 09.40	**HPV Outside the Cervix** Peter Sasieni, Wolfson Institute, UK	
09.40 - 10.10	**Cervical Cancer - Is The Picture Changing in the UK?** Alejandra Castanon, Wolfson Institute, UK	
10.10 - 10.55	**Evaluating Colposcopy Performance: Challenges of New Referral Pathways** Nicolas Wentzensen, National Cancer Institute, USA	
10.55 - 11.25	**Tea/Coffee/Exhibition/Poster Viewing**	Banqueting and Exhibition Suite
11.25 - 12.25	**Proffered Papers - Session 1** Chairs: Karin Williamson and Shilpa Deb, Nottingham University Hospitals Trust, UK	Lecture Theatre
11.25 - 11.40	**O-1, Sustained High Coverage of the HPV Bivalent Vaccine in Scotland Leads to a Reduction in Both Prevalence of HPV 16/18, Closely Related HPV Types and CIN 1, 2 and 3** *Kevin Pollock, Health Protection Scotland, UK*	
11.40 - 11.55	**O-2, Acceptability of Offering Routine HIV Testing to Women in Colposcopy Clinics - The ATTACH Study** *Laura Sadler, University of Manchester, UK*	

Thursday 16th April 2015 continued

11.55 - 12.10	**O-3, Prevalence of Cervical Abnormalities in Mid-Trimester Miscarriage and Preterm Labour in a Tertiary Unit Over a Ten Year Period** *Gulnaz Majeed, Guy's and St Thomas NHS Foundation Trust, UK*	
12.10 - 12.25	**O-4, Tips for Colposcopy Trainees - When Evidence Meets Experience** *Mohamed Shahin, Royal Stoke University Hospital, UK*	
12.25 - 13.25 12.40 - 13.25	**Lunch/Exhibition/Poster Viewing** **Poster Session One**	Banqueting and Exhibition Suite
13.25 - 14.00	**Global Cervical Cancer Burden: A Call to Action, with Particular Reference to Sub Saharan Africa** Heather Cubie, University of Edinburgh, UK	Lecture Theatre
14.00 - 15.00	**Proffered Papers Session 2** Chairs: Jafaru Abu, Nottingham University Hospitals Trust, UK and Onnig Tamizian, Royal Derby Hospital, UK	
14.00 - 14.15	**O-5, LLETZ Treatment and Disease Clearance, in View of Preterm Labour-Are We Being Overcautious and Under Treating?** *Faiza Gaba, Aberdeen Royal Infirmary, UK*	
14.15 - 14.30	**O-6, The Role of Dynamic Spectral Imaging (DySIS) in Colposcopic Assessment of Cytology Negative Failed Test of Cure Patients: Results of A Pilot Study** *Christina Founta, Northern Gynaecological Oncology Centre, Queen Elizabeth Hospital, UK*	
14.30 - 14.45	**O-7, Post Treatment HPV Testing as Part of CervicalCheck, The National Cervical Screening Programme in Ireland – The First Two Years** *Grainne Flannelly, CervicalCheck, National Screening Service, UK*	
14.45 - 15.00	**O-8, LLETZ in a Lunchbox** *Russell Luker, Royal United Hospital, UK*	
15.00 - 15.30	**Tea/Coffee/Exhibition/Poster Viewing**	Banqueting and Exhibition Suite
15.30 - 17.10	**Plenary Session 2** Chairs: Sue Vryenhoef and Andree Ellis, Nottingham University Hospitals Trust, UK	Lecture Theatre
15.30 - 16.00	**Liz Dollery and Jo's Trust Lecture** **What is CIN2?** *Christine Bergeron, Laboratoire Cerba, France*	
16.00 - 16.20	**HIV Testing in Colposcopy Services** *Mayura Nathan, Homerton Anal Neoplasia Service (HANS) and* **HIV Testing in Colposcopy - Results from the Survey of BSCCP Members** *Laura Sadler, The University of Manchester, UK*	

Thursday 16th April 2015 continued		EMCC
16.20 - 16.40	**HPV Primary Screening Update** *John Tidy, Sheffield Teaching Hospital NHS Foundation Trust, UK*	
16.40 - 17.10	**Vulval Disease for the Colposcopist in 30 Minutes** *Jennifer Yell, Central Manchester University NHS Foundation Trust, UK*	
19.00	**Coaches depart from EMCC to Colwick Hall**	
19.30 - Midnight	**BSCCP Conference Dinner**	Colwick Hall

Friday 17th April 2015		EMCC
08.00 - 16.30	**Registration Open / Speaker Preview Open**	Atrium/Conference Suite 1C
08.30 - 13.45	**Exhibition and Posters Open**	
09.00 – 09.45	**Proffered Papers - Session 3**	Lecture Theatre
	Chairs: Suha Deen and Mausumi Das, Nottingham University Hospitals Trust, UK	
09.00 - 09.15	**O-9, Characterisation Of The Vaginal Microbiome In Women With CIN** *Anita Mitra, Imperial College, UK*	
09.15 - 09.30	**O-10, DySIS Service Evaluation in Wales. A Report of Preliminary Data From 2 Sites** *Srividya Budithi, Ysbyty Gwynedd, UK*	
09.30 - 09.45	**O-11, The Routine Use of Zedscan within One Colposcopy Service in England** *Madeleine Macdonald, Sheffield Teaching Hospitals NHS Foundation Trust, UK*	
09.45 - 11.00	**Plenary Session 3**	
	Chairs: Suha Deen and Mausumi Das, Nottingham University Hospitals Trust, UK	
09.45 - 10.05	**Multifocal Disease - A Time to Define Roles and Responsibilities of Health Professionals** *Maggie Cruickshank, University of Aberdeen, UK*	
10.05 - 10.30	**A Colposcopists Guide to AIN – Assessment, Basic Management and when to 'Phone a Friend'** *John Scholefield, Nottingham University Hospitals, UK*	
10.30 - 11.00	**A Colposcopists Guide to VIN and VAIN – Assessment, Basic Management and when to 'Phone a Friend'** *Amanda Tristram, Cardiff University, UK*	

Friday 17th April 2015		EMCC
11.00 - 11.30	**Tea/Coffee/Exhibition/Poster Viewing**	Banqueting and Exhibition Suite
11.30 - 12.15	**Debate: Cervical Cancer Screening Audit Disclosure Process is of No Benefit to Patients** Chair: Anita Juliana, Nottingham University Hospitals Trust, UK **For** Charles Redman, University Hospital of North Staffordshire, UK **Against** Quentin Davies, Leicester Royal Infirmary, UK	Lecture Theatre
12.15 - 12.45	**BSCCP AGM**	Lecture Theatre
12.45 - 13.45 13.00 - 13.45	**Lunch/Exhibition - Exhibition closes at 13.45** **Poster Viewing** **Poster Viewing Session Two**	Banqueting and Exhibition Suite
13.45 - 15.40	**Plenary Session 4** Chairs: Jane Marley, Nottingham University Hospitals Trust, UK and Amanda Tristram, Cardiff University, UK	Lecture Theatre
13.45 - 14.15	**Molecular Markers in Pre-invasive Disease – How Can They Help The Colposcopist** *John Doorbar, University of Cambridge, UK*	
14.15 - 14.35	**After the Fallout- A Pathologists View of the Changes to The National Programme** *Suha Deen, Nottingham University Hospitals, UK*	
14.35 - 14.55	**What's Next after a QA Visit?** *Philippa Pearmain, Public Health England, UK*	
14.55 - 15.20	**An Obstetricians View of Colposcopy and Loops: Obstetric Outcome** *Siobhan Quenby, University of Warwick, UK*	
15.20 - 15.40	**Managing the Patient with Speculum Phobia: A Strategy for Success** *Angela Gregory, Chandos Clinic, Nottingham University Hospital Trust, UK*	
15.40 - 16.25	**'MDT'/Clinical Cases** Chair: John Tidy, Sheffield Teaching Hospital NHS Foundation Trust, UK Panel: Theresa Freeman-Wang, The Whittington Hospital NHS Trust, UK, Val Coneley, South Tyneside NHS Foundation Trust, UK	
16.25 - 16.35	**Presentation of Prizes and Closing Remarks**	
16.35	**Close of Conference**	

GENERAL INFORMATION

WELCOME RECEPTION

Wednesday 15th April 18.30 – 20.00
East Midlands Conference Centre (EMCC),
University Park, Nottingham, NG7 2RJ

The Welcome Reception will be held at the East Midlands Conference Centre in the Banqueting and Exhibition Suite.

The cost for this event is included in the registration fee, but places must be pre-booked. Drinks and canapés will be served and the rest of the evening is free for your own dinner plans.

CONFERENCE DINNER DANCE

Thursday 16th April 19.30 – Midnight
Colwick Hall, Colwick Hall Hotel, Nottingham, NG2 4BH

The Dinner will include a welcome reception followed by a 3-course menu. Places are limited at dinner so early booking is advised! Please ask at the Registration Desk for a late ticket availability. Coaches have been organised to pick up from The DeVere Orchard Hotel at 19.00 and will collect at the end of the evening returning back to the Hotel. The journey time between the two venues is roughly 25 minutes.

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 Banqueting and Exhibition Suite on the ground floor.

The exhibition will be open at the following times:

Wednesday 15th April	18.30hrs - 20.00hrs
Thursday 16th April	08.30hrs - 17.10hrs
Friday 17th 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 12.40hrs on Thursday 16th April and from 13.00hrs on Friday 17th 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 16TH APRIL 12.40 - 13.25	FRIDAY 17TH APRIL 13.00 - 13.45
Audit/Quality Assurance P-1, P-5, P-7, P-8, P-11, P-13, P-15, P-17 P-19, P-21, P-23, P-25, P-27, P-29, P-31, P-32 P-33, P-37, P-38, P-41, P-42, P-45, P-46, P-49, P-108	**Audit/Quality Assurance** P-2, P-4, P-6, P-9, P-10, P-12, P-14, P-18, P-20, P-22, P-24, P-26, P-28, P-30, P-34, P-35, P-39, P-40, P-43, P-44, P-47, P-48, P-51
Pathology P-50, P-53, P-55, P-57, P-59	**Pathology** P-52, P-54, P-56, P-58
Science/Epidemiology P-60, P-61, P-62, P-63, P-67, P-68, P-71, P-72, P-75, P-76, P-77, P-81, P-82, P-83	**Science/Epidemiology** P-64, P-65, P-69, P-73, P-78, P-79, P-80, P-84, P-85, P-86, P-88
Training/Education P-87, P-89, P-91	**Training/Education** P-90, P-92, P-94
Treatment/Morbidity P-93, P-95, P-97, P-99, P-101, P-103, P-105	**Treatment/Morbidity** P-96, P-98, P-100, P-102, P-104, P-106, P-107

REGISTRATION/INFORMATION DESKS

All delegates will receive their name badge, ordered tickets and all relevant conference information upon arrival at The East Midlands Conference Centre.

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

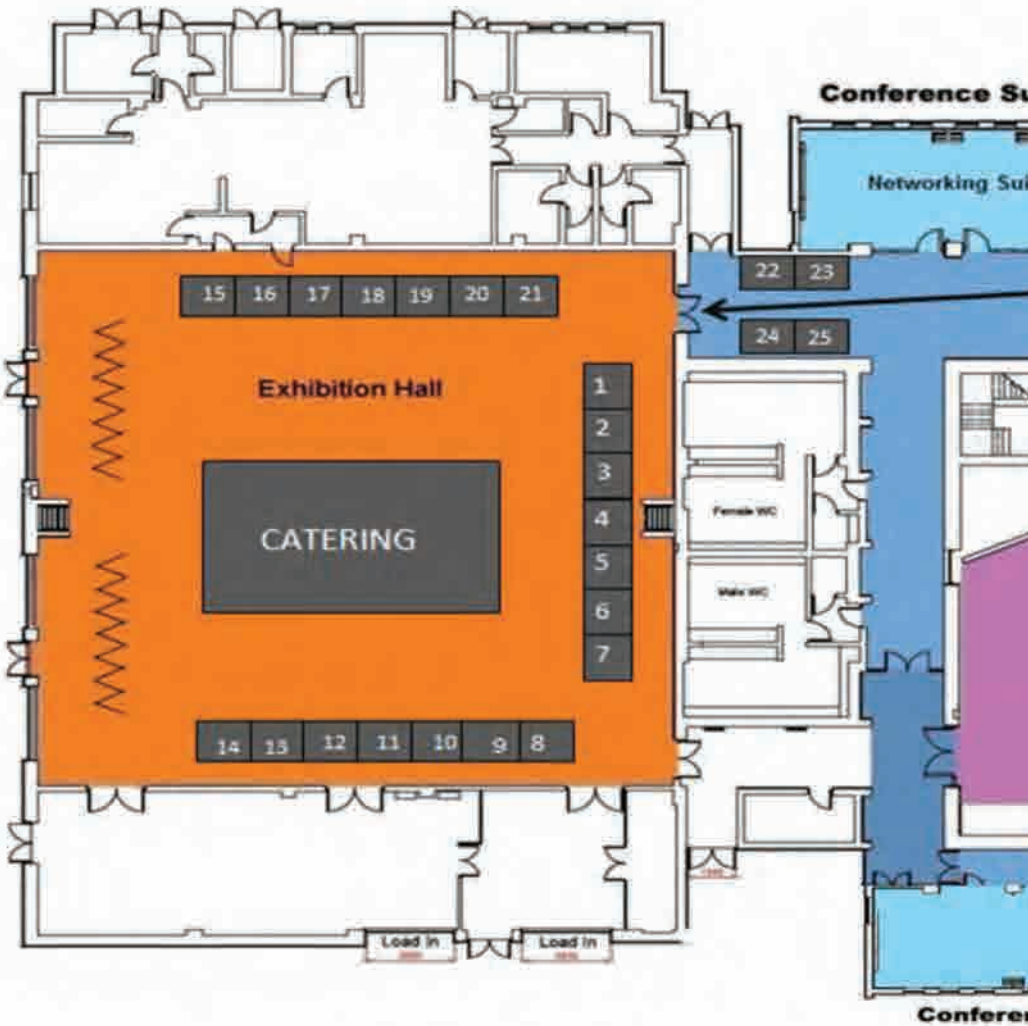
Wednesday 15th April	11.00 – 20.00
Thursday 16th April	08.00 – 17.30
Friday 17th April	08.00 – 16.35

SPEAKER PRESENTATION CHECK IN (CONFERENCE SUITE 1C)

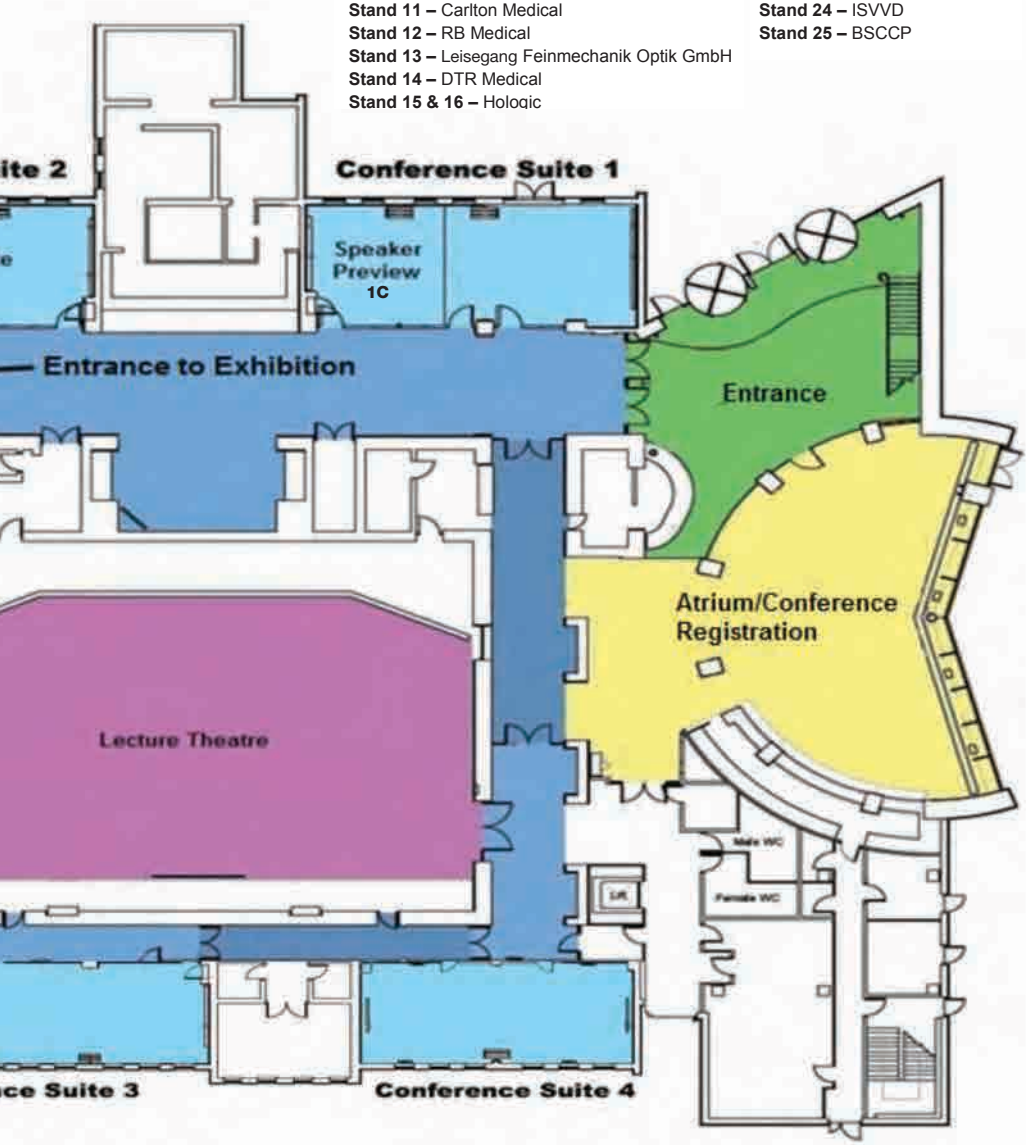
Presenters must check in their presentation at least four hours before they are due to speak. On Thursday 16th, the Speaker Presentation Room will be open from 08.00 – 17.30 and priority will be given to speakers in the morning session.

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.

EXHIBITION FLOORPLAN



Stand 1 & 2 – Eurosurgical Ltd
Stand 3 & 4 – Touchstone Medical
Stand 5 & 6 – Roche Diagnostics Ltd
Stand 7 – DP Medical
Stand 8 – Dysis Medical
Stand 9 – Timesco Healthcare Ltd
Stand 10 – UltraSpec
Stand 11 – Carlton Medical
Stand 12 – RB Medical
Stand 13 – Leisegang Feinmechanik Optik GmbH
Stand 14 – DTR Medical
Stand 15 & 16 – Hologic
Stand 17 – Meditech Systems
Stand 18 – Qiagen
Stand 19 – Sea Liverpool
Stand 20 – IRISOFT Ltd
Stand 21 – Sword Medical
Stand 22 – Single Use Surgical
Stand 23 – Jo's Cervical Cancer
Stand 24 – ISVVD
Stand 25 – BSCCP



LIST OF EXHIBITORS AND SPONSORS

THE BRITISH SOCIETY FOR COLPOSCOPY AND CERVICAL PATHOLOGY (BSCCP) — STAND 25

2nd Floor, Norton Court, Birmingham Women's Hospital, Edgbaston, Birmingham, B15 2TG

Contact Sharon Parisi or Elaine Radford **Tel** +44 (0) 0121 607 4716 **Fax** +44 (0) 121 623 6961
Email Sharon.Parisi@bwnft.nhs.uk or Elaine.Radford@bwnft.nhs.uk **Website** www.bsccp.org.uk

CARLETON MEDICAL LTD — STAND 11

Unit 1A, Lakeside House, Llantarnam Industrial Park Llantarnam, Cwmbran, Wales, NP44 3XS, UK

Contact Nick Fitrzyk **Tel** +44 (0) 1633 838081 **Mobile** +44 (0) 7827 298399
Email nf@carletonmedical.co.uk **Website** www.carletonmedical.co.uk

Carleton Medical Ltd are the UK distributor for Asclepion Lasers: Jena, Germany. Asclepion have been making surgical grade lasers for over 30 years, including CO2 and diode systems for colposcopy and sexual health. Carleton offer the most technically innovative lasers currently available, all of which are available via NHS Supply Chain.

DP MEDICAL SYSTEMS LTD — STAND 7

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

Contact Christina Pitman **Tel** +44 (0) 20 8391 9556
Email sales@dpmedicalsys.com **Website** www.dpmedicalsys.com

DP Medical Systems Ltd has been the leading supplier of colposcopy equipment for over 27 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 14

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

Contact Cara Lewis or Andrew Davidson **Tel** +44 (0) 1792 797910
Email clewis@dtrmedical.com or adavidson@dtrmedical.com **Website** www.dtrmedical.com

DTR Medical, specialists in high quality, sterile single-use instruments have recently introduced a new addition to the Colposcopy range; LLETZ Loops and Balls. The range is complementary to the Rotating Cervical Biopsy Punch, which is a cost effective option for busy clinics. Other popular lines include the Metal Cusco Specula, Bonney Polyp Forceps, Dental Syringes and Endometrial Samplers, as well as other Gynaecological lines.

DYSIS MEDICAL LTD STAND 8

Alba Innovation Centre, Livingston, EH54 7GA, UK

Contact Amanda Durman **Tel** +44 (0) 1506 592159
Email amanda.durman@dysismedical.com **Website** www.dysismedical.com

DySIS uses dynamic spectral imaging technology to quantify/map the acetowhitening process of the cervix during colposcopy. The DySISmap™ provides clinicians with an accurate image of neoplasia of the cervix helping to improve biopsy site selection and significantly increase sensitivity to CIN2+.

Comprehensive documentation provides complete examination playback and meaningful comparison of longitudinal patient data.

EAST PENNINE CYTOLOGY TRAINING CENTRE, C/O SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST

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 East Pennine Cytology Training 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.

EUROSURGICAL LTD STAND 1 & 2

Merrow Business Park, Guildford, GU4 7WA, UK

Contact Peter G. Parker **Tel** +44 (0) 1483 456007 **Fax** +44 (0) 1483 456008
Email peter@eurosurgical.co.uk **Website** www.eurosurgical.co.uk

Supplying Colposcopy instruments, devices and disposables for over 25 years we introduce LuViva a revolutionary advancement in early cervical cancer detection providing immediate results to eliminate false-positives. Also on display is the Cold Coagulator and the latest range of colposcopes, cameras and couches. Please visit our stand where you will be very welcome.

HOLOGIC STAND 15 & 16

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

Contact Jo Frost **Tel** +44 (0) 07917 155105
Email jo.frost@hologic.com **Website** www.hologic.com

Hologic is the world's leading developer, manufacturer, and supplier of fully integrated diagnostic solutions for cervical cancer screening and molecular diagnostic testing.
This includes the ThinPrep Liquid Based Cytology system and the Aptima HPV E6/E7 mRNA test running on the integrated Panther and Tomcat system. For more information visit www.hologic.com.

INTERNATIONAL SOCIETY FOR THE STUDY OF VULVOVAGINAL DISEASE (ISSVD) STAND 24

8814 Peppergrass Lane, Waxhaw, NC 28173, USA

Contact Debbie Roepe **Tel** +1 (0) 7048149493
Email executive.director@issvd.org **Website** www.issvd.org

The International Society for the Study of Vulvovaginal Disease (ISSVD) was created in 1970 with the following goals: To promote international communication among gynecologists, pathologists, dermatologists, and related disciplines, and to establish international agreement on terminology and definitions of vulvovaginal diseases. And, to promote clinical investigation, basic research, and dissemination of knowledge in this field. We invite you to stop by and discuss how you may benefit from being a member of this International Society or how attending one of our many educational opportunities may be beneficial to you.

IRISOFT LTD. STAND 20

11a Northenden Road, Sale, M33 2DH, UK

Contact Bernadine Morrison **Tel** +44 (0) 161 962 1422
Email Bernadine.morrison@irisoft.co.uk **Website** www.irisoft.co.uk

The COMPUSCOPE suite is "a specialist multimedia Patient Management and Audit System" for Colposcopy, Hysteroscopy, Oncology and Vulvoscopy clinics. The suite has been developed in close collaboration with clinicians to provide improved patient care. Automatically produces legislative statistics and failsafe lists, supports HPV triage & test of cure and MDT meeting. The systems are fully integrated with hospital PAS/EPR.

JO' CERVICAL CANCER TRUST STAND 23

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

Contact Claire Cohen **Tel** +44 (0) 2072508311 **Mobile** +44 (0) 7896717034
Email claire@jostrust.org.uk **Website** www.jostrust.org.uk

Jo's Cervical Cancer Trust (www.jostrust.org.uk) is the UK's only charity dedicated to those affected by cervical cancer and cervical abnormalities. We offer a range of online and face to face support and information including: information materials, a Helpline 0808 802 8000, online forum, local support groups and an Ask the Expert service.

LEISEGANG FEINMECHANIK-OTIK GMBH STAND 13

Leibnizstr. 32, Berlin, 10625, Germany

Contact Thomas Kupferschmidt **Tel** +49 (0) 303190090 **Mobile** +49 (0) 15256857588
Email t.kupferschmidt@leisegang.de **Website** www.leisegang.de

With over 65 years of experience in the development and production of colposcopes, the name Leisegang stands for traditional German engineering excellence and is recognised as the 'gold standard' in colposcopy in more than 70 countries worldwide. As a subsidiary of the American CooperSurgical Group, we can offer you a full range of products related to the dysplasia consultation.

MEDITECH SYSTEMS LTD STAND 17

Shrublands Estate, Sherstock, Shaftesbury, SP7 9PT, UK

Contact Lindy Gray **Tel** +44 (0) 1747 821546
Email lindy@meditechsystems.co.uk **Website** www.meditechsystems.co.uk

Meditech Systems Ltd is a well established British based manufacturer of high quality electrosurgery and clinic consumables. Showcasing at BSCCP is our 'Consignment Stock System' a unique cost saving solution for all clinics, only pay for items used in clinics, can include loops, balls, cuscos and many more consumable items.

QIAGEN LTD. **STAND 18**

QIAGEN Ltd., Skelton House, Lloyd Street North, Manchester, M15 6SH, UK

Contact Stuart Wilson **Tel** +44 (161) 204-1284
Email stuart.wilson@qiagen.com **Website** www.qiagen.com

QIAGEN is the leading global provider of Sample to Insight solutions to transform biological materials into valuable molecular insights. Our mission is to make improvements in life possible by enabling our customers to achieve outstanding success and breakthroughs in life sciences research, applied testing, pharma and molecular diagnostics.

RB MEDICAL ENGINEERING LTD **STAND 12**

Unit 2, Alton Road Industrial Estate, Ross-On-Wye, HR9 5NS, UK

Contact Valerie Lilwall **Tel** +44 (0) 1989 563958
Email v.lilwall@rbmedical.co.uk **Website** www.rbmedical.co.uk

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

ROCHE DIAGNOSTICS LTD **STAND 5 & 6**

Charles Avenue, Burgess Hill, RH15 9RY, UK

Contact Sue Tilbury **Tel** +44 (0) 1444 256788 **Mobile** +44 (0) 7730 303179
Email sue.tilbury@roche.com **Website** www.roche.co.uk

The cobas® HPV Test gives 3:1 results, providing pooled hrHPV, and simultaneous HPV 16 and 18 genotyping, to identify women at highest risk. The CINtec® PLUS (p16 marker) is for triage of hrHPV+ women with normal cytology. CINtec® Histology helps increase diagnostic accuracy by confirming ≥CIN2 lesions in biopsies.

SEA LIVERPOOL **STAND 19**

24 Hornspit Lane, Liverpool, L12 5LT, UK

Contact Fred Wootten **Tel** +4 (0) 151 226 3595 **Mobile** +4 (0) 7941650285
Email sealiverpool@onetel.net

Surgical Instrument Manufacturers and Brokers with 50 years experience in theatre and clinic instrumentation. We supply both reuseable and disposable instruments and sundries for access, diagnosis and treatment in Colposcopy and Gynae procedures. We have an extensive range of sizes in reuseable speculum, insulated and non insulated and biopsy forceps.

SINGLE USE SURGICAL LTD **STAND 22**

3 Spring Hill Road, Park Springs, Barnsley, S72 7BQ, UK

Contact Laura Fair **Tel** +4 (0) 1226 732 333 **Fax** +44 (0) 1226 785 386
Email info@susl.co.uk **Website** www.susl.co.uk

How many patients do you smoke a day? Visit our stand to experience the quiet power of the FUMOVAC Smoke Evacuation Machine that removes harmful particles and noxious odours from your environment. We also manufacture high quality single use Tischler-Morgan Biopsy Forceps: providing a clean cut every time.

SWORD MEDICAL — STAND 21

Vienna House, International Square, Birmingham International Park, Solihull, B37 7GN, UK

Contact Sylvia Taylor **Tel** +44 (0) 203 411 1947
Email sylvia@swordmedical.co.uk **Website** www.swordmedical.co.uk

Sword Medical UK is proud to represent Atmos Medical in Britain. As with all ATMOS products, in the development of the ATMOS® i View Colpo we have concentrated on three key elements when designing our Colposcope:Outstanding technology in lense and LED lightOutstanding quality in materialsOutstanding ergonomics.

TIMESCO HEALTHCARE LTD — STAND 9

3 Carnival Park, Carnival Close, Basildon, SS14 3WN, UK

Contact Jonas Hills **Tel** +44 (0) 7775 518 014 **Fax** +44 (0) 1268 297800
Email jonas.hills@timesco.com **Website** www.timesco.com

A leading supplier to the NHS and private sectors, with over 50 years' experience; we're experts in manufacturing and supplying medical products for medical professionals for Anaesthesia, Surgery, Podiatry and Primary care. We control every aspect of our product and service offering, through rigorous quality and processing procedures ensuring reliability.

TOUCHSTONE MEDICAL LTD — STAND 3 & 4

Unit 1, Kincraig Business Park, Kincraig Road, Blackpool, FY2 0PJ, UK

Contact Darren Neill **Tel** +44 (0) 20 8398 3417 **Mobile** +44 (0) 7595 882667
Email info@touchstonemedical.co.uk **Website** www.touchstonemedical.co.uk

Touchstone Medical provides a range of single use speculum and total capital equipment solutions for colposcopy and gynaecology. We work with award winning manufacturers such as Schmitz, Leica Microsystems and GIMMI Endoscopic Technology to provide you with market leading equipment. We strive to achieve perfection in advice, delivery and care and our latest product the Orchid Speculum is taking Europe by storm.

ULTRASPEC MEDICAL LTD — STAND 10

Unit F, Mochdre Ent Park, Newtown, SY16 4LE

Contact Danny Morren **Tel** +44 (0) 1686 625 750
Email ultraspec@splicecast.co.uk **Website** www.ultraspecmedical.co.uk

Manufactured in the UK by Ultraspec Medical, the Ultraspec® range of premium colposcopy vaginal speculum are unbreakable in normal use. The large viewing aperture, smooth-spinning lock nut and improved finger grip have made Ultraspec® the safer speculum of choice for discerning UK clinicians. The Ultraspec Retractor... developed to overcome vaginal prolapse complications and ensure patient protection and comfort during delicate procedures.

ZILICO LTD

Rutherford House, Pencroft Way, Manchester Science Park, Manchester, M15 6SZ, UK

Contact Catherine Davidson **Tel** +44 (0) 161 826 7840 **Mobile** +44 (0) 7800 861882
Email Catherine.davidson@zilico.co.uk **Website** www.zilico.co.uk

Zilico specialises in the design and manufacture of real-time medical diagnostics to address specific clinical needs. Zilico's patented EIS technology exploits the different electrical resistivity associated with the cellular structure of normal, pre-cancerous and cancerous tissue, providing a platform for the rapid, reliable and reproducible detection and diagnosis of disease.

DOES **VAGINAL PROLAPSE** SLOW DOWN YOUR COLPOSCOPY PROCEDURES?

New

Save time by simply inserting an additional instrument, instead of aborting the procedure

Visit **Ultraspec Medical Ltd** on **Stand 10** to find out how the

Ultraspec® Retractor

has been developed with input from leading consultants to overcome this challenge…

Ultraspec®

products for the people who care™

ultraspec@splicecast.co.uk

+ 44 (0)1686 625 750

www.ultraspecmedical.co.uk

ORAL ABSTRACTS

O-1

SUSTAINED HIGH COVERAGE OF THE HPV BIVALENT VACCINE IN SCOTLAND LEADS TO A REDUCTION IN BOTH PREVALENCE OF HPV 16/18, CLOSELY RELATED HPV TYPES AND CIN 1, 2 AND 3

Kevin Pollock[1], *Syed Ahmed*[1], *Kim Kavanagh*[1], *Chris Robertson*[1], *Kate Cuschieri*[2], *Maggie Cruickshank*[3], *Timothy Palmer*[4]

[1]*Health Protection Scotland, Glasgow, UK*
[2]*Scottish Human Papillomavirus Reference Laboratory, Edinburgh, UK*
[3]*University of Aberdeen, Aberdeen, UK,*
[4]*University of Edinburgh, Edinburgh, UK*

A National HPV immunisation programme was initiated in Scotland in 2008 for 12-13 year olds (routine) and those under the age of 18 (catch up). In tandem with the national immunisation programme, a programme of longitudinal HPV surveillance was set up; a key element of this was yearly sampling and HPV genotyping of a representative group of women attending for their first smear. Given that age at screening debut is 20 in Scotland, we are now able to determine the effect of vaccine on HPV prevalence in the catch-up cohort. For the first six years of the programme in Scotland, routine HPV vaccine uptake of all 3 doses has been sustained at high levels (>91%) in the 12-13 age group. In the catch-up cohort, uptake ranged from 30-80%. Analysis of the catch-up cohort showed that vaccine dramatically reduced the prevalence of HPV types 16 and 18 but also afforded cross-protection against other high risk types including types 31, 33 and 45. This has resulted in a concomitant effect in significant reductions of both low- and high-grade CIN. This longitudinal study continues to show demonstrable impact of the bivalent vaccine on high-risk HPV prevalence and associated disease at the population level. These data are very encouraging for countries that have national programmes which have achieved high vaccine uptake.

O-2

ACCEPTABILITY OF OFFERING ROUTINE HIV TESTING TO WOMEN IN COLPOSCOPY CLINICS – THE ATTACH STUDY

Laura Sadler[1], *Carly Moseley*[1], *Donna Roberts*[2], *Ursula Winters*[2], *Henry Kitchener*[1]

[1]*The University of Manchester, Manchester, UK*
[2]*Central Manchester NHS Foundation Trust, Manchester, UK*

Background
In 2008 BASHH, BHIVA and the British Infection Society published guidelines recommending women with CIN2+ should be routinely offered HIV testing. This has not been widely implemented and concerns about acceptability amongst colposcopy patients have been expressed. Whilst the guidelines recommend focusing on women with CIN2+ recent research has suggested there may be benefits to screening all women attending colposcopy.

Aim
To investigate the acceptability of routine HIV testing amongst women attending colposcopy clinics.

Methods
This is an ongoing study where colposcopy patients at one clinic are being asked to self-complete anonymous questionnaires when they attend evaluating knowledge, beliefs about HIV and views about testing. Results are presented for participants recruited since November 2014. Completion is planned by April 2015.

Results
To date, 170 questionnaires have been completed. 55.8% agreed that if offered a HIV test at their appointment they would agree and 17.6% were unsure. 55.9% had previously had a HIV test and 5.9% have previously declined HIV testing in other settings. 75.9% agreed it was acceptable to be offered HIV testing at their appointment and 65.3% that it should be routinely offered to everyone in colposcopy. 7.7% agreed they would be unhappy to be offered a HIV test in colposcopy and 12.4% that routine HIV testing should not be offered here. All had previously heard of HIV and 15.9% felt they had a good knowledge about the disease. 57.6% were not at all worried about getting HIV during their lifetime and 67.1% believed their chances of developing HIV were below average than others who were the same age and sex as themselves.

Conclusion
The majority of participants believe it is acceptable to be offered routine HIV testing in colposcopy, but not all would choose to be tested. Perceived risk of and knowledge about HIV are low.

O-3

PREVALENCE OF CERVICAL ABNORMALITIES IN MID-TRIMESTER MISCARRIAGE AND PRETERM LABOUR IN A TERTIARY UNIT OVER A TEN YEAR PERIOD

Gulnaz Majeed, Ali Kubba

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

Background
Cervical precancerous abnormalities and excisional treatment is linked with mid-trimester miscarriages and preterm labour.

Objective
To investigate the prevalence of cervical abnormalities in mid-trimester loss and preterm labour in an inner-city tertiary unit.

Design
Retrospective study over a 10 year period (1/07/2004 to 31/07/2014).

Methodology
Electronic-database-Healthware was used to confirm the number of mid-trimester and preterm deliveries over a ten year period at Guys and St Thomas Hospital. Cervical screening results for these women were obtained by Exeter-database locally from South East London Health Authority. Electronic-Patient-Records and Healthware-database were assessed for colposcopy and histology results.

Results
Total number of mid-trimester (12+ to 23+6) miscarriages (n=783) 15%, and total number preterm (>24 weeks <37week) deliveries (n=4499) 85%. Cervical screening results locally from South-East-London-Health-Authority were available for 4088 women, mid-trimester miscarriage (n=612) 15% and preterm labour (PTL) (n=3476) 85%. The results were normal in 80% (n=489) and abnormal in 20% (n=123) of women with mid-trimester miscarriages. Among abnormal 78% were low-grade (n=96) and 22% high-grade (n=27). Number of excisional biopsies with depth >1cm (n=14). Number of patients with mid-trimester miscarriage <20 weeks (n=47) and >20 weeks (n=76) RR 2.3 (95% CI 1.4-3.9) AR 1.3% (95%CI 0.1-2.5). In case of preterm labour (PTL) (n=3476) 79% (n= 2739) had normal cytology and 21% (n=737) had abnormal cytology. Low-grade abnormalities were 75% (n=551) and high-grade 25% (n=186). The number of excisional biopsies > 1 cm depth (n=74) 40% RR 2.2 (95% CI 1.4-3.9) AR 1.2% (95% CI 0.1-2.5). Women who delivered preterm less than 32 weeks (n=194) and between 32 to 36+5 weeks (n=543).

Conclusion
Prevalence of cervical abnormalities was higher among women with mid-trimester miscarriages (20%) and preterm labour (21%). Women of reproductive age with cervical abnormalities should be counselled accordingly and prospective measures taken to prevent pregnancy loss in the unit.

O-4

TIPS FOR COLPOSCOPY TRAINEES – WHEN EVIDENCE MEETS EXPERIENCE

Mohamed Shahin[1] ,[2]

[1]*Royal Stoke University Hospital, Staffordshire, UK*
[2]*Ain Shams University, Cairo, Egypt*

Introduction
Colposcopy training in UK is one of the most successful and organized training programmes. The tight training and variable needs by trainees leaves little for trainees to use clinical pearls and tips from their trainers.

Methods
The aim of the current presentation is to share my experience as a trainee during my BSCCP training with various experienced colposcopists and consultants. During my training, I recorded and compiled all available tips on skills and colposcopy practice, given to me by my trainers. Those tips and practice pearls were very useful to make my training more enjoyable and productive. I added to that tips verbally given by my colleagues and even patients attending the colposcopy clinics. I refined the advice given and checked the best relevant evidence and scientific background whenever practically possible.

Results
I summarized and refined 25 practice tips to present, from over 90 tips recorded during my training. I will present the most useful and practical ones, with a background basic science knowledge or evidence.

Conclusion
A well-organized training programme is the best way to deliver a sustainable training and competent certified colposcopists. Recording tips and verbal advice form experienced trainers, and comparing it to background basic science and best evidence and hugely boost training experience and outcome.

O-5

LLETZ TREATMENT AND DISEASE CLEARANCE, IN VIEW OF PRETERM LABOUR – ARE WE BEING OVERCAUTIOUS AND UNDER TREATING?

Faiza Gaba, Lubna Haque, Fiona Payne, Maggie Cruickshank

Aberdeen Royal Infirmary, Aberdeen, UK

Background
LLETZ is used as a fertility sparing treatment in women with histological proven high grade cervical intraepithelial neoplasia (HGCIN). A meta-analysis published in the Lancet (2006) demonstrated a link between LLETZ and preterm labour especially with depth of excisions >10-12mm. Persistent disease is the result of primary treatment failure or persistent HPV.

Objective
Since this publication, are we more conservative in managing HGCIN whilst undertaking LLETZ and leaving persistent disease?

Methods
Retrospective observational study of 1000 women <35 years who had not completed their family prior to having LLETZ for HGCIN were identified in the years 1999, 2002 and 2012 at a tertiary referral centre for the North-East of Scotland (Aberdeen Royal Infirmary). Amongst these 50 women were sequentially identified from each year using a computer based system. Case records/histology reports were examined. Exclusion criteria included age >35 years and histological proven cervical glandular intraepithelial neoplasia.

Outcomes
Total volume of the excised transformation zone and completeness of excision margins.

Results
In 1999 complete excision margins were achieved in 66% (n=33), incomplete margins in 8% (n=4) and margins of uncertain nature in 26% (n=13). Cervical volume was 9.56mm3 and tissue depth 1.064mm. In 2002, complete margins were 62% (n=31), incomplete 28% (n=14) and uncertain 10% (n=5) with cervical volume of 2.98mm3 and depth 1.03mm. In 2012, complete margins were 50% (n=25), incomplete 28% (n=14) and uncertain 22% (n=11) with cervical volume of 2.4mm3 and depth 0.86mm.

Conclusions
The total volume of the excised transformation zone/depth of excised tissue has reduced over the years since the publication of the meta-analysis whilst there has been an increase in the number of women with incompletely excised HGCIN. It appears we are being cautious in over excising HGCIN to prevent preterm labour whilst leaving behind persistent disease.

O-6

THE ROLE OF DYNAMIC SPECTRAL IMAGING (DySIS) IN COLPOSCOPIC ASSESSMENT OF CYTOLOGY NEGATIVE FAILED TEST OF CURE PATIENTS: RESULTS OF A PILOT STUDY

Christina Founta[1], *Nithya Ratnavelu*[1], *Melissa Bradbury*[1], *Stavros Natsis*[1], *Rachel O'Donnell*[1], *Arlene Feusi*[2], *Ali Kucukmetin*[1], *Christine Ang*[1], *Ann Fisher*[1], *Raj Naik*[1]

[1]*Northern Gynaecological Oncology Centre, Queen Elizabeth Hospital, Gateshead, UK*
[2]*University of Zurich, Zurich, Switzerland*

Background
NHSCSP recently implemented reflex Human Papilloma Virus (HPV) testing for cytology negative women previously treated for cervical intraepithelial neoplasia (CIN). If HPV positive, patients are referred to colposcopy.

Objective
To assess the role of DySIS in detecting CIN for the above population.

Methods
This is an observational prospective study performed in NGOC, Gateshead, UK from 3/2013 until 11/2014. Patients were examined using the DySIS colposcope. Initial colposcopic impression and biopsy sites were recorded before and after the DySISmap. A contemporaneous control group for conventional colposcopy was retrieved and Fisher exact test was used to compare results. The accuracy of DySIS in detecting CIN as well as first year's follow up results were assessed.

Results
A total of 105 women were included in the study (DySIS) group and histology results were available for 74% of them. Overall, 5(4.8%) women had high-grade histology and 24(22.9%) CIN1. Amongst the CIN2+ cases DySISmap was high grade in 4 and colposcopy was normal/low-grade in all 5. For the control group, out of 220 women 7(3.2%) and 24(10.9%) had CIN2+ and CIN1 histology respectively. In the study group, sensitivity of standard colposcopy for CIN2+ was 0% improving to 80% with the incorporation of the DySISmap. In addition, using directed biopsy results, the NPV of the DySISmap for CIN2+ was 99%. There was statistical significance (p=0.018) for detection of any grade of CIN for DySIS colposcopy compared to the control group. Year, degree of CIN and marginal status of previous loop as well as patients' demographics were comparable. First year's follow up results are available and will be presented.

Conclusions
Incorporation of the DySISmap improved accuracy in detection of CIN for this population. The results of this study provide a basis for a future multi-centre study of DySIS in TOC patients.

O-7

POST TREATMENT HPV TESTING AS PART OF CERVICALCHECK, THE NATIONAL CERVICAL SCREENING PROGRAM IN IRELAND – THE FIRST TWO YEARS

Grainne Flannelly[1], *Maeve Waldron*[1], *Therese Mooney*[1], *Sinead O Neill*[1], *Patricia Fitzpatrick*[1,2]

[1]*CervicalCheck, National Screening Service, Dublin, Ireland*
[2]*School of Public Health, Physiotherapy and Population Science, UCD, Dublin, Ireland*

Background
CervicalCheck, The National Cervical Screening Programme in the Republic of Ireland provides treatment at colposcopy for high-grade cervical intraepithelial neoplasia (CIN) to over 4000 women annually. Traditional follow up for these women has included annual cytology for ten years because of the increased risk of recurrence. New strategies including testing for subtypes of the human papillomavirus (HPV) allow a more accurate definition of this risk. Post treatment HPV testing was introduced as part of CervicalCheck in 2012 with combined cytology and HPV tests at six and eighteen months following the treatment. Women with results categorised as low risk (HPV negative and cytology of less than LSIL) were eligible for a return to routine screening. This paper documents the experience of the first two years.

Results
Up to October 2014, 13,386 women had the first test post treatment and 4,136 women had both first and second follow-up tests. The first test was categorised as low risk in 10,272 (77%) women, of whom 3257 had a documented second follow-up test. The mean interval between the tests was 12 months. In 2,898 cases (89%) the result was again low risk meaning that these women were suitable for discharge to the community for routine screening.

Conclusion
The performance of a combined cytology and HPV test at six and eighteen months post treatment reduces the need for annual smear tests as it allows women with normal or ASCUS cytology who do not demonstrate high risk HPV to be discharged to routine screening in three years.

O-8

LLETZ IN A LUNCHBOX

Russell Luker

Royal United Hospital, Bath, UK

Introduction
Performing LLETZ requires fine motor skills and confidence. The majority of currently practising colposcopists performed their first LLETZ's on live patients which has significant clinical and ethical issues.

LLETZ training tools using pieces of meat have been described [1] however, this resource is inconvenient, costly and does not replicate the contours and lesions found in clinical practise.

Proposal
We have discovered that models using salt dough (Play-DohTM) can be fashioned to precisely mimic the shape of the cervix together with surface lesions to be removed. Standard disposable diathermy loops will cut and ablate the dough in a realistic fashion.

We submit plans, and building instructions for a low cost diathermy training box (for dissemination and public use). This equipment can be constructed with minimal equipment for less than £10 from a plastic lunch box and other sundry items.

Experience
This training model has been proven to be effective in training the LLETZ's fine motor skills to medical students (see separate submission). Our experience is that it is convenient (it sits in the drawer in colposcopy department), requires no prior planning before use and is realistic. We found it to create more smoke than standard human diathermy and we recommend the use of additional in-line filters to prevent suction machines becoming contaminated.

1. J Grad Med Educ. 2013 Jun;5(2):320-2.Constructing a Novel Simple LEEP Training Model.Walters CL, Whitworth JM, Tyra SL, Walsh-Covarrubias JB, Straughn JM Jr.

O-9

CHARACTERISATION OF THE VAGINAL MICROBIOME IN WOMEN WITH CIN

Anita Mitra[1], David MacIntyre[1], Yun Lee[1], Ann Smith[2], Julian Marchesi[2], Elaine Holmes[3], Jeremy Nicholson[3], Phillip Bennett[1], Maria Kyrgiou[1]

[1]Imperial College, London, UK
[2]Cardiff University, Cardiff, UK
[3]Imperial College London, London, UK

Background
The healthy vaginal microbiome is typically Lactobacillus spp. dominant and plays an important role in the prevention of urogenital diseases and infections. Recent evidence indicates that the vaginal microbiome may play a functional role in the persistence or regression of Human Papillomavirus (HPV) infections. The vaginal microbiome in women with cervical intra-epithelial neoplasia (CIN) has yet to be investigated.

Objectives
To characterize the vaginal microbiome in women with CIN, compared to women with negative cervical cytology.

Material and Methods

Population
Non-pregnant women of reproductive age attending the colposcopy clinic.

Setting
Imperial College Healthcare NHS Trust.

Interventions
Vaginal swabs were collected from the posterior vaginal fornix and bacterial DNA extracted. The vaginal microbiome was characterised by 16S rRNA gene sequencing using an Illumina MiSeq platform. Women were categorized in to two groups on the basis of histology and cytology; women with low-grade (LSIL) and high-grade squamous intra-epithelial lesions (HSIL).

Analysis
Multivariate modeling of sequence data was used to examine bacterial species classification data, and correlated these to the disease severity. Richness and diversity indices were calculated for patient population groups.

Results
We analysed 191 women with negative cervical cytology(n=18), LSIL(n=58), HSIL(n=108) and cervical cancer(n=7). Hierarchical clustering analysis at the genus level showed the proportion of women with a dysbiotic microbiome increased with disease severity (normal=11%, LSIL=14%, HSIL=23%, cancer=43%). Further analysis at a species level revealed Lactobacillus spp. content decreased in a step-wise fashion with increasing disease severity (normal=92%, LSIL=82%, HSIL=78%, cancer=62%). Snethia spp, previously associated with HPV-positivity, as well as Dialister spp. and Peptostreptococcus spp. To be significantly increased in patients with HSIL compared to LSIL.

Conclusions
Women with CIN have a more diverse Lactobacillus-depleted vaginal microbiome, compared to normal women. This supports previous reports indicating a dysbiotic microbiome may be involved in HPV persistence. The vaginal microbiome may play a role in carcinogenesis and warrants further investigation. Future therapeutic strategies may allow modulation of the vaginal microbiome toward a vaginal community structure that promotes HPV clearance.

O-10

DYSIS SERVICE EVALUATION IN WALES. A REPORT OF PRELIMINARY DATA FROM 2 SITES

Srividhya Budithi[1], *Richard Peevor*[1], *David Pugh*[2], *Manolis Papagiannakis*[3], *Simon Leeson*[1]

[1]*Ysbyty Gwynedd, Bangor, Gwynedd, UK*
[2]*Royal Glamorgan Hospital, Llantrisant, South Wales, UK*
[3]*DySIS Medical, Livingston, UK*

Introduction
Dynamic spectral imaging (DySISTM; DySIS Medical Ltd, Livingston) uses a monocular digital colposcope to quantify acetowhitening and calculate a colour-coded map which may improve detection of at least high grade cervical intraepithelial neoplasia (CIN2+) by assisting the identification, localization and grading of cervical lesions.

Design and setting
This prospective service evaluation of colposcopy with DySIS at four clinics in Wales, due to complete in March 2015, compares the performance when using DySIS against conventional colposcopy for the (CIN2+). Preliminary data is presented from two of the four sites (Ysbyty Gwynedd (YG), Royal Glamorgan Hospital (GLM)). Patients and colposcopists were given questionnaires to assess their experience.

Results
There were 191 cases from May-November 2014 (YG:120; GLM:71). For all referrals (including patients with no/unknown histology) the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) for colposcopy with DySIS predicting CIN2+ were 100%, 54%, 22% and 100% respectively. For conventional colposcopy they were 43%, 89%, 33% and 92% respectively. For low-grade (LG) referrals (including patients with no/unknown histology) the sensitivity, specificity, PPV and NPV for colposcopy with DySIS were 100%, 59%, 18% and 100% respectively. For conventional colposcopy they were 11%, 91%, 10% and 92% respectively. The yield of CIN2+ from biopsies was 22% at YG and 17% at GLM.

The biopsy rate among LG referrals (percent of patients that were biopsied) was 58% (YG:61%; GLM:48%). Among LG referrals, CIN2+ was diagnosed in 10 cases from YG and none for GLM. Nine of them had a final colposcopic impression of LG but a DySIS indication for high-grade. Patient and colposcopist feedback (36 responses) showed that DySIS was informative, reassuring and helped select sites for biopsy.

Conclusion
From provisional data, DySIS improves the sensitivity to detect CIN2+ for all referrals and especially for those with LG referral cytology.

O-11

THE ROUTINE USE OF ZEDSCAN WITHIN ONE COLPOSCOPY SERVICE IN ENGLAND

Madeleine Macdonald, Julia Palmer, John Tidy

Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK

Background
Colposcopic impression is known to be subjective and variable at identifying high grade cervical intraepithelial neoplasia (HGCIN). An over-cautious colposcopist may subject a patient to unnecessary interventions, whilst failure to identify high grade changes puts a patient at increased risk of developing cervical cancer. The Zedscan is a handheld device that uses electrical impedance spectroscopy to differentiate between tissues and has been shown to improve colposcopic performance by aiding detection of HGCIN.

Objective
To evaluate the routine use of the Zedscan as an adjunct to colposcopy within our clinic in particular the ability to identify HGCIN.

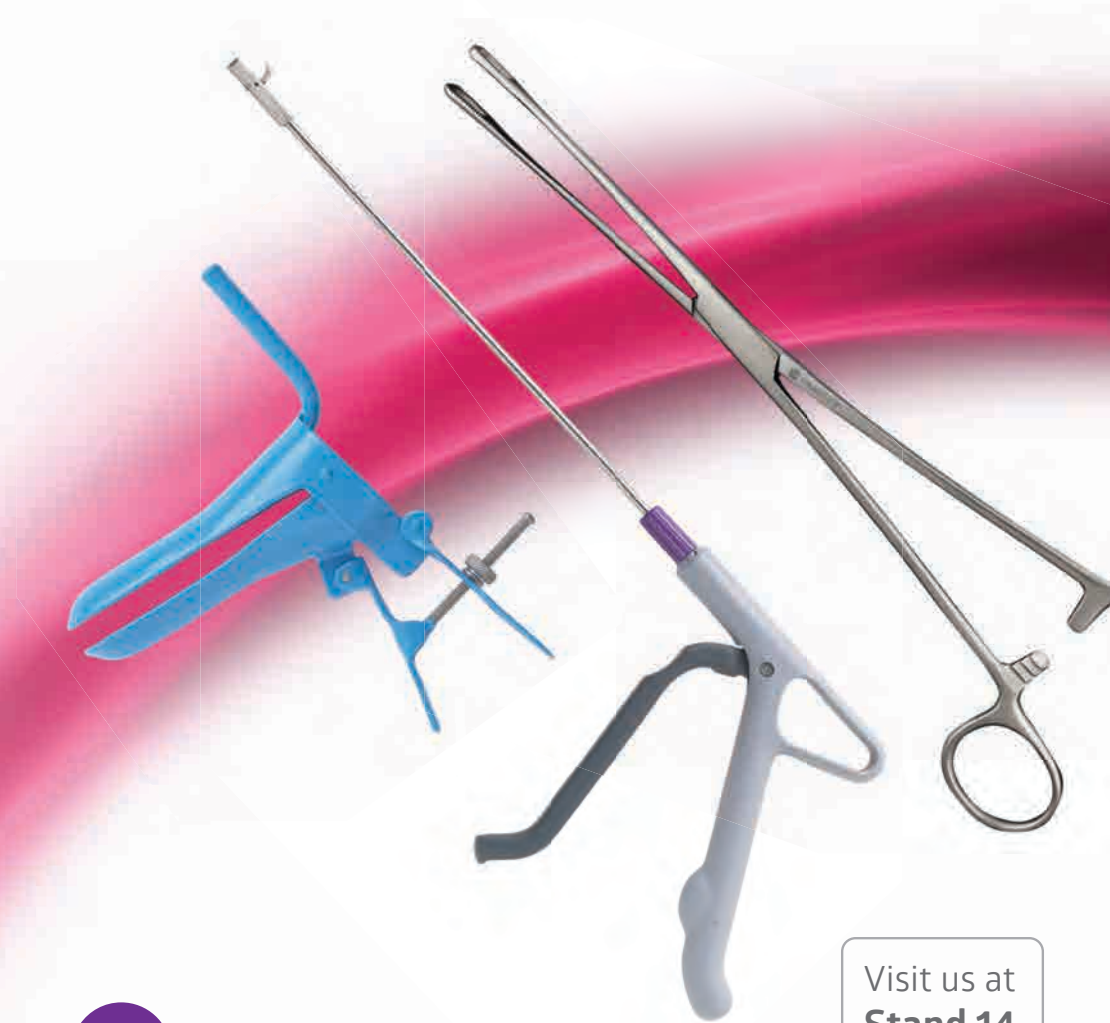
Method
Patients seen from December 2013; the start of the routine use of Zedscan within clinic, until end of September 2014 were included. The colposcopy clinic and Zedscan databases were used to identify patients and Microsoft Excel TM was used for analysis.

Results
Overall 468 new patients had a colposcopic examination in addition to Zedscan during the time period.
There was agreement between the colposcopist impression (either the need for a biopsy or no need for a biopsy) and Zedscan's recommendation on whether to perform a biopsy or not in 80% of cases (a concordance of K= 0.625). When Zedscan recommended a biopsy and the colposcopist impression was HGCIN, histology confirmed a high grade lesion including a small number of CGIN in 78% of cases. In 34 patients when the colposcopist's impression was normal but Zedscan directed a biopsy; two additional cases of HGCIN and one adenocarcinoma were identified. Only 35% of patients who had a normal colposcopic impression but a Zedscan recommended biopsy had normal histology.

Conclusion
Zedscan used in conjunction with colposcopy has improved the identification of HGCIN in our colposcopy clinic and given colposcopist more confidence in discharging patients with a normal impression and negative Zedscan result.

YOUR STERILE SINGLE USE SOLUTION WITHOUT COMPROMISE

Once Used.
Workflow Improves.



Visit us at
Stand 14

DTR Medical®

t +44 (0) 1792 797 910 **e** info@dtrmedical.com www.dtrmedical.com

POSTER ABSTRACTS

P-1

HOW CAN WE REASSURE WOMEN WITH ABNORMAL POST-TREATMENT TEST AND NORMAL COLPOSCOPY

Mohammed Abdullah Agha, Francesca Paltenghi, Abdullqadir Wagley

Wexham Park Hospital, Slough, UK

Background and aim

HPV DNA testing has been introduced as a postconisation follow-up test (ToC) to detect residual/ recurrent disease due to its high sensitivity and negative predictive value.

However, this has resulted in a considerable number of false positive cases with no clear follow-up strategy.

We aim to evaluate our local follow-up protocol and whether performing a smear after normal colposcopy will aid to detect residual/recurrent high grade CIN.

Method and materials

As ToC was introduced in a staggered approach, list of women treated for CIN2 and 3 in our unit in the period from 2006-2013 was reviewed. Patients included were those who failed their ToC, had normal colposcopy and were then called for a repeat smear.

A total number of 29 patients were included. Results of smears and colposcopy up to present time were reviewed.

Results

All patients had a checking colposcopy in 1-8 months after date of ToC. Colposcopy suggested normal cervix in 24 patients and HPV in further 5. No further action was needed following the examination. All patients had a further smear in 3-15 months. Cytology was normal in 25 patients, borderline in 1, mild dyskaryosis in 2 and moderate dyskaryosis in 1. Four were tested for HPV (it was positive in 2), while their cytology was normal.

None of these 4 patients showed any evidence of CIN in any of following examinations over a period of follow-up extending from 13- 27 months.

Discussion and conclusion

Our data did not show any high grade disease in this cohort of patients and the second follow-up smear did not add to the colposcopic results. Our data is limited by the short duration of follow-up. We will need to wait until the next routine smear test to confirm whether there is any residual or recurrent CIN.

P-2

PATIENT SATISFACTION SURVEY OF COLPOSCOPY SERVICE IN NORTHERN IRELAND

Amanda Ali[1], Hans Nagar[2], Sharon Fallows[3], Abdelrahman Abdelmageed[3], Sandra Mawhinney[4], Karen McKinney[5], Lorraine Johnston[1], Gary Dorman[1]

[1]Northern Trust, Northern Ireland, UK
[2]Belfast Trust, Northern Ireland, UK
[3]Western Trust, Northern Ireland, UK
[4]Southeastern Trust, Northern Ireland, UK
[5]Southern Trust, Northern Ireland, UK

Introduction
A visit to the colposcopy clinic is associated with a considerable amount of anxiety and worry for most women. The aim of this survey was to obtain feedback from patients about their colposcopy experience and to alert the team to any issues raised by patients attending the clinic. We sought to assess their satisfaction with the waiting time, the colposcopy venue, the colposcopist, the procedure and follow-up.

Methods
Data were collected using a validated questionnaire distributed to new and returning patients to fill in after their colposcopy visit from 8 colposcopy units in five trusts across Northern Ireland over a period of two weeks. The data were entered into an Excel workbook and analysed using IBM-SPSS V22.

Results
A total of 247 patients completed the questionnaire, (61) Northern trust, (61) Belfast trust, (19) Southern trust, (21) Southeastern trust and (86) Western trust. Of these, 50.2% (124) were new and 49.8% (123) were returning patients.

The majority, 79.4% (196) of patients received an information leaflet ahead of their appointment, and it was found to be helpful by the 96.9% (190) who read it.

The waiting time in weeks and satisfaction with that varied considerably by Trust, with the Western Trust having the highest number of patients satisfied with the waiting time.

Patient feedback on several measures ranging from their impression of the clinic, professionalism and confidence in the staff showed over 90% satisfaction with the services provided to them.

Conclusion
Overall this survey has shown positive results with regards to patients' impression of the clinic, the behaviour of the staff and the colposcopy procedure. Improvement needs to be made in the waiting times as this increases patients' anxiety and affects their overall experience. Centres should ensure that all patients receive an information letter prior to their appointment.

P-4

COLPOSCOPY IN PREGNANCY: A 5-YEAR REVIEW OF CASES

Karen Austin-Smith, Esther Moss

University Hospitals of Leicester, Leicester, UK

Introduction
There is a need for colposcopy during pregnancy, not only for women identified with abnormal cervical cytology through the NHS Cervical Screening Programme but also for women in whom a clinical suspicion of cervical cancer has been raised.

Methods
A retrospective review of all women seen in the colposcopy clinic between 30/06/2009 and 01/07/2014. Data was collated on indication for referral, parity and gestation, colposcopic findings and management both during the pregnancy and in the postnatal period.

Results
In total 176 women were seen in a colposcopy clinic. Three women had two pregnancies during the study period giving 179 index appointments. The mean age at first appointment was 30 years (range 18-49 years). New referrals accounted for 81 (45.3%) of cases, with abnormal cytology being the primary indication (71.6%), followed by clinically suspicious cervix (16.0%) and unexplained vaginal bleeding (7.4%). The majority of cytology results triggering referral were taken prior to the diagnosis of pregnancy, 86% performed at ≤6 week's gestation. The remaining 54.7% of appointments were in women attending for planned follow-up. Low-grade cytology/ histology accounted for 60 (61.2%) appointments and 30 (30.6%) were for high-grade. The mean gestation of the initial appointment was 15 weeks and nurse colposcopists performed 80% of the examinations. Only 9% of women declined to undergo a colposcopy. In total, there were 3 cases of cervical cancer seen during pregnancy or in the immediate postnatal period, equating to 1.7% of the pregnant patients seen.

Conclusion
Even though cervical cytology is not routinely performed during pregnancy, there are a significant number of referrals from the screening programme where pregnancy is diagnosed between the taking of a cytology sample and colposcopy appointment. The primary focus of colposcopy in pregnancy should be to exclude or diagnose cancer with management of premalignant conditions deferred until after delivery.

P-5

A PATIENT ACCEPTABILITY SURVEY: VIEWING ELECTRONIC INFORMATION AS A STEP TOWARDS MOVING AWAY FROM PAPER

Melinda Roche, Naomi Jobson, Russell Luker

Royal United Hospitals Bath NHS Foundation Trust, Bath, UK

Introduction
Routinely sending paper information leaflets attached to colposcopy appointments uses precious administrative resources. Sending text reminders has been shown to be effective within the healthcare industry1. We proposed that our patients would happily access electronic information and receive texts/emails for their appointments. A survey was conducted to explore the patient acceptability of this in the Royal United Hospital Bath in 2014.

Method
101 patients completed our questionnaire following their colposcopy appointment, between Sept and Dec 2014. Included were questions about use of health websites and their helpfulness, acceptability of receiving a link to a website for patient information and of receiving appointments reminders by email/text.

Results
34% of patients accessed a website before attending their colposcopy appointment. Of these, 24% stated it reduced anxiety, whilst 29% stated it increased anxiety and 47% stated it was 'about right'. 98% of patients owned a mobile phone and 92% had access to the Internet at home. However, 34% of patients stated they would not be happy to receive a link to a website, preferring a paper leaflet.

Conclusions
The majority of patients would be happy to receive appointments and reminders by email/text. Despite 92% of women having access to the Internet at home, only 66% of them would be happy to access a website for their patient information. Accessing unregulated websites for heath information can be anxiety inducing, by informing patients where to look, this could be reduced.

This survey does not support a unilateral transition to electronic information resources. We propose dual use of paper and on-line communication with colposcopy patients as a cost-saving initiative.

1Gurol-Urganci I, de Jongh T, Vodopivec-Jamsek V, Atun R, Car J. Mobile phone messaging reminders for attendance at healthcare appointments. Cochrane Database of Systematic Reviews 2013, Issue 12. Art. No.: CD007458. DOI: 10.1002/14651858.CD007458.pub3.

P-6

EFFECTS OF HPV TESTING ON A LOCAL COLPOSCOPY SERVICE

Petra Deering, Anita Juliana

Nottingham University Trust, Nottingham, UK

HPV testing was introduced in Nottinghamshire in October 2012 to triage lowgrade smears and as a Test of Cure following treatment for CIN. We investigated the effect of HPV testing on referral rates, clinical judgment and practise within the department including number of new referrals, number of biopsies and treatments performed.

Data of 536 new referrals to the colposcopy service was collected including 253 cases from October-December/2011 (pre-HPV testing era) and 283 cases from October-December/2012 (HPV era). 55 lowgrade smears were referred in 10-12/2011 via autocolp, and 103 during 10-12/2012 indicating a significant rise in referrals for lowgrade smears since HPV triage. The cohort from 10-12/2012 included women referred for recurrent lowgrade smear results (44/ old system) and HPV triaged women (59) hence direct comparison of management of the two groups within the same clinical setting and time frame was possible.

Results indicated a lower threshold to biopsy women referred with lowgrade smears in 2012 independent of HPV triage (81% (HPV+) and 86% (NonHPVtested) 2012 versus 60% 2011). Less women biopsied in 2012 required a LLETZ for highgrade CIN suggesting the threshold to biopsy has become lower in our department compared to 2011(76% 2011 versus 38% 2012). Given the same colposcopic opinion knowledge of HPV positivity did not significantly influence the threshold to biopsy (biopsy rate in 2012 for colposcopic opinion 'HPV/lowgrade' for HPV + group 97%/ nonHPVtested group 94%).

P-7

COLPOSCOPY PATIENT SATISFACTION SURVEY – NORTHWICK PARK HOSPITAL, 2014

Wioletta Kapadia, Panayotis Sarhanis, Everard Manning

Northwick Park Hospital, Harrow, UK

This poster presents the results of a patient satisfaction survey carried out in the colposcopy service at Northwick Park teaching hospital, covering three months from the 1st of July 2014. This was the first survey conducted since the Central Middlesex and Northwick Park colposcopy services merged to provide a combined colposcopy service at Northwick Park.

The main aim of this survey was to determine whether we provide and maintain a good quality colposcopy service, to identify and highlight the areas that need development or improvement, to compare with past results, and to formulate an action plan to implement changes.

The patient satisfaction survey contained 34 questions gathering information about the patients themselves, their experience both before and during their appointment, the waiting times, and the environment.

266 surveys were completed and returned. Compared to previous results we achieved better results in some areas, including the reminders we issue (94%), satisfaction with our answers (97.2%), satisfaction with our explanation of the procedure (98%), and being told that the procedure can be stopped any time (91.3%). The overall experience was rated as good or excellent by 91.7% of the patients.

Despite the fact that more than 90% of women rated our colposcopy service positively (easy to find the department, friendly staff, satisfaction with information given), we lost a few points since the previous survey.

Most of the women were seen on time: only 32 (13%) of the patients waited for more than 30 min, and apologies were given in 50% of cases. 53.4% of women were informed whom to contact and how in case of any concerns.

An action plan is now in place to improve our service. We will conduct a further survey next year to check the quality of care we provide, as part of our regular cycle of improvement.

P-8

LA OR GA – PATIENT CHOICE

Wioletta Kapadia, Panos Sarhanis

Northwick Park Hospital, London, UK

The UK National Health Service Screening Programme 2010 guidelines recommend that at least 80% of cervical excisions for CIN (Cervical Intra-epithelial Neoplasia) should be performed under local anaesthesia (LA) in outpatients. General anaesthesia (GA) should only be used in appropriate cases and should be clearly documented. Northwick Park Hospital (NPH) is one of the largest providers of colposcopy services in London, seeing over 2500 patients annually. This presentation describes the results of an audit into the forms of anaesthesia administered to women undergoing loop cervical incision at NPH. This is a re-audit as part of the regular audit cycle.

The audit goal was to determine the percentage of women who had loop cervical incision under LA/GA and discover whether the form of anaesthesia was due to patient choice. This was a retrospective study covering the period from 01/04/2013 to 31/04/2014, collecting data from compuscope (a standardised colposcopy data management application). 216 LLETZ procedures were performed in NPH during this time.

20% of LLETZ were performed under GA of which 21% were due to patient choice. 80% of procedures were done under LA including 13% under LA with sedation. 69% of the procedures performed under LA with sedation were due to patient choice. Compared to the results of our previous audit we increased the number of LLETZ under LA by introducing sedation. The most common indication of LLETZ under GA was another procedure being required at the same time e.g. hysteroscopy.

We are aiming for more than 80% of LLETZ under LA. The audit recommends performing hysteroscopy and LLETZ under LA where possible, as well as improving patient information through leaflets and appropriate patient counselling with a specific focus on those with anxiety and needle phobia. We are planning to re-audit next year to see whether we achieve our goals.

P-9

IS IT COST-EFFECTIVE TO OFFER COLPOSCOPY TO WOMEN WITH NEGATIVE SMEARS WITH HR-HPV POSITIVE RESULTS?

Seema Malvankar, Alaa El-Ghobashy

The Royal Wolverhampton NHS Trust, West Midlands, UK

Introduction
Human papillomavirus (HPV) is a major cause of cervical cancer. Although most sexually active individuals are exposed to HPV during their lifetime, the majority will get rid of the virus asymptomatically1. Women with persistent exposure to particular strains (i.e. HPV 16 and 18) are at an increased risk of developing cervical cancer1. High risk HPV DNA testing identifies around 90% of cervical intraepithelial neoplasia (CIN) 2/3 or cancer cases2. However if HPV has a transient effect in most, is it cost effective to refer women with normal smears but are HPV positive for colposcopy?

Objective
The aim of this audit was to highlight the cost-effectiveness and outcomes associated with women referred to colposcopy with normal smears, who are HPV positive.

Methods
The inclusion criteria were patients seen in colposcopy between March 2013 and March 2014; after having a smear which was both normal and HPV positive. A computer search identified 50 patients, and a retrospective analysis was carried out on electronic medical records.

Results
The median age of our patients was 33.5 years (range 26-67 years). 96% had undergone previous treatment for cervical abnormalities. Based on colposcopy findings 66% had a normal cervix and only one patient had acetowhite changes. Six patients had a biopsy taken (two had CIN 1, two had koilocytosis and two had normal findings).
For smear recall, 40% were asked to repeat in 3 years and 38% in 12 months. The Clinical Commissioning Group paid New Cross Hospital £8,050/year to see patients who had a normal smear and were HPV positive at colposcopy.

Conclusions
It cost the NHS over £8000/year to biopsy six patients and to detect two cases of CIN 1 out of 50 patients.
This audit indicates that being HPV positive alone is not a strong enough indicator to refer women to colposcopy.

P-10

THE CERVICAL SCREENING QA VISIT ACTION PLAN: IS THIS AN EFFECTIVE TOOL FOR MAKING CHANGES WITHIN THE CERVICAL SCREENING PROGRAMME?

Theresa Freeman-Wang[1], *Sonya Narine*[2], *Reena Patel*[2], *Olive Moynihan*[2]

[1]*Whittington Health, London, UK*
[2]*London QARC, London, UK*

The London Quality Assurance Centre is responsible for ensuring various components of the NHSCSP are quality assured. Acute trusts providing cytopathology, colposcopy and histopathology are required to participate in quality assurance (QA)visits every 3 years. Following a QA visit, a report is issued which details the findings of the visit, referring to any deviations from national standards and indicating the associated risks. Recommendations are made with timescales for implementation depending on the severity of the breach or improvement required. These are translated into an action plan. The London QA action plans utilise a 'traffic light' style' monitoring system whereby stakeholders can keep abreast of progress. It is the responsibility of the Hospital Based Programme Co-ordinator to manage the action plan, working closely with Trust management within the healthcare organisation.

The aim of this audit is to evaluate how effective an action plan is as a tool for delivering change within the London cervical screening programme. Where recommendations have not been met within a set timescale, what are the common themes and associated risks? And to consider the management of action plans and the escalation process where recommendations remain unactioned.

Between 2011-2014 the London QARC undertook 25 NHSCSP QA visits which resulted in 24 action plans. A total of 488 recommendations were made. 181 were classified as a clinical risk, 307 were a breach in national guidance. Depending on the associated risk, the timelines for action required ranged from with immediate effect to action within 12 months. 62% of clinically related recommendations and 49% of recommendations related to guidance breaches were actioned. Only 4 out of 25 trusts actioned all recommendations within their action plan. Currently there is regional variation in the Visit process. QA of cancer screening and NHS England commissioning are under review. Their discussions needs to ensure we have a mechanism to be supportive and ensure action plans are followed.

P-11

HIGH GRADE DISEASE IN LOW GRADE DYSKARYOSIS – ANNUAL AUDIT APRIL 2013 TO MARCH 2014 AT A DISTRICT GENERAL HOSPITAL IN EAST LONDON: NEWHAM UNIVERSITY HOSPITAL

Daljit Kaur, Jamna Saravanamuthu, Kalpana Rao, Vincent Oon, Rashna Chenoy

Newham University Hospital, London, UK

Aim

Low grade dyskaryosis account for about 65% of referrals with abnormal smear test. Colposcopy is used to identify cases with high grade disease.

Methods

Colposcopy at Newham University Hospital is managed using the Infoflex Colposcopy database. Data is downloaded onto an Excel spreadsheet for processing and analysis. There were 182 referrals with borderline and 243 referrals with mild dyskaryosis – 347 (88%) attended during this audit period and 83% (n=312) were tested and positive for HR HPV.

Results

In women with HR HPV 82% (n=257) had biopsies and 26% reported high grade disease. In 91% (n=234) of women with biopsy, colposcopy examination was complete. Colposcopy sensitivity for detection of high grade disease in women referred with low grade dyskaryosis was 42% and positive predictive value for the same was 66%. The overall accuracy of colposcopy was 77%. 63 women with punch biopsy were treated and there was a discrepancy of 37% with punch biopsy reporting high grade and treatment tissue reporting low grade disease.

In the smaller audit (n=62) of women not tested for HPV, 56% (n=35) had biopsies and 31% reported high grade disease. In 74% (n=26) of women with biopsy, colposcopy examination was complete. Colposcopy sensitivity for detection of high grade disease in women referred with low grade dyskaryosis was 11% and positive predictive value for the same was 100%. The overall accuracy of colposcopy was 69%. 10 women with punch biopsy were treated and there was a discrepancy of 40% with punch biopsy reporting high grade and treatment tissue reporting low grade disease.

Conclusion

Detecting high grade disease in referrals with low grade dyskaryosis is challenging. According to this audit, in women with tissue biopsies and complete colposcopy, HR HPV testing improves the sensitivity of colposcopy detecting high grade disease in referrals with low grade dyskaryosis.

P-12

AUDIT OF HIGH GRADE CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN) TREATMENT TIMES

Yvonne Higgins, Karen Shaw, Amit Patel

United Hospitals Bristol, Bristol, UK

Background

Within colposcopy, LLETZ treatment for high grade abnormalities (CIN2 or 3) is advised. NHSCSP guideline, Colposcopy and Programme Management 2010[1] recommends the proportion of women having definitive treatment for high grade CIN within four weeks of receiving a diagnostic biopsy report should be ≥ 90%. An audit of this standard in 2013 identified that only 9% of cases met the standard.

Aims

Re-audit this standard to assess improvement in compliance and explore reasons where standard was not met.

Method

Retrospective data was collected manually from patient records and via the colposcopy database for the period between 01/04/14 and 30/08/14. Descriptive analysis of the data was carried out.

Results

There were 167 eligible women, 106 (63%) met the target.

Of the 61 (37%) women who did not meet the target, 23(38 %) could not attend the 1st offered appointment, 4 (7%) did not meet for clinical reasons and 10 (16%) required a general anaesthetic. 8 (13%) were placed on a follow up pathway for focal CIN2 or ungraded CIN and 2 (3%) women fell into the "others" category. 1 woman declined treatment and the other took 6 months to decide which type of anaesthetic she wanted. The remaining 14 (23%) did not meet the 4 week target due to clinic capacity.

Of the 8 (13%) women placed on a follow up pathway, 37% regressed and 63% are awaiting their next appointment.

Conclusion

Failure to meet the target can partly be attributed to current demand on inpatient day case surgical lists.

Defaulting appointments was the largest contributing factor (38%).

There are many barriers to achieving this target. Some of which will be inevitable. More needs to be done to reduce the default rate of treatment appointments. Sound clinical reasoning, on the other hand, to ensure a patient is not over treated for example must not be overthrown by the need to fulfil a target.

P-13

PATIENT SATISFACTION SURVEY IN COLPOSCOPY, QUEEN ALEXANDRA HOSPITAL, PORTSMOUTH HOSPITALS NHS TRUST

Sam King, Veronica Sutton, Amita Khanapure

QA Hospital, Portsmouth, UK

Portsmouth has a very diverse and large community with significant differences in awareness about cervical screening. It is especially important in this diverse and often socially deprived community to promote effective understanding to improve participation and attendance.

Women may have strong negative reactions to gynaecological examinations and are often anxious attending colposcopy. Being sensitive and giving appropriate information helps improves their experience.

Out of a total of 69 patients surveyed, 100% understood the reason for attendance. The letter advising the patient to make an appointment was clear in only 90%.

Only 10% experienced a difficulty getting through on the telephone to make an appointment and 98% found the staff to be helpful and polite.

98% received a letter confirming their appointment and 97% of these had a colposcopy booklet included. 95% thought the booklet was useful and easy to understand.

100% thought information given at the appointment was the right amount but only 75% had HPV discussed with them. 97% had treatment discussed. 100% felt that all staff provided dignity and privacy.

97% received a letter explained the results of biopsies or treatment.

Of patients that phoned with concerns 96% gained access to help or advice from numbers that was given.
The overall the satisfaction score was 99%.

P-14

COLPOSCOPY ACCURACY AT RIGA EAST CLINICAL UNIVERSITY HOSPITAL, SITUATION AFTER COLPOSCOPIST'S TRAINING AND CERTIFICATION IN THE UK

Irina Jermakova[1], *Dace Rezeberga*[1], *Jana Zodzika*[1], *Marina Utorova*[1], *Charles Redman*[2]

[1]*Riga East Clinical University Hospital, Riga, Latvia*
[2]*University Hospital of the North Staffordshire, Stoke-on-Trent, UK*

Introduction
Colposcopic accuracy is defined as the clinical correlation between a colposcopic impression and a histologic report of high grade cervical precancer lesions. Colpocopic accuracy is one of the required fields for QA standards.

Objectives
To estimate colposcopy accuracy at Riga East Clinical University Hospital.

Background
A cervical cancer screening programme was established in Latvia in 2009 and the colposcopic part of the programme was started in June 2012. The EFC and British Society for Colposcopy and Cervical Pathology sponsored two gynaecologists from Latvia to receive hands-on colposcopic experience and to see UK colposcopy QA in practise. This was to enable RCOG/BSCCP colposcopy certification and to determine what aspects of QA could easily be introduced into the Latvian programme at this stage.

Methods
We retrospectively analysed the case notes of 2654 women who attended the colposcopy clinic over a 1 year period in 2014.

Results
304 patients who had high grade punch biopsy histology results were reviewed. The colposcopic finding agreed within one histologic grade in 257 of these patients, giving colposcopic accuracy rate of 84.5%.

Conclusions
Colposcopic accuracy is within EFC/BSCCP standards in our clinic. High level of colposcopy training in UK and realizing of importance of QA standards in colposcopy help us to introduce of a high-quality colposcopy service with an embedded QA component in Latvia.

P-15

QUALITY ASSURANCE AND TREATMENT OUTCOMES AS A PERCENTAGE OF COLPOSCOPY REFERRALS

Deirdre Lyons, Sonya Narine, Anne Jackson, Anna Parberry, Sonya Narine, Jorge Marin, David Jeansoule, Reena Patel, Theresa Freeman-Wang

Quality Assurance Reference Centre, London, UK

Introduction

London deals with 20% of England's colposcopy referrals. It is divided into three regions: north central/ north-east, Northwest and South. There are referral pattern differences between London and the rest of England, mainly the percentage of patients referred to Colposcopy units with both low-grade and high-grade dyskaryosis. London has 57% borderline (BNA) and low grade (LG) cytology referrals. Triage of low grade abnormalities with HPV testing was introduced in London between 2012 and 2014.

Quality Assurance (QA) underpins the monitoring and maintenance of standards for cervical screening. There are nine regional QA Reference Centres (QARCs). Colposcopy Units are assessed via quarterly Korner (KC) 65 returns, a detailed dataset and formal QA site visits every three to four years.

Aims

To look at regional variances in percentage of treatments with an outcome of </= CIN 1.

To see if there is a difference in the cytology reporting profile and consider reasons for any differences.

Methods

We looked at the KC65 Parts A, B, C2 and E for London over a four year period 2010 - 2014 and the KC61 cytology returns for the same period.

Part A details the percentage of cytology referrals by grade and waiting times.

Part B details all attendances. Part C2 details all biopsies (punch and Treatment) by referral cytology.

Part E gives all histology results for first month of each quarter.

Results

Referrals with a LG abnormality have increased from 55.05% in 2010/11 to 60.1% in 2013/14. HG referrals decreased from18.4% 2010/11 to 14.2% 2013/14.

22% of women attending colposcopy in London underwent excisional treatment (range 8.9-46.7%). Of these 25.4% were reported as </= CIN1. (range 11-40%).

Conclusion

There is a large variance in treatment and final histology rates across London. We will present this data in detail and explore reasons behind these differences.

P-17

AUDIT OF TEST OF CURE SMEARS

Nick Matthews, M George

University Hospital of North Tees and Hartlepool, Teesside, UK

During the period 10th April 2012 to April 2013 there were 830 test of cure smears analyzed at the university Hospital Of North Tees and Hartlepool.

A total of 95 smears were reported abnormal cytology and 229 of the smears tested came back as HPV positive, 80 in total were found to be high risk HPV positive. Of the 95 women who had abnormal cytology, only 1 had ablative treatment. All the others were loop excisions.

All the women with abnormal cytology were seen in colposcopy clinic. Over half of the women had normal colposcopy and further smears were arranged for between 12 and 36 months. 41 women had biopsies taken and only 5 women had repeat treatment.

No women were treated with excisional treatment on their first colposcopy appointment following test of cure. No women were retreated with ablative techniques.

P-18

AN AUDIT OF THREE NATIONAL CANCER SCREENING SERVICE (NCSS) STANDARDS FOR FOLLOW UP AFTER TREATMENT

Aoife Kelly, Sasikala Selvamani, Sinead Cleary, Gunther Von Bunau

Colposcopy Clinic CWIUH, Dublin, Ireland

Background
National standards are developed to ensure quality assurance in service delivery. The NCSS have clear standards regarding the follow up of women following LLETZ treatment. They identify women who are HPV and cytology negative who can safely returned to routine recall. In addition, they identify women with persistent HPV who require increased surveillance due to their increased risk of recurrent high grade CIN.

On-going clinical audit remains the best evidence based method of ensuring compliance to these standards.

Aim
To audit our practice on follow up after LLETZ treatment against the QA standards set by the NCCS of the cervicheck programme

Standards
Follow up after treatment:

1 At least two follow up smear and HPV tests should be performed at colposcopy clinic within the first 18-24months which should be >90%

2 The diagnosis of residual or recurrent CIN within 24months of treatment should be <5%

3 The result of the smear and HPV tests on two separate occasions 1 year appart at colposcopy should facilitate discharge to the women to routine in >80%

Setting
Colposcopy Unit managing 2000 first visit referrals per year, Coombe Women and Infant University Hospital, Ireland.

Method
Electronic data of 1104 women treated with LLETZ between April 2012 and May 2013 were evaluated. The cytology and HPV status at 6 and 18 months were analysed on an Excel data sheet.

Results
1038 women (94%) had smear and HPV at 6 and 18months.

90 women (8.75%) had recurrent CIN or residual disease.

27 women (2.6%) required further treatment.

838 women (81.5%) were discharged (standard 3).

Conclusion
This audit demonstrates that we mostly meet the standards set by the NCCS in the follow up after treatment. While we acknowledge the 8.75% recurrent or residual rate is higher than standards, the retreatment rate of 2.6% is reassuringly low. Cytology and HPV testing following treatment allows us to safely discharge 81.5% from colposcopy to routine community screening.

P-19

MANAGEMENT OF CGIN IN A DISTRICT GENERAL HOSPITAL: OUR EXPERIENCE

Michael Hardway, A Sivasurium, S Mirando

Prince Charles Hospital, Merthyr Tydfil, Cwm Taf Health Board, UK

We have audited all our confirmed CGIN cases proven on histology to review the referral times and appropriate management done against NHSCSP 20 guidance. The presence of other pathology was also reviewed and the local incidence of CGIN explored. We found most cases were actually referred with smear of severe dyskaryosis. Background details were reviewed shown a high incidence of condom use or no contraception among these confirmed cases as well as high nulliparity rates in these patients making management decisions difficult. High rates above quoted incidence of concurrent CIN was found also. Treatment outcomes post cervical treatment were also reviewed. Clear margins we're achieved in 50% cases and cases were further reviewed following this where each case needs individualised care and this audit has addressed these difficult cases in terms of management.

P-20

NORTHWEST REGIONAL AUDIT OF WOMEN TREATED BY LOOP EXCISION OF TRANSFORMATION ZONE (LETZ)

Uma Krishnamoorthy[1], *Jonathan Herod*[2], *Derek Parkinson*[2], *Michael Wall*[3], *Ruth Stubbs*[3], *Yvonne Brown*[3]

[1]*Burnley General Hospital, Burnley, UK*
[2]*Liverpool Women's Hospital, Liverpool, UK*
[3]*Northwest Cervical Screening Quality Assurance Reference Centre, Liverpool, UK*

Introduction
Loop Excision of Transformation Zone (LETZ) is one of the fundamental treatment methods for women referred with high grade smear abnormalities.

Aim
To evaluate compliance of Northwest Colposcopy units against clinical standards of practice recommended by NHS screening programme (NHSCSP20)

Objectives
Regional practice with regards to LETZ procedure was benchmarked against 7 key National standards.

Methodology
Retrospective audit. All patients in Northwest who underwent LETZ procedure between 1st April 2013 & 30th June 2013 were identified from KC65.

Results
23 out of 28 Northwest Colposcopy units (82%) participated. 1187 LETZ data submissions were recieved (91%)

Proportion of women treated at first visit with evidence of CIN 2 or above in histology must be 90% or above as standard, was fulfilled in 12 units (55%).

17 (74%) units achieved compliance above recommended 90%, in ensuring that LETZ was performed within 4 weeks of receiving a diagnostic biopsy.

97.7% of women treated by LETZ were noted to have recieved treatment within eight weeks from referral.

2.3% of the total audit cohort required additional haemostatic technique with 3 units reporting haemorrhage rates over 5%.

The proportion of LETZ managed as outpatient procedure under local anaesthesia was more than recommended 80% in 19 units (83%).

87% of LETZ overall were of depth more than or equal to 7mm against national standard of 95%, with 10 units achieving compliance.

Specimen was removed as a single sample in 84% of total LETZ (standard 80%) and 74% units demonstrated compliance with this standard.

Conclusion
Regional audit revealed good evidence to demonstrate that Northwest Colposcopy units practice LETZ in accordance with National standards.

Recommendations
Areas of good practice and those with room for improvement identified for each unit is to be reported formally to facilitate objective feedback and improvement before next re-audit.

P-21

EXPERIENCE OF PATIENTS ATTENDING THE COLPOSCOPY CLINIC AT THE NORFOLK AND NORWICH UNIVERSITY HOSPITAL NHS FOUNDATION TRUST

William Chege Maina, Julie Peckham, Timothy Duncan, Nikolaos Burbos, Joaquin Nieto

Norfolk and Norwich University Hospital NHS Foundation Trust, Norwich, Norfolk, UK

Patient feedback is an important aspect of quality assurance for colposcopy. We performed a survey in September 2014 to determine patient satisfaction with our service. Our team consists of six full-time specialist colposcopists and dedicated gynaecology nurses.

An anonymous questionnaire and a letter explaining the purpose of the survey was issued to the first 100 patients attending colposcopy clinics during the study period. 99 completed questionnaires were received. We assessed the quality of information provided prior to appointment, waiting times at the clinic, patient perception of the staff, as well as the quality of information provided after the consultation.

60% of patients were new while 40% were follow ups. 95% reported they had received written information prior to their appointment and 93% rated the information as useful and adequate. 32% of patients were seen on time, 31% were seen within 30 minutes, while 37% waited more than 30 minutes. An explanation or apology was provided if there was a delay of more than 20 minutes. All patients reported clear communication and good support from the staff. Our facilities, which include a private area for changing, were rated as clean and well maintained by most patients. All those who had a biopsy were informed when and how they would receive the results. 91% were provided with details of who to contact in case of need and 96% rated the service as good or excellent.

We were disappointed that 37% of our patients waited more than 30 minutes for their consultation.

However, this was due to unavoidable factors such complex consultations or additional support required following procedures.

We conclude that most patients attending our colposcopy clinic have a positive experience and high rates of satisfaction with the care provided.

P-22

THE MANAGEMENT OF LOW GRADE CERVICAL CYTOLOGY

Nicholas Wood, David Goodall, Gemma Lysycia

Lancashire Teaching Hospitals NHS Trust, Preston, UK

Background

Along with the introduction of the HPV triage, there have been recent updates on the management of low grade cervical cytology (most recently July 2014.) In view of these updates, there has been no formal assessment to check if these new standards are being met. These new standards should aim to streamline the colposcopy service, providing succinct yet quality care to patients. The pathway should keep patient and colposcopist anxiety to a minimum.

Objectives

- How are we [LTHTR] managing low grade cervical cytology?
- Are we adhering to the most recent guidelines?

Methods

All LTHTR colposcopy low grade referrals (HRHPV +ve) were looked at from January to July 2013 and the action at first visit and follow up audited.

- Exclude TZ=3 (SCJ not seen)
- Action at first visit and follow up

Results

Practice varies dramatically between colposcopists and there is still much contention amongst the correct management of cervical cytology.

Summary

The following standards were met:

- Good rate of biopsy at first visit when CIN visualised on colposcopy

However, standards need to be improved in the following areas:

- Discharging to routine recall the patients whose cervix looks normal
- Discharging to routine recall the patients whose cervical biopsy is reported as non-neoplastic
- In the patients whereby the cytology was mild/borderline, the cervix appeared low grade and biopsy demonstrating CIN 1, planning for them to have a smear in 12months time and then if that is negative, discharging to GP for another smear in 12 months before returning to routine recall
- Unified management across all colposcopists as practice currently varies

Recommendations

- Share audit information with the colposcopy team
- Agree management pathway for low grade cervical cytology
- Ensure adequate capacity of nurse led smear clinic
- Consider technological innovations to support clinical decision making in colposcopy
- Review decisions at 1st appointment Jan-June 2015 and re-audit September 2015

P-23

THE FIRST AUDIT OF A NEW COLPOSCOPY SPECIFIC WHO CHECKLIST IN A LARGE DISTRICT GENERAL HOSPITAL

Andrea Joynson[1], Jenna Hawkins[1], Spogmai Durani[1], Jane Panikkar[2]

[1]Keele University School of Medicine, Staffordshire, UK
[2]Shrewsbury & Telford NHS Hospital Trust, Shropshire, UK

Introduction
The WHO surgical safety checklist was introduced as part of the WHO Safer Surgery Saves Lives Campaign, and was found to reduce the rate of postoperative complications and death by more than 1/3. Colposcopy also has procedural risks; including retained swabs, sharps and cotton wool, risk of latex and iodine allergy, and the risk of the procedure should the patient be pregnant. A colposcopy specific checklist was therefore introduced in Shrewsbury and Telford Trust (SaTH) and this was the first audit of the checklists' introduction.

Aims
To ascertain whether the checklist had been used for colposcopy procedures and improved documentation. To find out if there were any problems or improvements that could be made to the checklist.

Methods
A 14 question audit was devised from a pilot study of 6 sets of patient colposcopy notes. 50 sets of colposcopy notes were audited and the position of the staff members completing the form noted.

Results
For only 3/50 colposcopy procedures, was a checklist not located in the notes. 33/50 checklists were incomplete. Of the 33 incomplete checklists, there were 7 incomplete questions that could be potentially serious if not checked prior to the procedure. This included 1 checklist without recording pregnancy test completion, 1 without swab count and 1 without sharp count prior to the procedure, and another 4 not recording that the allergy status' had been checked. There was 1 confusing question and 1 typographical error on the form.

Conclusion
Overall this audit showed that the WHO adapted SaTH Colposcopy checklist was feasible with a good completion rate. It had been introduced and used well in the majority of cases. Education will be given to staff on correct completion of the form, errors will be corrected on the form and the checklist will be re-audited.

P-24

ARE WE FOLLOWING NEW HPV TRIAGE PROTOCOL? A RETROSPECTIVE AUDIT

Shivashankar Meti, Clodagh McElhenny, Ann Hamilton, Ramez Ayyoub

Ulster Hospital, Belfast, UK

Aim

To compare our current practice of colposcopy practice with new triage protocol

Audit standards - Taken from new triage colposcopy protocol published by Department of health and social service

Method

49 case notes were reviewed (ECR), 31 new cases and 18 follow up cases. Duration - 1st October to 30th October 2013

Results

New cases - Protocol was followed in only 17 of 28 cases. All cases who missed the pathway had BNA and low grade abnormality. Compliance with the new protocol was only 60%

Follow up cases -Protocol was followed in 12/16 cases. All cases who missed the pathway are cytology with low grade abnormality. Compliance with the new protocol was 75%

Conclusion

Area of good practice

New protocol was followed up in most of the high grade cases. New protocol was reasonably followed up in post treatment (new cases)

Area for improvement

Need to improve our practice in managing women with low grade abnormal smears

Recommendation

To re-audit the practice of triage protocol in 6 months

P-25

RE-AUDIT OF THE MANAGEMENT OF PATIENTS WITH GLANDULAR CHANGES ON CERVICAL CYTOLOGY SCREENING IN ST. MICHAEL'S HOSPITAL, BRISTOL

Sarah Platt, Yvonne Higgins, Amit Patel

St Michael's Hospital, Bristol, UK

Background
A previous audit indicated that 44% of patients with? Glandular change had a 'See and Treat' LLETZ at the first appointment, not complying with national recommendations. Re-audit was performed 12 months after departmental presentation of audit findings and guideline implementation.

Aim
To audit management of patients with? Glandular changes on cervical screening within our service.

Methods
A retrospective audit of 12 patients with? Glandular changes on cervical screening from November 2013-2014. Patients were identified on the CISS database: cytology, colposcopic impression and histology were recorded and analysed.

Results
92% (11/12) had 'See and Treat' management with LLETZ. 8% (1/12) had punch biopsy: Histology indicated HG CGIN and CIN 3.

LLETZ pathology indicated CIN 2 (1/12), LG CGIN (1/12), HG CGIN (7/12), HG CGIN and CIN 3 (2/12) and Adenocarcinoma (1/12). Depth of LLETZ ranged from 5 to 18 mm, with no clear correlation to age, parity or TZ type.

LLETZ margins: 3/12 had clear margins, 8/12 had incomplete margins, 1/12 had all margins involved (adenocarcinoma). Of those with incomplete margins, 2 are awaiting cytology, whilst 6 had repeat LLETZ or hysterectomy with negative histology.

Follow-up
3/12 had repeat LLETZ, 3/12 had hysterectomies, 5/12 had 6-month cytology and 1/12 referred to oncology.

Conclusion
Re-audit indicates an improvement in our 'See and Treat' policy, with 92% receiving treatment within 2 weeks, whilst the remaining patient had a LLETZ after confirmatory histology. This audit emphasises that 'See and Treat' is appropriate for patients with? Glandular change, since all patients had high grade cervical pathology.

However, audit indicated that depth of LLETZ remains variable. Several patients' required repeat treatments due to margin involvement, and 5/8 were originally ≤10mm. Deeper initial treatments could reduce unnecessary secondary treatments with their associated risks and patient inconvenience. Age and parity should be considered when performing deeper treatments.

P-26

AUDIT OF WOMEN UNDERGOING LARGE LOOP EXCISION OF TRANSFORMATION ZONE AT BLACKPOOL VICTORIA HOSPITAL

Divya Nagarajan, June Davies, Addalla Yagoub

Blackpool Victoria Hospital, Blackpool, UK

Introduction

In the UK, the annual incidence of cervical cancer is approximately 9.7 per 10,000 and a mortality of 3.9 per 100,000 women. Cervical cancer develops as a result of persistent infection with high risk HPV, through pre-cancerous stages called cervical intra-epithelial neoplasia (CIN) grades 1-3. Several surgical treatments exist for CIN including large loop excision of transformation zone (LLETZ), cryotherapy, laser ablation, knife/ laser conisation. LLETZ is the treatment of choice as it has been shown to provide the most reliable histology with the lowest morbidity.

Aim of audit

The aim of the audit was to compare the colposcopy practice at Blackpool Victoria Hospital against benchmarked criteria in the NHSCSP criteria 20 and the North West Cervical Screening Quality Assurance Resource Centre. This was part of a regional audit of LLETZ procedure.

Methodology

This was a retrospective audit into women undergoing LLETZ procedure between March 2013 and March 2014. 56 case notes were identified and data collected using the proforma supplied by the regional audit leads. The data was then analysed on Microsoft Excel.

Results and discussion

LLETZ was performed on see and treat in 40% of patients under local anaesthetics as outpatients (80% recommended), and the reason why this was not performed was documented in 66% of cases (100% recommended). This may be due to a high number of low grade changes having punch biopsies rather than LLETZ on first visit. Histology from LLETZ was removed as a single specimen in 57% of patients (80% recommended), this may be due to under-reporting of top hat excisions.

Conclusion and recommendations

The findings of the audit were presented at a clinical governance meeting to highlight the main areas for improvement in patient care. A computerised proforma for colposcopy has been implemented will be used to re-audit in 12 months.

P-27

COLPOSCOPY TREATMENT AUDIT AUGUST 2012 TO JULY 2013 AT A DISTRICT GENERAL HOSPITAL IN EAST LONDON – NEWHAM UNIVERSITY HOSPITAL

Jamna Saravanamuthu, Daljit Kaur, Vincent Oon, Kalpana Rao, Rashna Chenoy

Newham University Hospital, London, UK

Aim

To compare outcomes recommended by the NHSCSP Publication No 20 for treatment type, number of specimens and follow-up post-treatment.

Method

Colposcopy at Newham University Hospital is managed using the Infoflex Colposcopy database. Data is downloaded onto an Excel spreadsheet for processing and analysis. LETZ used for out-patient treatment, with the exception of one ablation. In-patient treatment consisted of hysterectomy, knife cone or NETZ.

Results

208 colposcopy treatments were performed with 87% (n=182) out-patient procedures. 28% (n=58) was "Select and Treat" and 96% had high grade disease.

58% (n=121) were deferred out-patient treatment with 93% for high grade disease. 12.5% (n=26) had in-patient treatment - 10 cases repeat treatment.

77% of specimens were removed as single specimens and 17% with two specimens.

Post-treatment, 17 cases were excluded – mainly for further treatment or Oncology referral.

191 cases were invited for follow-up post treatment with 99% within 8-months. 10% did not attend.

163 (90%) had negative smear with 73% (n=132) HR HPV negative, 12% (n=22) were positive and 5% (n=9) were not tested. 15 (8%) had low grade dyskaryosis with 3% (n=6) HR HPV negative, 4.4% (n=8) positive and 1 case not tested. All women with HR HPV positive had colposcopy. Further follow-up was not consistent when colposcopy was unsatisfactory particularly when treatment margins were not complete.

Three women had severe dyskaryosis post-treatment and two cases were re-treated with NETZ - histology confirmed high grade disease. One case post-hysterectomy for CIN 3, with cancer diagnosed at initial treatment, had VaIN 2 on biopsy managed with local excision. The overall rate of post-treatment histologically proven high grade disease was 1.7% (n=3)

Conclusion

This annual audit demonstrates that practise is good with improvement required in removing single samples and post-treatment follow-up. "Test of cure" has introduced challenging decisions about further follow-up post-treatment.

P-28

INTEGRATING STOP SMOKING SERVICES IN COLPOSCOPY CLINIC: A QUALITY IMPROVEMENT MOVE

Jemimah Obaro, Tammy Waddington, Kalsang Bhatia

Burnley General Hospital, East Lancashire Hospitals Trust, Burnley, Lancashire, UK

Background

Smoking cessation is a national priority. The department of health aims to reduce the number of smokers in England to 18.5% by the end of 2015. Smoking is an independent risk factor for high risk HPV infection including cervical cancer. Whilst Stop Smoking Services (SSS) are fully integrated with Cardiology, Respiratory medicine and Antenatal services, for most Colposcopy units, the onus is on the patients to contact their GP or the Stop Smoking services themselves and hence very little impact on advice given.

We have committed ourselves to health promotion within our Colposcopy services by better utilisation of the opportunity for the National Stop Smoking campaign in a high risk cohort. In collaboration with the hospital Stop Smoking Service (SSS), a new referral pathway was developed which would allow the SSS team to directly contact the patient and instigate management.

Methods

We are conducting a survey of smoking status in our cohort of women referred with abnormal cytology / HR HPV positive. Women are also asked whether they are aware about the link between smoking and abnormal smears, HPV infection and cervical cancer.

Current smokers are offered direct referral to hospital SSS. A Colposcopy specific simplified referral form was designed, to be signed by patient with their contact telephone numbers. The referral forms are directly collected by SSS nurse, who contact the patient within 1 week. Data will also be collected on outcomes from SSS referral.

Conclusion

Colposcopy clinics are in an ideal position to motivate high risk patients to stop smoking. SSS are well established within hospital settings and these need to be integrated in Colposcopy services, to promote more meaningful and proactive approach to stop smoking. By integrating with hospital Stop Smoking services, we have designed a pathway for a more proactive approach to helping women stop smoking.

P-29

ASSESSING TEST OF CURE AND DYSPLASIA RATES FOLLOWING LLETZ

Karen Shaw, Yvonne Higgins, Amit Patel, Kristyn Manley

University Hospitals Bristol NHS Foundation Trust, Bristol, UK

Background
Women with CIN in their LLETZ specimen undergo HPV test (test of cure, TOC) six months after treatment. It is expected that > 90% of these women will have a negative cytology1 and 74.3% are anticipated to have negative TOC.2 If found HPV positive (irrespective of cytology), further colposcopic assessment is recommended.

Aims
To identify the proportion of women with on-going dyskaryosis 6 months post treatment and assess our TOC rate (no current standard available but data from the sentinel sites study suggests approximately 74.3%).

Methods
We performed descriptive analysis of retrospectively collected cyto-pathological and colposcopy data between January and April 2012 from electronic database.

Results
Out of the total 123 eligible women, 36(29.2%) did not have a test of cure. Of the remaining 87(70.7%) women, 71 (81.6%) were HPV negative, 5 (5.7%) were HPV positive but cytology negative, 10 (11.4%) were HPV positive with low grade cytology and 1 women was HPV positive with high grade cytology.

Nine (25%) out of 36 women who did not have a TOC, had cytological follow up. Seven of these had negative cytology whilst two had mild dyskaryosis.

Our rate of negative cytology following LLETZ was 88.6% and rate of negative TOC was 81.6%.

Conclusions
Our negative TOC rate following LLETZ is higher than those observed in the Sentinel sites study however rates of negative cytology is lower than the national standard. This is despite meeting recommendations for excision depth. Possible explanation could be the difference in population, HPV type prevalence or simply variation by chance. A larger dataset is required to standardise expected negative TOC rate.

References
1 NHSCP (May 2010) Colposcopy and Programme Management: Guidelines for the NHS Cervical Screening Programme. 2nd Edition. NHS Cancer Screening Programmes: Sheffield.

2 Evaluation of sentinel sites for hpv triage and test of cure: Report to the NHS cancer screening programmes (September 2011).

P-30

COMPLIANCE WITH NATIONAL GUIDELINES RELATING TO THE DEPTH OF LOOP EXCISIONS OF THE TRANSFORMATION ZONE, AND OUTCOMES RELATED TO DEPTH AT A DISTRICT GENERAL HOSPITAL

Robert Parker, Fateh Ghazal

Walsall Manor Hospital, Walsall, UK

Background
NHS Cervical Screening Programme (NHSCSP) guidelines for colposcopy state that excisional techniques should remove tissue to a depth > 7 mm. Our Trust's colposcopy unit was identified as underperforming in this area. An audit was performed on depths of Large Loop Excision of the Transformation Zone (LLETZ) samples and subsequent outcomes.

Aims
To compare our Trust's performance against NHSCSP guidance on depth of LLETZ samples. To ascertain if depth had any influence on subsequent outcomes in our population.

Methods
A retrospective audit was performed on the depths of all LLETZ samples in our Trust between 1 August 2011 and 31 July 2012. Histological outcomes as well as patient follow-up results were recorded, and compared to LLETZ depths.

Results
270 LLETZ procedures (from 265 patients) were identified during the Audit period. 40% of LLETZ samples were >7mm deep, with a mean sample depth of 7.5mm. 223 patients had cytological follow-up after their LLETZ. Of these, 94% had no dyskaryosis on follow-up cytology. 91% of LLETZ samples >7mm depth showed no dyskaryosis on follow-up cytology, compared with 95% of samples <7mm deep (no significant difference).

Subsequent to this audit, a quality improvement programme was introduced, resulting in better compliance with the NHSCSP standard for depth in 2013-4.

Conclusions
Despite not meeting the NHSCSP 7mm standards, our unit over-performed in terms of follow-up samples with no dyskaryosis. This was thought to be due to the extra depth of tissue destruction caused by the use of ball diathermy following LLETZ.

P-31

VAGINAL VAULT CYTOLOGY FOLLOWING HYSTERECTOMY; AN AUDIT ON HOW TO IMPROVE COMPLIANCE WITH GUIDELINES

Vasileios Stamelos[1] ,[2], *Phyllis Dunn*[1], *Gillian Douce*[1], *William Parry-Smith*[1], *Charles Redman*[1]

[1]*University Hospital of North Midlands, Stoke on Trent, Staffordshire, UK*
[2]*Keele University, Keele, Staffordshire, UK*

Introduction
The NHSCSP guidelines detail when post-hysterectomy vault smears are needed. It is the responsibility of the treating gynaecologist (or Trust) to ensure that these tests are performed. In a previous audit, 16% of women undergoing hysterectomy required vaginal vault cytology, which was performed in only 39%; the following recommendations were made:

- Hysterectomy histology reports should advise whether /when subsequent vault cytology is required (target=100%)
- The patient and GP should be informed of the plan in writing (target=100%)
- The initial vault smear should be performed within 8 months of surgery (target=95%)

Objective
To audit these recommendations.

Methodology
An audit of women undergoing hysterectomy from July 2013 to March 2014 (n=348) was performed. All vault smears are performed in a single designated clinic under the care of the Lead Colposcopist. Clinic data is entered and stored on the colposcopy database.

Results
All histology reports stated whether or not vault cytology was required and when it should be done.
60 (17%) patients required a vault smear. Of these:

- 52 (87%) patients had a vault smear, though in only x 41 (68%) was this within 8 months of surgery
- In only 49 (82%) had the patient and GP received a letter after surgery explaining why a vault smear was needed

Conclusions and recommendations
The use of systematic reporting and centralisation has significantly improved performance though there were shortcomings in communication and administration. In future, these will be addressed by direct referral to the vault cytology clinic so that communication and administration are under the control of a single team.

P-32

ARE CLINICO-PATHOLOGICAL CONFERENCE (CPC) DECISIONS COMPLIED WITH? – AN AUDIT

Vasileios Stamelos[1],[2], *Gill Warrilow*[1], *Lorraine Harding*[1], *Charles Redman*[1]

[1]*University Hospital of North Midlands, Stoke on Trent, Staffordshire, UK*
[2]*Keele University, Keele, Staffordshire, UK*

Introduction
Within the NHSCSP, CPC meetings are a mandatory quality assurance activity as well as a valuable management tool. Compliance with the decisions made at these meeting should be undertaken.

Objective
To determine the compliance with CPC patient management decisions.

Methodology
Retrospective analysis of the electronic records for all CPC meetings was performed on a rolling basis i.e. every week the outcomes from the CPC meeting held 8 months previously were reviewed. The outcome for meetings held between July 2013 to January 2014 was reviewed, in which a total of 151 cases were discussed.

Results
Management complied with the CPC plan in 79% (92/117) cases.

The reasons for non-compliance (n=25) were as follows;

a) Data error (n=4: 16% of non-compliant cases).

The recorded management decision was incorrectly coded.

b) Patients DNA (n=9: 36%)

c) Pregnancy (n=7: 28%)

d) Decision changed (n=5: 20%)

Comments
It was reassuring to note that the vast majority of CPC decisions were followed. The main factors in non-compliance were patient-related. In the cases where the clinician chose an alternative plan, the CPC was informed and this was documented.

P-33

CERVICAL SCREENING TESTS SHOULD ONLY BE DONE IN CYTOLOGY CLINICS

Vasileios Stamelos[1],[2], *Joanne Parkes*[1], *Charles Redman*[1]

[1]*University Hospital of North Midlands, Stoke on Trent, Staffordshire, UK*
[2]*Keele University, Keele, Staffordshire, UK*

Background
A previous audit recommended that cervical screening tests should not be performed in general gynaecological outpatients because of high rates of inadequacy (35%) and poor administration. Consequently, virtually all cervical screening tests in our hospital are performed in a designated cytology clinic. However, a few tests are still done in the general gynaecological clinic.

Methodology
Retrospective analysis of the cases identified from the records of the Cytopathology department of the University Hospital of North Midlands.

Results
In 2014, 36 cervical screening tests were performed in the general gynaecological outpatients and received by the laboratory.

Most tests were performed by Advanced Nurse Practitioners or consultants who had PINs. Only one test was performed at an inappropriate interval; all the other tests were either done at the appropriate interval or in women who had previously defaulted or never had a test.

In 6 cases (17%) there were administrative errors: inadequate clinical information (n=5, including no PIN in one case) and incorrect processing in a further case (sent in wrong container). Two of these cases (both performed by senior medical staff) were rejected. Of the 34 tests processed, one was reported as inadequate (3%). Two tests were abnormal and the rest were reported as normal.

In only a minority of cases were the results of the test shared with the patient using the QARC sanctioned standard letters.

Conclusions and recommendations
The inadequacy rates were lower than in the previous audit, reflecting the move to LBC and that virtually all the practitioners had received training. Nonetheless, taking cervical tests outside of a specially designated cytology clinic is associated with an unacceptably high rate of administrative errors.

The Department has decided that cervical tests will only be performed in designated cytology clinics and no cervical tests will be performed in the general gynaecological setting.

P-34

AN AUDIT OF HIGH GRADE SMEAR REFERRALS TO COLPOSCOPY AT CRAIGAVON AREA HOSPITAL

Claire Thompson, Aoife Currie

Craigavon Area Hospital, Craigavon, UK

Background

The Craigavon Area Hospital Colposcopy service has approximately 750 new referrals per year and has four Consultant Colposcopists.

The aim of this audit was to review the current management of high grade smears referred to Craigavon Area Hospital and compare to current BSCCP standards.

Methodology

A retrospective analysis of high grade smears referred to the colposcopy service in Craigavon between October 2013 – February 2014.

Cases were identified by the Excelicare Database. Data collection was via a standardised proforma. Auditable standards were pre-defined using the NHSCSP Publication Number 20.

Results

Sixty-Nine cases were identified and analysed.

Of note was that 54% of patients had no previous smear history.

The index smear referral was severe dyskaryosis in 89%.

Sixty-one per cent of patients were seen at Colposcopy within 4-6 weeks of the index smear. Of the 19 cases seen over 6 weeks this was influenced by a 42% DNA rate.

Colposcopy was satisfactory in 89% of cases with the impression of high grade in 96%.

Ninety-seven per cent of cases had excisional biopsy. 79% of patients had a local anaesthetic LLETZ at the time of Colposcopy while 13% of patients required a General Anaesthetic.

A single sample specimen was obtained in 86%. Histopathology confirmed 2 cases of invasion, staged FIGO 1A1, whilst 80% included CIN III.

Follow up was within the smear clinic (93%) and the interval time to follow up smear was 6-8 months in 71%.

Ninety-four per cent of follow smears where negative or mild. HPV testing was performed on 100% of these cases, which showed that 88% were HPV Negative and were therefore discharged back to routine recall.

Only 28% of follow up smears were HPV 16 or 18 positive, which is of concern with regards as to the effectiveness of the vaccine on Colposcopy services.

P-35

B9 AND M9 REFERRAL SMEARS: WHAT HAPPENS TO THEM?

Kerry Sargant, Kate Aston, Carolyn Leland

Hampshire Hospitals NHS Trust, Winchester, Hampshire, UK

With the introduction of HPV testing as part of the screening programme the way we manage borderline and low-grade dyskaryosis smears has changed. Any borderline or low-grade dyskaryosis smear is tested for high-risk HPV and if detected the patient is directly referred to colposcopy.

According to our guidelines any possible area of CIN is biopsied and then further management is planned according to the result. If there is an adequate negative colposcopy the patients are returned to routine recall within the community.

A retrospective audit was performed looking at all patients seen over a 6 month period in 2014 with a B9 or M9 referral smear. 304 patients were identified and using a combination of notes, colposcopy proformas and histology results we determined what was observed during colposcopy as well as how many were referred back to routine recall immediately and how many had negative biopsies and were subsequently referred back to community routine recall. We also determined how many of the M9 smears were found to have CIN 1 on biopsy and also how many of the B9 smears actually had an abnormality on biopsy.

P-37

A SURVEY OF PATIENT OPINION ON HPV TESTING AT COLPOSCOPY CLINIC

Foteini Verani, Caroline Sheehan, Karen McKinney

Daisy Hill Hospital, Newry, Northern Ireland, UK

Objective
With the introduction of HPV testing, in our Health Trust, we wished to evaluate patients' understanding of HPV testing at cervical screening. We also wished to evaluate their views on the social and psychological issues that might arise from this test.

Method
Sixty women attending the colposcopy clinic were asked to complete a questionnaire about their understanding of HPV testing. We evaluated the information they received and psychological implications of a positive result.

Results
35% did not receive any information on HPV testing and 43% were aware that an HPV test was being performed with their cervical smear. The majority (83%) were referred to colposcopy with an abnormal smear with 70% being unaware of their HPV status. 3% of the women didn't know why they were attending. 37% didn't know that HPV was a sexually transmitted disease. 20% thought that treatment was not required (even with the presence of CIN) whereas 43% thought treatment was always necessary. 13% were unaware of the HPV vaccination programme. Women expressed anxiety to the possibility of having a positive HPV test result with 67% marking >5 (in the scale of 10) while half of them admitted being upset. 45% didn't feel embarrassed but 18% of them avoided the question completely.

Conclusion
The introduction of HPV testing in cervical screening is complex. Public awareness is essential to decrease the psychological costs of the test. There also appears to be a need for better information to be given to women at the time of cervical screening regarding HPV and the consequences of testing positive for HR HPV types.

P-38

MEASURING SERVICE QUALITY IN A DISTRICT HOSPITAL COLPOSCOPY CLINIC

Foteini Verani, Meeta Kamath, Karen McKinney

Daisy Hill Hospital, Newry, Northern Ireland, UK

Objectives
Attendance at a colposcopy clinic is potentially associated with different degrees of anxiety highlighting the importance of measuring and improving the provision of service in a health care setting. Our aim was to measure the quality of service provided based on women's experiences of having colposcopy, evaluating their satisfaction with communication, health knowledge, quality of service and level of anxiety.

Methods
A total of 87 women that attended the colposcopy clinic in a District Hospital, aged 22-53, were asked to complete a questionnaire that evaluated their self-reported satisfaction and knowledge as well as the information provided and efficacy of the service.

Results
95% of the women had received information on colposcopy prior to their attendance with 94% finding this helpful. The majority of women (86%) were seen within 30 minutes of their appointment with all of them finding the staff pleasant, helpful and making them feel at ease. All women found that medical staff clearly communicated the examination involved and possible treatment. 93% of women that had treatment found their overall experience above average with all of them feeling that their privacy and dignity were respected. More than half (55%) experienced less than moderate discomfort with only 4 (6%) feeling pain more than average. The information given after their attendance regarding their treatment, communication of the results and possible follow up were found to be satisfactory by almost all of them (90-99%).

Conclusion
Attendance at colposcopy can be a stressful event but this study has demonstrated that good verbal and written information is effective in reducing anxiety and minimising pain level.

P-39

TREND OF THE LENGTH OF THE CERVICAL EXCISIONAL TREATMENT BIOPSY OVER TWO TIME COHORTS AND EFFECT OF LENGTH ON MARGINS AND FOLLOW UP CYTOLOGY

Osama Abughazza[1], *P Mairemban*[2], *Deirdre Lyons*[2], *Faisal Al-Mayahi*[3], *Neil Shah*[3]

[1]*Royal Surrey County Hospital, Surrey, UK*
[2]*Imperial Healthcare Trust, London, UK*
[3]*Imperial College School of Medicine, UK*

Aim

- To evaluate trend in length of excisional cervical treatment biopsies over two time cohorts
- To evaluate the effect of this on incomplete margin status
- To evaluate the effect of change in depth of excision biopsies on F/U cytology.

Background

Deep cervical excision biopsies of > 15mm can lead to preterm delivery, however, shallow excision biopsies can lead to incomplete treatment and persistence/recurrence of high grade (HG) CIN requiring repeat treatment.

Studies looking into distribution of CIN within TZ and extension into cervical crypts suggest > 7 mm depth of cervical excision for ecto cervical lesions (NHSCSP 20). However when colposcopic assessment is not satisfactory (e.g. T3 TZ) - no consensus on optimum depth that ensures complete first treatment; deeper excisions are often required.

Methods

All excisional biopsies examined - performed in 2007-2009 (N0 365) (group 1) and 2012-2014 (N0 353) (group 2)

Results

Mean age of women in Grp 1 - 34 years (22-66 years old) and in Grp 2 - 36 years old (23-66 years old).

94% of all referrals were for abnormal cervical cytology.

98% excision biopsies were removed in one specimen. Histology confirmed CIN2/3 in 74% Grp 1 and 71% Grp 2, while CIN1 was 20% and 23% respectively.

The length of excisional biopsy in Grp 1 - recommended depth in 97% in both groups.

Clear margins - 94% of cases in Grp 1 and 84% in Grp 2.

6 months F/U only LG cytology was found, 10% group 1 and 18% group 2

Conclusion

The length of excisional treatments in our unit has become shallower. While overall incidence of post-treatment HG cytology is negligible in the two groups, the incidence of positive margins and LG cytology at follow-up has increased in recent years (2012-2014), this is likely to be due to more shallow excisions performed.

P-40

LLETZ UNDER GENERAL ANAESTHESIA UNIVERSITY HOSPITAL LEWISHAM 1/1/2013 – 30/10/2013

Eve Allen[1] ,[2], Ola Folayan[1], Joshua Nwanazia[1], Dan Zamblera[1]

[1]Lewisham and Greenwich NHS Trust, London, UK
[2]Kings College Hospital, London, UK

Background
Between 1/1/2013 and 30/10/2013 255 women were treated with large loop excision of the transformation zone (LLETZ) within the colposcopy department at University Hospital Lewisham. 58 patients were treated under GA. The NHSCP guidelines state that the proportion of women managed as outpatients should be ≥ 80%, ≥ 80% of cases should have the specimen removed as a single sample to tissue to a depth > 7 mm (95%). Follow up should start at six to eight months following treatment (>90%). The proportion of treated women with no dyskaryosis six months following treatment should exceed 90%.

We investigated the general anaesthetic cases to assess the compliance with NHSCP guidelines.

Method
This is a retrospective study using a search on the electronic database compuscope. Data was collected on reason for general anaesthetic, depth of loop, number of pieces in the specimen, histology assessment of follow up in 6-8 months and whether cytology was negative at follow up.

Results
255 LLETZ procedures were carried out at UHL, 23% under GA.

The mean diameter of the wide excision as indication 27mm versus other indications- 22mm.

Average depth of LLETZ excision sample- 51% <7mm.

Number of Excision samples- 54% single sample (range 1-6 pieces) 71% negative cytology single sample versus 83% multiple samples.

Excisional plan status versus negative cytology at follow up: endocervical clear-79%, indeterminate-

91% and involved 62%. ectocervical clear-78%, involved-75% and indeterminate 78%.

90% patients had a follow up smear with 6-8 months.

78% negative cytology at follow up.

Conclusions
Although the numbers are small this would seem to suggest indeterminate excision (likely due to multiple pieces being taken) could lead to better cure rates, Depths of excision were not achieved but we had good follow up rate and 78% of patients had negative cytology at follow up.

P-41

UNNECESSARY PROCEDURES ON WOMEN WHO ARE NORMAL AT COLPOSCOPY

Simon Wrathall[1], *Sarah Flower*[1], *Jullien Brady*[2]

[1]*East of England QARC, Public Health England, Cambridge, UK*
[2]*Bedford Hospital, Bedford, UK*

Background
Women who have a normal cervix on colposcopy following a low grade cytology/HPV+ referral may be safely discharged back to the community. National evidence shows that for this cohort, only 7.8% will have CIN2 or CIN3 on loop excision.

Methods
In the East of England, Trusts upload colposcopy and cytology data to a regional database. Bespoke reports can be run from this for audit purposes. A query was used to identify women with a low grade cytology referral to colposcopy between April 2013 and March 2014, who had a colposcopic opinion of normal at the first appointment.

Results
Of 1,915 women identified, 80% had no procedure at the first appointment. Of the remaining 20%, 113 (5.9%) had a single punch biopsy, 241 (12.6%) a multiple punch and 24 (1.3%) an Excision.

Of 380 women who had a procedure at the first appointment, just 30 had a histology outcome of CIN2 or worse (25 CIN2/ 3 CIN3/ 2 AdenoCa) = 7.9%. These thirty women all went on to have a further procedure, typically LLETZ, at subsequent appointments.

Across the 18 colposcopy units in the East of England, a minority of units were responsible for most of the biopsies. For example, one Trust biopsied 91% of such cases whereas others biopsied 1% or less. At some trusts with lower rates, individual colposcopists were responsible for the majority of the biopsies.

Conclusions
The data from the East of England reflects national findings.

Some colposcopists appear to be seeking reassurance even when there is no sign of disease. Staff needs to be reminded that the role of colposcopy is to detect cervical cancer, and women with normal colposcopic appearance should not undergo unnecessary procedures. The screening programme is designed to pick up these women in the future if their condition worsens.

P-42

WOMEN SEEN IN COLPOSCOPY FOLLOWING A BORDERLINE ENDOCERVICAL REFERRAL

Simon Wrathall[1], *Sarah Flower*[1], *Jullien Brady*[2]

[1]*East of England QARC, Public Health England, Cambridge, UK*
[2]*Bedford Hospital, Bedford, UK*

Background
Borderline change in endocervical cells has recently been incorporated into NHSCSP management guidelines. As with borderline changes in squamous cells, the diagnosis is used when dyskaryosis cannot be excluded. Borderline endocervical tends to be a rare diagnosis.

Methods
In the East of England, Trusts upload colposcopy and cytology data to a regional database. Bespoke reports can be run from this for audit purposes. A query was used to identify women with a referral to colposcopy following a diagnosis of borderline endocervical between April 2013 and March 2014.

Results
Just 96 borderline endocervical referrals to colposcopy were found compared to 3,979 referred with a borderline squamous result.

However, whereas just 15% of women referred with borderline squamous had a histology outcome of CIN2 or worse, for borderline endocervical the percentage was 35% (34 of 96). These include two stage 1A cancers (2.1% of 96) and nine Adenocarcinomas (9.4% of 96) where the comparable proportions for borderline squamous were 0.1% and 0.2% respectively.

A third of women referred with borderline endocervical had no detected abnormality - either the histological outcome was no CIN/HPV (16 of 96 or 16.7%) or the women was discharged from colposcopy with no procedure (16.7%). The comparable proportions for borderline squamous were 13.2% and 27.8% respectively.

Conclusions
Due to the delayed revision to the KC65 Colposcopy return, most Trust colposcopy databases have not been updated to allow borderline endocervical to be recorded under referral cytology. It is important for the colposcopist to have access to this information from the lab report prior to any appointment as, compared to borderline squamous, endocervical referrals are twice as likely to have a high grade histology outcome, with adenocarcinoma a relatively common result.

As borderline endocervical is an unusual diagnosis, outcomes are best audited at a regional level.

P-43

CERVICAL CANCER STAGE 1A1 FOLLOW-UP NORTHERN IRELAND 2010-2012

Lisa Bell, Ian Harley, John Price, Hans Nagar, Stephen Dobbs

Northern Ireland Regional Cancer Centre, Belfast, UK

Objective

To retrospectively review the management and follow-up of Cervical Cancer Stage 1A1 cases in NI over a 2 year period allowing comparison of care between trusts and against NHSCSP guidance

Patients and Methods

Computer search of NI Cancer Registry identified cohort of 39 patients. Electronic Care Record utilised to obtain information to complete proforma parameters:

- Age at diagnosis
- Trust first seen
- Initial smear result/referral source
- Initial management
- Diagnosis/Discussed at Regional MDM
- Follow-up
- HPV

Results

38 completed proforma. Average age at diagnosis 33 years. 73.6% of cases from Belfast/South-Eastern Trust. GP provided 89.5% of primary referrals with severe dyskaryosis the most common abnormality. All patients seen at colposcopy - 73.7% undergoing LLETZ as initial management. Histopathology confirmed squamous carcinoma in 89.5% of cases vs adenocarcinoma in 10.5%. All results discussed at Regional MDM. 4 positive HPV (14 tests). Repeat local excision performed in 73% of cases (range 6-20 weeks), 16.2% returned for colposcopy/smear, 8.1% for MRI and 2.7% boarded for surgery. 4 patients returned to GP for follow-up smear and only 1 patient discharged.

In depth analysis reveals staggering variation in review and management; within and between trusts.
Multiple cases of interest.

Conclusion

Results highlight need for awareness of national guidance and formulation of regional guideline re: follow-up.
Need cost-effective use of resources especially colposcopy service with appropriate utilization of GP/smear clinics.
Potential research project - HPV testing on Cervical Stage 1A1 at first follow-up.

P-44

SUCCESS RATE OF LARGE LOOP EXCISION OF TRANSFORMATION ZONE [LLETZ]

Jayalakshmi Sireesha Dhannapuneni[1], *Sheila Pearson*[2]

[1]*St Helens and Knowsley Teaching Hospitals NHS Trust, Whiston Hospital, Prescot, Merseyside, UK*
[2]*North Cumbria University Hospitals NHS Trust, Cumberland Infirmary, Carlisle, Cumbria, UK*

Problem statement

The NHSCSP publication No 20 states that:

- The proportion of treated women with no dyskaryosis six months following treatment should exceed 90%.
- The proportion of confirmed histological treatment failures should not exceed 5% within 12 months of treatment.

To assess the practice in our local unit we have conducted a retrospective Audit over a period of 4 months. The time period was Jan 2012 to April 2012.

A total of 28 women who attended Colposcopy clinic at Cumberland infirmary, Carlisle, and had treatment for High grade dyskaryosis in the form of LLETZ were identified. Microsoft access database designed to collect and analyse results.

For the purpose of this audit we have defined the successful treatment as those women who had a post treatment smear at 6 months, reported as double negative which is normal cytology and no HRHPV detected.

In addition, the other parameters we looked into were:

- the percentage of women who had the treatment as an outpatient procedure under local Anaesthesia. Standard > 80%.
- The percentage of specimens retrieved as single piece. Standard > 80%
- Place where the follow up smear was taken.
- Completeness of treatment on Histology.

Results

24/28 women attended for their 6 months follow up smear. 4/28 women either did not attend or lost for follow up.

22/24 women who attended for follow up smear had both negative cytology and negative for high risk HPV Virus. This amounts to 91.66%. One woman had negative cytology but positive for High risk HPV. One woman had borderline nuclear changes in squamous cells on cytology but negative for HRHPV.

Conclusion

The success rate based on cytology alone was 95.83%. [23/24]

The success rate based on both cytology and HPV test of cure was 91.6%. [22/24]

This confirms that large loop excision of transformation zone is a highly successful method of treatment for high grade dyskaryosis.

P-45

MANAGEMENT OF PATIENTS WITH LOW GRADE SMEAR ABNORMALITIES

Mona Zanaty, Charles Nagy

East Lancashire Teaching Hospital, Burnley, UK

The implementation of HPV triage for low grade dyskaryosis has better selection of patients needing referral for colposcopy. The lack of consensus on management of such patient once seen in colposcopy clinics still pose a challenge. This audit is designed to help setting our local guidelines for management of patient referred with a low grade smear abnormalities and HR-HPV at ELTH.

47 patients referred with borderline or mild dyskaryosis and HRHPV has been followed up for 2 years.

23% has been discharged after first visit, 4% had a biopsy at First visit and73% were managed conservatively at variable intervals for two years.

16% of the patient not discharged at first visit had a confirmed high grade CIN. Consequently 48% of them were discharged in less than a year, a further 24 % were discharged between twelve and twenty four months with 8 % discharged after two years and 8 % non–attendance.

Recommendation to consider a biopsy at first visit which may help identify high grade CIN earlier, shorten patient follow up period and help discharge more patient to routine screening and a re-audit of the guideline when fully developed.

P-46

THE MANAGEMENT OF LOW GRADE CERVICAL CYTOLOGY – HPV TESTING IMPACT

Mona Zanaty, Charles Nagy

East Lancashire Hospitals NHS Trust, Burnley, UK

The implementation of HPV triage for low grade dyskaryosis has better selection of patients needing referral for colposcopy. The lack of consensus on management of such patient once seen in colposcopy clinics still pose a challenge. This audit is designed to help setting our local guidelines in ELTH.

47 patienst referred with borderline or mild dyskaryosis and HRHPV has been followed up for 2 years 23% has been discharged after first visit, 4% had a biopsy at First visit and73% were managed conservatively at variable intervals for two years.

16% of the patient had a confirmed high grade CIN. Patients not discharged at first visit, 48% of them were discharged in less than a year, a further 24 % were discharged between twelve and twenty four months with 8 % discharged after two years and 8 % non–attendance.

Recommendation to consider a biopsy at first visit which may help idenfy high grade CIN earlier, shorten patient follow up period and help discharge more patient to routine screening and a re-audit of the guideline.

P-47

AUDIT OF COMPLICATIONS FOLLOWING LARGE LOOP EXCISION OF THE TRANSFORMATION ZONE (LLETZ) IN NMH IN 2013

Somaia Elsayed, Azy Khalid, Moira Fitzpatrick

National Maternity Hospital, Dublin, Ireland

Cervical cancer is the third most common cancer and cause of death among gynecologic cancers (1)

The rate of cervical cancer has declined significantly following introduction of cervical screening. The treatment of high-grade CIN is excision or ablation of the transformation zone of the cervix, which can reduce the risk of invasive cancer of the cervix by 95% in the first eight years after therapy (2)

Large loop excision of the transformation zone (LLETZ) is the most common treatment for abnormal cervical cells. Complications include intraoperative or post-operative bleeding (0-8%) and infection (0-2%) (2) .The British society for colposcopy and cervical pathology (BSCCP) recommend that primary haemorrhage requiring haemostatic technique in addition to treatment should be less than 5% of cases. It also recommends that the rate of cases admitted due to complications of LLETZ treatment should be less than 2% (3)

The purpose of the audit was to assess the rate and type of complications following LLETZ treatment in 2013, and to compare our figures with the BSCCP standards.

The hospital's gynaecology walk-in service admission book and the electronic colposcopy system were used to get a list of all patients who presented to the hospital following LLETZ treatment.

In 2013 there were 1059 LLETZ performed. 43 patients (4%) presented with complications [37% bleeding (overall rate of 1.5%), 37% offensive discharge, 16% pain]. The deferential diagnosis in 53% of presentations was infection. The overall rate of admission was 1.03%.

In conclusion, the hospital rates of complications comply with the BSCCP standards.

1.Siegel R, Ma J, Zou Z, Jemal A. Cancer statistics, 2014. CA Cancer J Clin 2014; 64:9.

2.Large loop excision of the transformation zone (LLETZ) , UpToDate, http://www.uptodate.com/contents/cervical-intraepithelial-neoplasia-treatment-and-follow-up?source=search_result&search=cervical+intraepithelial+neoplasia&selectedTitle=1~88

3.The british G. Flannelly, "Colposcopy and programme management", NHSCSP publication 20, https://www.bsccp.org.uk/colposcopy-resources/colposcopy-and-programme-management-1/

P-48

COLPOSCOPY REFERRALS IN PATIENTS UNDER 25, A TWO YEAR RETROSPECTIVE AUDIT IN A DGH

Teddy Golob, Inaolaji Ogunlola, Ritu Rana

Darent Valley Hospital, Dartford, UK

Introduction
Cervical screening beings at 25 in England and Wales. This age was raised from 20 to 25 in 2003. The rate of cervical cancer under 25 is low at 2.6 cases per 100,000 people. Whilst HPV related cervical changes are very common in the under 25 age group it is thought most of these will spontaneously revert.

Method
Using computer records and hospital notes, a retrospective analysis was performed of all referrals to colposcopy clinic in patients under 25 years from January 2012 to April 2014. Data was collected looking at: the reason for referral, whether STI screens were taken prior to colposcopy, source of the referral, use of oral contraceptives, cytology results, colposcopy findings, histology results and whether any treatment was carried out.

Results
49 cases were identified from a total of 1679 colposcopy referrals in the same period, 3% of all referrals. The average age of referral was 22. 67% of referrals were direct from the GP, 29% were referred following consultations in gynaecology clinic and the remaining 4% were referred from GUM clinics. The most common reasons for referral were PCB (49%) and abnormal smears (33%). The majority (57%) of patients had not had an STI screen performed. Most patients had normal histology (39%), 24% had CIN 2 or 3 and there was one case of cervical cancer. 14 patients had treatment with LLETZ, 10 with cold coagulation, 1 by needle diathermy and the rest were not treated.

Discussion
Referrals for under 25 are a small proportion of total referrals. Many patients are not having STI screen done in GPs prior to referral for PCB. We do not know how many patients with high grade disease would have reverted if left untreated and the risks of possible over treatment must be considered.

P-49

CERVICAL SCREENING REVIEW DISCLOSURE AUDIT

Mamatha Banavathi, Arathi Lakhiani, Maggy El-Khanaghry

Burton Hospital Foundation Trust, Staffordshire, UK

The Trust has a policy that all patients with a newly diagnosed cervical carcinoma should be offered review of their previous cervical screening tests. A consent has to be obtained from all such patients before the review is undertaken. Once the review is completed all patients should be informed of the outcome of the review. These standards should be met in all cases of newly diagnosed cervical carcinoma.

An audit was undertaken by reviewing the case notes and electronic records of patients who were newly diagnosed with cervical carcinoma during May 2012 to June 2014 against the above standards.

Twenty-four patients aged between 21 to 90 years were newly diagnosed with cervical carcinoma during this period. The consent form to review previous cervical screening tests were sent to 21 (85.7%) patients. Only 9 (43%) patients with newly diagnosed cervical carcinoma received the results of the review of previous cervical screening tests.

P-50

NEUROENDOCRINE CARCINOMA OF THE UTERINE CERVIX: A CASE REPORT

Mamatha Banavathi, Lina Antoun, Maggy El-Khanagry

Burton Hospital Foundation Trust, Staffordshire, UK

Small cell neuroendocrine cervical carcinoma (SCNCC) is a rare tumor that comprises 1-3% of cervical tumors.

A 28-year-old para one caucasian lady was admitted to hospital as an emergency because of PV bleeding, lower back pain, and bilateral shoulder pain. A year earlier she was diagnosed with widespread dissiminated metastatic adenocarcinoma of unknown primary which was confirmed on CT scan (head/abdomen/pelvis), and liver biopsy. Patient received palliative radiotherapy but died three weeks after diagnosis of SCNCC.

Patients with early-stage neuroendocrine cervical carcinoma (SCNCC) have a high mortality rate despite aggressive therapy. Recognition of this rare and aggressive tumour is important for planning effective treatment but the optimal mode of therapy remains controversial.

P-51

AN AUDIT OF HIGH GRADE DYSKARYOSIS REFERRAL TO TREATMENT (RTT) WAITING TIME AT A DISTRICT GENERAL HOSPITAL

Lily Walker, Mohamed Ahmed, Fateh Ghazal

Walsall Manor Hospital, Walsall, West Midlands, UK

Introduction and Aims

Following a case of delayed diagnosis of cervical cancer, an audit was completed to investigate the referral to treatment pathway for moderate or severe dyskaryosis. Current standards indicate referral with moderate or worse dyskaryosis should be completed on a 62 day cancer pathway. The aim was to assess whether these guidelines are being followed at Walsall Manor Hospital.

Methods

The data was collected retrospectively on all referrals with moderate or severe dyskaryosis over a 12 month period. The cohort was divided into 2 groups based on colposcopic impression; Group (A) with colposcopic impression of high grade lesion and group (B) without colposcopic impression ofhigh grade lesion

Results

177 patients were referred as moderate or severe dyskaryosis,data was collected on 169 patients. There were 145 patients (86%) in group A and 24 patients (14%) in group B.Colposcopic opinion of group B was: 6 low grade CIN, 9 unsatisfactory, 4 normal, 3 not recorded, 1 ectropion and 1 other. Punch biopsy was performed in 5 patients. RTT waiting time median for group A was 27 days compared to 65 days for group B ($p < 0.0001$). Treatment histology showing cancer or CGIN was 14 in group A (9%) and 4 in group B (17%) ($p = 0.3$).

Conclusion

From these results patients without colposcopic impression of high grade lesions had longer waiting time to treatment due to MDT referrals and adding to waiting list. Although not statically significant, the risk of cancer or CGIN was higher in this group of patients. Punch biopsy is not recommended in high grade dyskaryosis unless obvious cervical cancer is present.

P-52

A CASE REPORT OF CYTOMEGALOVIRUS (CMV) ON CERVICAL BIOPSY

John Barker, Murrray Luckas, Deborah Doyle

Leighton Hospital, Cheshire, UK

Introduction

38 year old Para 0 referred with a smear for mild dyskarosis and high risk HPV, non- smoker, no history of PCB and Type 2 DM.

On examination SCJ visualised, Type 1 Transformation zone and mild aceto-whitening was noticed the upper limit seen and the initial impression was a low grade lesion, a cervical biopsy was done.

Histology showed cervical transformation zone mucosa, HPV viral cytopathic effect, CIN 1 and chronic inflammation with no evidence of CGIN and the endo-cervical glandular cells markedly enlarged and containing large round basophilic nuclear and cytoplasmic inclusions staining positive for CMV.

Further management included referral to GUM clinic, other investigations normal, conclusion that diabetes the only factor for her immuno-compromised state.

Discussion

Histologically diagnosed cytomegalovirus (CMV) infection of the cervix is rare and the published literature is limited to a few reports. However Using sensitive methods, such as in situ hybridisation and polymerase chain reaction, CMV can be identified in the cervix in a considerable proportion of women. Rates of CMV infection of up to 29% have been found.

Morphological features such as a dense inflammatory cell infiltrate with lymphoid follicles, and especially fibrin thrombi within small vessels, should alert the pathologist to look closely for the pathognomonic CMV inclusion, Abulafia et al described CMV inclusion bodies.

Sites other than the cervix have also been reported rarely as in a recurrent ulcerative vaginal lesion.

Presence of CMV may signify immunodeficiency, Immunological assessment of a patient with this finding is advisable, possible causes include steroid medication HIV, diabetes, most patients can be immune - competent and require no treatment.

P-53

WHO IS AT RISK OF TEST OF CURE SMEAR; CYTOLOGY NEGATIVE, HRH PV POSITIVE?

Niamh Doherty, Kevin Devlin, Daniel Douglas

Altnagelvin Hospital, WHSCT, Derry, Northern Ireland, UK

Background

Virtually all cervical cancers are caused by HPV with HPV16 responsible for approximately 70% of cases and HPV18 the next most prevalent.

HPV Test of Cure (TOC) was introduced to the Western Trust on 28/1/2013. 2 patients groups were identified for benefit. The first included those patients who had had treatment for CIN and re-attended for first follow-up smear at 6 months.

Aim

The aim of this study was to identify those patients found to have TOC smear, Cytology Negative, HRHPV positive following treatment with LLETZ.

Method

Time period: 20 months following introduction of TOC. Patient group: All patients reporting TOC- Cytology Negative, HRHPV positive. These patients were identified from lab records, n=146. A random sample of 50 patients was reviewed using Excelicare database

Results

Demographics: 70% of patients were aged 25-29, 62% non-smokers, 36% Nulliparous

Referring cytology: Borderline with HRHPV 30%, Mild with HRHPV 26%, Moderate 28%, Severe 16%

Colposcopy
HPV 2%, Unsatisfactory 14%, LG 30%, HG 54%

Histopathology: 52% of patients had CIN 3 confirmed on LLETZ specimen

32% of lletz specimens had margin involvement

HRHPV Distribution in TOC cytology negative smears: HPV 16, 9 (18%); HPV 18, 3 (6%); HPV Other, 33 (66%); HPV Other +16, 5 (10%)

Conclusion

Most patients were aged 25-29,nulliparous, nonsmokers. Majority of patients had confirmed CIN3 on lletx specimen however 32% of patients had margin involvement.

Persistent HRHPV distribution did not reflect background rates of HPV subtypes with 76% of cases reporting HRHPV Other

P-54

CERVICAL GLANDULAR NEOPLASIA: FROM COLPOSCOPY TO HISTOPATHOLOGY, A SERVICE EVALUATION

Anna Green, Hilda Dunsmore, Emma Mclean, Gulnaz Majeed, Ali Kubba, Giuseppe Culora

Guys and St Thomas' Hospital, London, UK

Background
Cervical glandular intra-epithelial neoplasia (CGIN) is difficult to diagnose on cytology and colposcopy. CGIN represents a small proportion of the positive diagnoses in patients referred for colposcopy, but has important management implications. The aim of this evaluation of 56 cases of CGIN over a 5 year period was to improve our understanding of the demographics and colposcopic findings of such patients seen in our unit (GSTT).

Methods
A retrospective review (01/01/2009 - 31/12/2013) of patients with histologically confirmed CGIN or cervical adenocarcinoma. Data was collected with respect to patient demographics, referral cytology, clinical and colposcopic findings and histology. Continuous data was summarized as median and interquartile range (IQR). Categorical and count data was summarized as frequency (n) and percentage (%).

Results
The number of cases diagnosed per year were: 2009 n=13, 2010 n=9, 2011 n=10, 2012 n=11, 2013 n=13. The median age at diagnosis was 29 years (IQR 27, 31.25). 42 (75%) patients were nulliparous; 30 (54%) patients were taking the combined oral contraceptive (COC). 51 (91%) patients were referred with abnormal cytology (glandular neoplasia n= 18 (32%); low grade squamous cervical intra-epithelial neoplasia (CIN) n= 3 (5%); high grade CIN n= 30 (54%)). 11 (20%) patients were symptomatic, 5 (9%) without abnormal cytology. A wide transformation zone was described in 28 (50%) cases. The possibility of CGIN was raised at colposcopy in 3 (5%) cases. On histology, 11 (20%) cases had glandular neoplasia alone and 45 (80%) cases had glandular neoplasia and CIN.

Discussion
The number of cases of CGIN has remained stable over this period. The data did not identify any consistent clinical feature predicting CGIN, but 42 patients were nulliparous, 30 were using the COC and 5 were referred with clinical symptoms. CIN is typically asymptomatic, therefore this cohort will be compared to patients with CIN alone to determine if any features raise the possibility of CGIN clinically.

P-55

REFERRALS TO COLPOSCOPY WITH POSTCOITAL BLEEDING – A REVIEW OF OUTCOMES

Iman Almabhooh, Amudha Thangavelu, Robert Hammond

Nottingham University Hospitals NHS Trust, Nottingham, UK

Postcoital bleeding (PCB) is thought to be an important sign of cervical neoplasia. As such, women with persistent symptoms namely postcoital or intermenstrual bleeding are usually seen urgently within two weeks. A high incidence of cervical neoplasia has been reported in case series of women presenting with postcoital bleeding. In order to determine the incidence of cervical pathology in our cohort of women presenting with PCB, a retrospective review was undertaken at Nottingham University Hospitals.

All women referred to the colposcopy clinic at Nottingham City Hospital with PCB between 2009 and 2013 were included in the review. Information was collected from hospital notes and NotIS regarding symptoms, colposcopy findings, and cytology and histology results.

90 women were seen in the colposcopy clinic during the study period. Data collection is currently in progress and the results will be presented at the meeting.

P-56

A COMPARISON OF THE OUTCOME OF BORDERLINE NUCLEAR ABNORMALITY (BNA) AND MILD GRADE ABNORMALITIES WITH HPV ON INITIAL REFERRAL SMEAR WITH COLPOSCOPY AND HISTOPATHOLOGY RESULTS

Tina Newell[1], *Kathy McDade*[2], *Clodagh McElhenny*[1]

[1]*Ulster Hospital, Dundonald, UK*
[2]*Lagan Valley Hospital, Lisburn, UK*

Aim
To compare the Borderline Nuclear Abnormality (BNA) and mild dyskaryosis smear group and high risk HPV with high-grade histopathology requiring treatment.

Background
Approximately 69% of patients attending for cervical screening have BNA or mild dyskaryosis but require colposcopy to ensure high-grade lesions are ruled out. (TOMBOLA trial, 2006). 50 patients were identified attending colposcopy clinic as new referrals from March-June 2013. Electronic care records for each patient were used to gather information.

Results
50% patients had borderline smears and 50% mild dyskaryosis. Age ranged from 25– 55 years (mean of 34 and mode of 32). 72% patients with a BNA or mild dyskaryosis result were seen within 8 weeks of initial referral. 13 of the 50 patients had a previous abnormality of their cervix, 5 of which had a previous Lletz procedure.

At colposcopy, 21% of patients with a low-grade smear with HPV had high-grade findings (CIN2 & 3).

Histology revealed 26% of patients had high-grade abnormalities, 9% had CIN 3. 3 patients did not have histopathology sent. None of the patients had destructive treatment prior to biopsy result.

The management of patients included 68% having no treatment, 12% having cold coagulation and 20% had Lletz. 100% of the women needing treatment had prior colposcopy.

92% of patients were followed up with smear +/- colposcopy. 4% had no follow up planned and 4% were DNAs.

Conclusion
Following the introduction of HPV testing there has been a significant increase in the number of referrals for BNA and mild dyskaryosis on smears. A significant number of patients with BNA and mild dyskaryosis with HPV (26%) had high-grade histology. 56% patients with high-grade lesions had HPV 16. High index of suspicion of high-grade disease is required, especially if HPV 16, and timely assessment to avoid delay in treatment.

P-57

AN AUDIT ON EARLY RECALL WOMEN WITH PREVIOUS LOW GRADE CERVICAL CYTOLOGY NOW CYTOLOGY NEGATIVE BUT POSITIVE FOR HIGH-RISK HPV

Fredric Willmott, Farida Bano, Jane Rains, Tania Adib, Stephen Burgess, Charlotte Harper

Barking, Havering and Redbridge University Hospitals NHS Trust, Essex, UK

Introduction

NHS Cervical Screening Programme aims to reduce the incidence and mortality of cervical cancer by screening, with cervical cytology. HPV Triage and Test of Cure were added to the screening programme in 2012. HPV triage uses reflex testing for HR-HPV in Borderline or Mild cytology tests enabling prompt referral to Colposcopy if detected and return to 'Normal Recall' if negative.

Cervical abnormalities requiring treatment are present in approximately 15-20% of the women with low grade cytology who are HR-HPV positive.

Overall the positive predictive value of HPV infection in cytologically negative women for detecting residual CIN3 or worse is 0.4%, for detection of CIN2 or worse it is 2.9%.

Methods

Between July and October 2013, 184 cervical smears reported as Negative Cytology but High Risk HPV Detected was seen in Colposcopy. These women had previous low grade cytology report but had not yet returned to 'normal recall' status and are a different category to Test of Cure Negative Cytology HRHPV positive cases.

All women n=166, who attended a colposcopy appointment and had a full colposcopic assessment following a Negative smear with HRHPV detected. Some women were already under Colposcopy surveillance. 18 women were excluded from the study.

Results

69 women out of 166 were biopsied, 8 were reported as CIN 2/CIN3and 8 had high grade disease = 4.8%

These 8 cases of High Grade CIN from 166 cases were reviewed. 7 cases were confirmed as negative and one case showed borderline nuclear changes.

Conclusion

HPV testing in this audit resulted in 8 cases of high grade CIN being diagnosed that might not have been detected until the next recall smear. HPV testing alone may result in false positives but appears to increase sensitivity over conventional screening. Therefore HPV testing and cytology screening compliment each other.

P-58

OUTCOME OF POSTCOITAL BLEEDING IN WOMEN REFERRED TO THE COLPOSCOPY CLINIC

Olumide Ofinran, Sivanandana Korrapati, Jay Raut, Onnig Tamizian

Royal Derby Hospital, Derby, UK

We carried out a retrospective audit on the referral of women with postcoital bleeding (PCB) to the colposcopy clinic with the aim of determining whether these cases were referred according to departmental guidelines and to determine the various pathologies detected at colposcopy. We reviewed 231 cases of PCB referred to the colposcopy clinic between January 2014 and August 2014. Data was obtained from the departmental database and analysed using Microsoft Excel 2011.

The median age was 34 years and the range was 17 – 53. Referral interval varied between 6 days and 100 days and duration of symptoms ranged from 2 months to 24 months with a median of 5 months. Forty-eight percent did not have any associated symptoms apart from PCB while 52% had symptoms that included irregular uterine bleeding, dyspareunia, and vaginal discharge, with majority of the symptoms being irregular uterine bleeding. Thirty-five (15%) women referred did not have cervical smears taken before referral. Pathology was present in 56 (17.3 %) patients with negative smears; 21 high grade CIN and 35 low-grade CIN, and thirty-five (15%) women did not have triple swabs before referral. The cause of PCB was cervical ectopy in 40 patients and none of the patients had cervical cancer.

Though cervical cancer was not found in any of these cases and correlates with studies reporting a low incidence of cervical cancer with PCB, there was a high incidence of CIN and 49 (87.5%) of these had up-to-date negative smears. It is therefore important for women with post coital bleeding to be referred for colposcopic assessment. From this audit, there is a need for improvement in investigations before referral to the colposcopy clinic, there is also a need for these patients to be seen within the appropriate waiting time target.

P-59

SEVERE SQUAMOUS DYSPLASIA ARISING ON A DUPLICATED CERVIX

George Michal[1], Euripidis Bilirakis[2], Georfe Androutsopoulos[1], Ifjgeneia Papamitriou[1], Georgantis Apostolos[1], George Adonakis[1], HeCPa Study Group[3]

[1]Patras Univeristy Hospital, Patras, Achaia, Greece
[2]"Elena Venizelou" Maternity Hospital, Athens, Greece
[3]HeCPa Study Group, Athens, Greece

Introduction
Mullerian Duct Anomalies (ASRM) represents a spectrum of uterine shape malformations with possible clinical implications. It is a condition with varying prevalence, based on statistics. Fertility potential depends, based predominantly on the type of anomaly. Concomitant aberrations of the vagina might coexist.

Case Report
We report here the case of a 36year old P2G2 who was referred to the Colposcopy Clinic with a persistently mildly dyskaryotic smear. Some 8 months ago she had underwent cryotherapy in a private practice, again because of a mildly dyskaryotic smear. Upon referral, colposcopic features were indicative of HGSIL, while there was also an impression of duplication of the cervical os. The second os was hidden behind a cervical 'collar' that encircled the apex of the vagina. The whole exam was quite painstaking. As mentioned by the patient, suspected uterine duplication was the reason for the primary CS. Aiming at a definite treatment; the patient underwent a pelvic MRI that confirmed the diagnosis of the cervical duplication. She soon underwent a combined treatment (excisional and ablative); histology confirmed high grade disease. Her first post-op smear is due.

Discussion
Mullerian Duct Anomalies are not infrequent, and present with a variety of gynecologic symptoms, throughout women's reproductive life span. Obstetrical clinical observations should be communicated to the patient in a clear manner since they might predispose to future complications. Current options offered by the numerous available imaging modalities can define the exact Mullerian subtype. Besides clinical vigilance, treatment of those patients should be exclusively performed by trained colposcopists who have access to all modes of the therapeutic armamentarium.

P-60

CONSIDERATIONS ABOUT THE USE OF HR-HPV TESTING, AS A PRIMARY SCREENING TOOL FOR CERVICAL CANCER, IN WOMEN WITH CTZ

Geogre Michail, George Androutsopoulos, Ifigeneia Papamitriou, Georgantis Apostolos, George Adonakis, George Decavalas

Patras University Hospital, Patras, Achaia, Greece

Congenital transformation zone (CTZ) is a common variant of squamous metaplasia located peripherally to the acquired transformation zone. Microscopically, it appears as partially mature squamous epithelium with an irregular, dentate junction with the epithelial stroma. It originates from the squamous metaplasia of the embryonic paramesonepric ducts.

CTZ is a variant of squamous metaplasia that exhibits incomplete maturation and affects approximately 4% of women. Despite being a benign condition, management is not always straightforward. The colposcopic features of the CTZ (acetowhiteness, punctuation, mosaic vascular changes, leukoplakia) may be disconcerting even to the experienced colposcopist and mislead to unnecessary biopsies in the pursuit of a definite diagnosis.

The frequency of LR- & HR- HPV types is significantly increased in CTZ than that observed in the normal cervix. Nevertheless the infection is usually subclinical (SPI) and the lesions caused by the presence of HPV are insignificant, barely requiring treatment. Perhaps the higher prevalence of the HPV in cases of CTZ can be attributed to other plausible biological mechanisms which affect the vulnerability of the metaplastic epithelium and favor the acquisition of HPV.

In the context of primary population cervical screening implementing HPV-DNA testing, the higher prevalence of HPV infection in women with CTZ might contribute to overrepresentation of these cases among positive specimens. In turn, this could lead to several cytology and colposcopy rounds, combined with inevitable invasive procedures, before the individual is returned back to standard screening. Thus, a different screening policy might be warranted for patients with confirmed CTZ following their identification. Perhaps the use of HPV related biomarkers and the individualized management might suit more appropriately this group of women.

P-61

HPV IMMUNISATION WITH BIVALENT VACCINE IS ASSOCIATED WITH SIGNIFICANT REDUCTIONS IN BOTH CYTOLOGICAL ABNORMALITIES AND IN TEST PERFORMANCE

Seonaidh Cotton[4], Timothy Palmer[1], Mag MacFadden[2], Chris Robertson[2,3], Kim Kavanagh[3], Maggie Cruickshank[4]

[1]University of Edinburgh, Edinburgh, UK
[2]Health Protection, Scotland, Glasgow, UK
[3]University of Strathclyde, Glasgow, UK
[4]University of Aberdeen, Aberdeen, UK

Background
The HPV immunisation campaign in Scotland has achieved uptake rates of between 40 and 70% in the catch-up cohorts. These women have been attending for cervical screening since 2010. Women routinely immunised in the school based programme have an uptake of 90% for all three doses and will enter the Scottish cervical screening programme in 2015. HPV immunisation status is included within the complete screening record held within the Scottish Cytology Call/Recall System (SCCRS). It is therefore possible to correlate directly immunisation status with cytology results and the performance of cytology as a test.

Methods
The screening records of a total of 62423 women born between 1990 and 1993 inclusive who had cytology tests taken during their first year in the screening programme have been examined and the cytology results analysed. The number of doses of vaccine administered have been correlated with cytology results and performance of cytology.

Results
There is a significant reduction of all cytological abnormalities in fully immunised women; partial immunisation in this cohort has no effect on high grade disease. The performance of cytology as a screening test is also significantly reduced, as assessed by the predictive values of various grades of cytological abnormality for high grade CIN.

Conclusion
These findings have implications for the choice of test for the screening programme, as the data have come from women who may have been exposed to HPV by the time of vaccination, the effects in routinely-immunised women are likely to be greater.

P-62

HPV IMMUNISATION WITH BIVALENT VACCINE ENCOURAGES UPTAKE OF CERVICAL SCREENING

Seonaidh Cotton[4], Timothy Palmer[1], MacFadden[2], Chris Robertson[2,3], Kim Kavanagh[3], Maggie Cruickshank[4]

[1]University of Edinburgh, Edinburgh, UK
[2]Health Protection, Scotland, Glasgow, UK
[3]University of Strathclyde, Glasgow, UK
[4]University of Aberdeen, Aberdeen, UK

Background
The HPV immunisation campaign in Scotland has achieved uptake rates of between 40 and 70% in the catch-up cohort. These women have been attending for screening since 2010. Routinely immunised women have an uptake of 90% for all three doses and will enter the Scottish screening programme in 2015. There has been concern that immunised women may consider themselves protected from cervical cancer and therefore not take part in screening. The linkage between immunisation and screening records within the Scottish Cytology Call/Recall System (SCCRS) permits examination of this question. Uptake of immunisation in Scotland is inversely correlated with deprivation.

Methods
There are approximately 208,000 women in Scotland born between 1988 and 1993 inclusive who are eligible for cervical screening. Their screening records have been examined and details of their attendance in their first year in the cervical screening programme extracted. Women with valid exclusions from screening (for example, pregnancy) were excluded. Attendance for screening has been correlated with immunisation status, deprivation (SIMD, 2012 version) and rurality (travel time from a population centre of >=10,000). Linkage to deprivation and rurality indices was made using the postcode of residence.

Results
Overall uptake of screening is greater in immunised than non-immunised women in the catch-up cohorts. In addition, the gradient of screening attendance by deprivation is abolished in immunised women with respect to non-immunised women.

Conclusions
These data appear to indicate considerable motivation in immunised women to attend for screening. This offers reassurance that immunisation does not make women complacent about their risk of cervical cancer but the results will need to be confirmed in routinely immunised women.

P-63

IMPACT OF HPV VACCINATION ON COLPOSCOPY PRACTICE IN SCOTLAND: AN ANALYSIS OF ROUTINE DATA

Jiafeng Pan[1], Chris Robertson[1], Kim Kavanagh[1], Seonaidh Cotton[2], Maggie Cruickshank[2]

[1]University of Strathclyde, Glasgow, UK
[2]University of Aberdeen, Aberdeen, UK

Background
The impact of HPV vaccination on clinical workload is unclear. In Scotland, there was a successful catch-up vaccination campaign in 2008/9 for girls aged 13-17; some of whom have now entered the Scottish screening programme which starts at age 20).

Methods
All colposcopy clinics in NHS Scotland routinely collect clinical data on the web-based Scottish National Colposcopy Clinical Information Audit System (NCCIAS) We obtained a data extract including records for all women born on or after 1 January 1985 and who attended colposcopy 2008-2014 to review changes over time in patterns of referrals, interventions and outcomes. This analysis is restricted to 7013 women attending colposcopy at age 20 or 21 (i.e. likely to be following their initial screen).

Results
There has been a slight downward trend in the proportion of women referred to colposcopy with an abnormal cytology test, with increasing proportions referred with suspicious symptoms or clinically suspicious cervix. Of those referred with an abnormal screening test, the proportion with a BNA result is increasing (2008/9 12%, 2013/14 20%), and the proportion with any grade of dyskaryosis decreasing. The absolute number and the proportion of women with CIN2 or more severe disease (CIN2+) has decreased. The positive predictive value of a colposcopic impression suggestive of CIN2/3 or more severe disease for CIN2/3 on biopsy has decreased from 79% in 2008/9 to 67% in 2013/14).

Attendance rates for colposcopy are increasing over time, with smaller proportions cancelling appointments or failing to attend.

Discussion & conclusion
In this ecological analysis, we have shown changes over time in colposcopy referrals and disease and a reduction in the positive predictive value of colposcopy.

In part, these changes are likely to be as a result of increasing proportions of vaccinated women attending for colposcopy and have implications for future service provision and planning.

P-64

A HIGHER PREVALENCE OF NON-HPV 16/18 SUBTYPES MAY LEAD TO A HIGHER INCIDENCE OF HIGH GRADE CERVICAL PRE-CANCER CHANGES

Dominic Blake, Purushothaman Natarajan, Sarika Munot, Supratik Chattopadhyay, Richard Hutson

St James' University Hospital, Leeds, West Yorkshire, UK

Introduction

Following the introduction of the HPV vaccination the incidence of cervical carcinoma is expected to fall. There are 20 high risk HPV subtypes that cause cancer. Currently, Gardasil, the quadravalent vaccination, covers two high risk subtypes. Genetic and regional variations in HPV subtypes are documented across the globe. In West Yorkshire there is a large amount of migration from Asia, Africa and Eastern Europe, therefore there is likely to be an increase in the amount of 'other' high risk subtypes present. We studied the prevalence of HPV subtypes in borderline and mild smears across West Yorkshire to assess whether the current HPV vaccination provides adequate cover. We reported the outcomes of colposcopic directed biopsies.

Methods

840 triage patients from Bradford, Airedale, Leeds triage were identified with borderline and mild dyskaryosis between April and November 2012 from the cytology database. Patients were selected if they were positive for high risk HPV. Data were analysed and percentages documented. We have included biopsy results taken from 400 patients.

Results

The population median age was 30 (23-64). Cytology demonstrated 9.5% mild dyskaryosis, 90% borderline and 0.5% were negative for cytological abnormality. Geographically, 65.5% of our population were from Leeds, 25.8% from Bradford and 8.2% from Airedale. Analysis of the subtypes showed 25% was HPV 16 positive, 9% HPV 18, 65.2% 'other' high risk HPV subtypes. The biopsies demonstrated that 25% showed HPV infection, 15% were high grade pre-invasive changes, 30% CIN 1, 21% demonstrated no change and 9% demonstrated inconclusive findings.

Conclusion

West Yorkshire has a high proportion of 'other' high risk subtypes, although there is some cross reactivity with other high risk subtypes with Gardasil, it would suggest that our population maybe at higher risk of developing cervical pre-invasive changes. The new nanovalent vaccination may provide more appropriate protection in our population.

P-65

LENGTH OF EXCISION AT TZ1 TYPE COLPOSCOPY PATIENTS; DOES IT MATTER?

Vasileios Stamelos[1] ,[2], *Richard Todd*[1], *Mallikarjun Kodampur*[1], *Charles Redman*[1]

[1]*University Hospital of North Midlands, Stoke on Trent,Staffordshire, UK*
[2]*Keele University, Keele, Staffordshire, UK*

The NHSCSP colposcopy quality standard that therapeutic excisions should be greater than 7mm is based on anatomical evidence. We sought to evaluate the association between length of excision and outcome based on Test of Cure (TOC) at 6 months, in women with a type I transformation zone.

A sample of 368 women undergoing loop diathermy excision for abnormal cytology were evaluated and divided into five subgroups according to the length of excision (≤5, 6-8, 8-10, 11-15 and 15+mm). The average length of excision was 10 ± 3mm (mean ± SD), and 87 % exceeded 7mm (national standard >95%). The average patient age was 31, and 24 % were nulliparous. On histology, CIN was present in 99%, and CIN2+ in 88%.

On univariate analysis there was no association between age, parity, excision margins with TOC result or length of excision. The overall incidence of a failed TOC (i.e. non-negative cytology and/or positive HPV test) was 24 ± 3% (mean ± SD) and there was no association with the length of excision.

These results challenge the current treatment quality standard which needs review.

P-67

CERVICAL CHECK – THE NATIONAL CERVICAL SCREENING PROGRAMME IN IRELAND – POPULATION COVERAGE AND THE IMPACT OF HYSTERECTOMY RATES

Grainne Flannelly[1], Therese Mooney[1], Sinead O Neill[1], Sara Mc Nally[1], Anne O Farrell[2], Howard Johnson[2], Patricia Fitzpatrick[1,3]

[1]CervicalCheck, National Screening Service, Dublin, Ireland
[2]Health Intelligence Unit, Health and Wellbeing Directorate, HSE, Dublin, Ireland
[3]UCD School of Public Health, Physiotherapy & Population Science, Dublin, Ireland

Background
In September 2008 CervicalCheck - the National Cervical Screening Programme commenced regular screening women aged 25-60. The programme uses 'call and re-call' as well as an online eligibility-check facility for both women and smeartakers. The initial target set by the programme for coverage is 80%. Coverage is based on the eligible population which should only include women whose cervix has not been surgically removed. In reality, the population is based on the national census which does not collect information on hysterectomy.

Aim
To examine national data on inpatient activity (HIPE) to calculate the percentage of age cohorts within the CervicalCheck population who have had a documented hysterectomy and to examine the possible effect on coverage for the CervicalCheck programme.

Methodology
HIPE is the principal source of national data on discharges from acute hospitals in Ireland. Data was collected on all hysterectomies (excluding subtotal hysterectomies) carried out in public hospitals from 1997 to 2013. The current age of these women was calculated based on the year of the procedure and the age of the woman at the time of the hysterectomy. Adjusted coverage was calculated based on the hysterectomy adjusted population.

Results
During the first five years of CervicalCheck screening, in excess of 1.6 million smear tests were performed in over 939,000 women. Over 91% of women were screened in primary care settings. By September 2014 overall coverage of 75.9% was achieved. The rate corrected for hysterectomy was 77.45%. Younger women were more likely to participate in screening with 80.6% of women aged 25-29 years screened compared to 61% of women aged 55-59 years (69.8% Adjusted).

Conclusions
CervicalCheck reached the coverage target for younger women. While adjusting for hysterectomy improved rates in older women, screening of this hard to reach group remains a challenge.

P-68

HPV TESTING FOR THE MANAGEMENT OF UNCERTAINTY AT COLPOSCOPY AS PART OF CERVICALCHECK, THE NATIONAL CERVICAL SCREENING PROGRAMME IN IRELAND – THE STORY OF THE FIRST SIX MONTHS

Grainne Flannelly[1], *Maeve Waldron*[1], *Therese Mooney*[1], *Sinead O Neill*[1], *Patricia Fitzpatrick*[1,2]

[1]*CervicalCheck, National Screening Service, Dublin, Ireland*
[2]*School of Public Health, Physiotherapy and Population Science, UCD, Dublin, Ireland*

Background
CervicalCheck, The National Cervical Screening Programme in the Republic of Ireland provides colposcopy for women with cervical abnormalities with over 16,500 new referrals attending annually. While women diagnosed with high grade CIN are offered treatment, women with CIN 1 or less are managed conservatively. Until March 2014 these women had repeat cytology at six month intervals with discharge only following two consecutive negative smears. This resulted in significantly increased numbers of women of indeterminate risk attending for follow up. New strategies including testing for subtypes of the human papillomavirus (HPV) allow a more accurate definition of the risk of high grade CIN. HPV testing for the management of uncertainty (MUCH) in March 2014 combined with cytology. Women with results categorised as low risk (HPV negative and less than LSIL) were eligible for discharge from colposcopy and a return to routine screening. This paper examines data from the cervical screening register to document the experience of the first six months of this policy.

Results
From March to October 2014, 9,012 women had a MUCH test performed at 15 CervicalCheck colposcopy services. No prior treatment was recorded in 7030 women while a treatment more than 24 months earlier was recorded for 1982. The test was categorised as low risk in 5,441 (60.4%) women meaning that these women were suitable for discharge to the community for routine screening. A repeat colposcopic assessment was recommended in 3,571 (39.6 %). The next step is to examine the clinical outcome for these women.

Conclusion
The performance of a combined cytology and HPV test for the resolution of uncertainty at colposcopy reduced the need for unnecessary repeat colposcopy visits by allowing more women to be discharged to routine screening. This allows more effective use of resources as well as reducing unnecessary anxiety for women.

P-69

HPV TESTING IN THE GLOUCESTERSHIRE CYTOLOGY SERVICE – EFFECTS ON LOCAL SCREENING PROGRAMMES AND FUTURE OPTIONS

Phil Bullock, Richard Butt, Steve Ferryman, Sarah O'Flaherty, Nichole Villeneuve

Gloucestershire Hospitals NHS Foundation Trust, Cheltenham, UK

The NHS Cervical Screening Programme introduced Triage and Test of Cure (TOC) for High Risk Human Papilloma Virus (HR HPV) in 2012. The Gloucestershire laboratory serves 3 screening programmes - Gloucestershire, Worcestershire and Herefordshire and implemented Qiagen's Hybrid Capture 2 (HC2) testing system to deliver NHSCSP requirements.

This poster summarises the effects this has had on these programmes over the last 3 years and in looking forwards compares HC2 with a possible alternative testing technology across the following areas:

- Triage
- Test of Cure
- High Grade cytology
- Histological outcome

The forward look includes modelling of the effects of implementation of an alternative technology whilst validating its use within the UKAS accreditation system.

P-71

HAS HPV TESTING REDUCED THE INCIDENCE OF NEGATIVE LLETZ?

Kristyn Manley[1] ,[2], *Andrew K Wills*[2], *Julia Hogg*[1], *Guy Morris*[1], *John Murdoch*[1]

[1]*University Hospitals Bristol NHS Foundation Trust, Bristol, UK*
[2]*University of Bristol, Bristol, UK*

Introduction
HPV testing was introduced in 2011 to improve the sensitivity of cervical screening. All women now referred to colposcopy are HPV positive and the incidence of negative LLETZ (no dysplasia within the histological specimen) should have reduced. The aims of this study are to determine the mean rate of negative LLETZ pre- and post-HPV testing and to assess variables which might predict this finding.

Methods
A retrospective single centre comparative cohort study. A power calculation identified that 401 participants for the pre- and post-HPV screening cohorts would be sufficient to detect a difference of 7% with 90% power at 0.05 significance. Participants were randomly selected from an online colposcopy database and electronic records were reviewed for colposcopic and clinical variables. The mean negative LLETZ rate was estimated and a logistic regression model used to control for confounding.

Results
74/401 (18.7%) samples from the pre-HPV testing cohort and 47/401 (11.7%) from the post-HPV cohort were negative for CIN and HPV (risk difference -7%, 95% CI -11.7 to 1.8%; RR 0.64, p=0.007). Results from the logistic regression model will be presented. In the post- HPV testing cohort, there was evidence for an association between referral with low grade dysplasia (0.002), unsatisfactory colposcopy (p=0.0001) and negative LLETZ histology.

Conclusions
Although the reduction in risk of negative LLETZ is 36%, the prevalence is still high following the introduction of HPV testing. There are no national guidelines for the management of unsatisfactory colposcopy; regional protocols recommend a diagnostic LLETZ after the second colposcopic assessment for low grade dysplasia and unsatisfactory colposcopy, as 5-15% of these patients will harbour HG CIN. These results highlight the importance of continuing to improve the specificity of CIN screening, possibly including the use of biomarkers that detect HPV transforming infections, to reduce screen false positives and unnecessary treatments.

P-72

CYTOLOGICAL QUALITY AND UNSATISFACTORY COLPOSCOPY

Kristyn Manley[1],[2], *Sarah Platt*[1], *Yvonne Higgins*[1], *Karen Shaw*[1], *Amit Patel*[1]

[1]*University Hospitals Bristol NHS Foundation Trust, Bristol, UK*
[2]*University of Bristol, Bristol, UK*

Introduction
National guidance on cytological follow up with unsatisfactory colposcopy is limited and diagnostic LLETZ has reproductive implications. The aims of this study are to determine if a cytobrush improves cytological quality and whether conservative management can be offered.

Methods
A retrospective single centre cohort study. Patients with unsatisfactory colposcopy from 2011 were extracted from CYRES. Clinical, cytological and histological findings were retrieved from colposcopy and pathology databases.

Results
The incidence of unsatisfactory colposcopy was 6% (89/1448). 48/89 (53.9%) were referred with adequate TZ sampling (smear quality '11') and 31 with insufficient sampling ('01'). Oestrogen deficiency did not affect cytological quality (RR 0.92, 95%CI 0.53-1.72, p=0.78).

21/89 (23.5%) women had a LLETZ; All 7 referred with HG cytology/quality 11 had CIN3 whilst the remaining 14 referred with LG cytology/01 quality had no dysplasia (mean excision depth 8.5mm (SD 1.3), mean interval from cytology 8 weeks (SD 5.0)).

24/89 (87.5%) women had colposcopy and a broom and brush; there was evidence that a B&B improved cytological quality compared to a broom alone (RR 1.5, 95%CI 1.11-1.67, p=0.005).

9/89 women had vaginal biopsies.

35/89 (39%) had no colposcopic intervention but 6 month community cytology. Mean cytological follow up was 21 months (SD 10.4, range 6-40). Within 18 months of colposcopic assessment four women were diagnosed with CIN2 and three with CIN1.

Conclusions
For women with inadequate TZ sampling and unsatisfactory colposcopy, a broom and brush improves sampling if the interval is greater than eight weeks. From our results, we recommend diagnostic LLETZ in women with HG cytology if colposcopy is unsatisfactory. It also appears that women with LG dyskaryosis and unsatisfactory colposcopy have a small risk of HG dysplasia. These women may benefit from cytological follow up, including sampling of the endocervical canal if TZ sampling is insufficient, to avoid unnecessary LLETZ.

P-73

LECTINS FOR CERVICAL SCREENING

Anita Lim[1], *Sarah Langsham-Leen*[2], *Pierre Lao-Sirieix*[3], *Naveena Singh*[2], *Michael Sheaff*[2], *Rebecca Fitzgerald*[3], *James Redman*[3], *Jason Crawte*[3]

[1]*Wolfson Institute of Preventive Medicine, Queen Mary University, London, UK*
[2]*Barts and The London NHS Trust, London, UK*
[3]*Hutchison-MRC Research Centre, Cambridge, UK*

Background
Cervical screening in low-resource settings remains an unmet need and would benefit from a more specific and cost-effective probe for identifying high-grade cervical intraepithelial neoplasia (CIN2/3). Lectins are naturally occurring proteins whose binding patterns change as cancer develops. Studies have demonstrated that lectins can discriminate between dysplasia and normal tissue in some precancerous conditions. Potentially, this could allow us to distinguish high-grade cervical intraepithelial neoplasia (CIN3) from normal cervix on visual inspection.

This study aimed to identify a lectin(s) that could be developed as a tool for cervical screening.

Design
We performed lectin histochemistry using 8 candidates on Formalin-Fixed Paraffin Embedded human cervical tissue from normal (n=20) and CIN3 (n=20). Two researchers independently scored the top third of squamous epithelium for intensity of staining (0-3) and a histopathologist adjudicated when there was disagreement.

Validation was undertaken in a separate cohort (30 normal, 25 CIN1 and 25 CIN3) for 2 lectins which best discriminated between CIN3 and normal cervix.

The Wilcoxon-rank sum test was used to compare staining in normal versus CIN3 (as determined by comparison with an H&E-stained adjacent section).

Results
Staining was significantly less intense in CIN3 compared to normal for 3 of the 8 lectins in the discovery phase: WGA ($p<0.0001$), HPA ($p<0.001$) and UEA ($p<0.001$). Absolute staining intensity for UEA was low (median of 1 in normal) and did not warrant validation.

Findings were confirmed for WGA in the validation cohort. CIN1 was found to stain similarly to normal tissue. Analysis is currently ongoing for HPA.

For WGA sensitivity was 75%, specificity 85% in the discovery cohort (assuming score 0/1=positive, ≥2=negative), AUC 0.884. For the validation cohort, sensitivity was 60%, specificity 87%, AUC 0.708.

Conclusion
These early results indicate that WGA and HPA could potentially be used to identify high-grade CIN.
Further investigation in ex-vivo studies is warranted.

P-75

CLINICAL VALIDATION OF THE COBAS 4800 HPV TESTING OF SELF-COLLECTED VAGINAL SAMPLES IN ROUTINE SCREENING IN SCOTLAND

Grazyna Stanczuk[1], Heather Currie[1], Gwen Baxter[1], Addele Foster[1], Kate Cuschieri[2], Allan Wilson[3]

[1]Dumfries and Galloway Royal Infirmary, Dumfries, UK
[2]Scottish HPV Reference Laboratory, Edinburgh, UK
[3]Monklands Hospital, Airdrie, UK

Background
Presence of HPV in genital epithelium is necessary for the development of cervical pre-cancer. Clinically validated HPV detection allows identification of women who will benefit from further screening or cervical assessment. Sampling has to be minimally invasive and universally accessible to women.

Objectives
We clinically validate self-collected vaginal sample against previously validated cervical sample for HPV routine cervical screening using Cobas 4800 HPV test.

Methods
5330 women attending for routine smear between April 2013 and July 2014 consented to self-collect vaginal swab for Cobas 4800 HPV testing. The same test was used for HPV detection in ThinPrep cervical samples. Women with abnormal smear results were referred to colposcopy as per routine protocol in Scotland. HPV positive participants with normal cytology where offered HPV re-testing in 4-6months. Those with two positive cervical HPV tests with HPV 16/18 were invited to colposcopy.

Results
HPV was detected in 14.7% of cervical and 16.5% of vaginal samples. Prevalence of HPV16/18 was 4.9% and 5.5% in cervical and vaginal samples respectively.

We identified 116 CIN2+(CIN2=56, CIN3=57, and 3 cervical cancers). Twenty three of CIN2+ lesions (19.8%) were cytology negative.

Sensitivity of cytology, cervical HPV testing and vaginal self-testing for CIN2+ lesions was 79.8%, 97.4% (91.1, 99.3) and 94.7% (88.4, 97.8) respectively.

Overall intra-laboratory agreement of Cobas 4800 results on self-collected vaginal samples was 99.2% with Kappa value of 0.99 (0.97, 1.00).

Conclusion
It is reasonable to assume that the majority of women would prefer minimally invasive self HPV testing. Our results indicate that Cobas 4800 HPV testing using self-collected vaginal samples has very high sensitivity in identifying CIN2+ lesions. This study is on-going with completion date in March 2015.

P-76

EFFECT OF CATCH UP VACCINATION ON HPV PREVALENCE IN ROUTINE CERVICAL SCREENING

Grazyna Stanczuk[1], *Gwen Baxter*[1], *Heather Currie*[1], *Adele Foster*[1], *Kate Cuschieri*[2], *Allan Wilson*[3]

[1]*Dumfries and Galloway Royal Infirmary, Dumfries, UK*
[2]*Scottish HPV Reference Laboratory, Edinburgh, UK*
[3]*Monklands Hospital, Airdrie, UK*

Objectives
Since 2008, Scotland has offered a national HPV immunisation programme to 12-13 year old girls which included an initial 3 year "catch up" for girls up to age 18. The "catch up" cohort are now of age to attend for cervical screening. The aim of this study was to determine HPV positivity in younger women and the effect of vaccination.

Methods
We enrolled 613 women (20 -24 years) attending for routine cervical screening. Samples were tested by the Cobas HPV test. HPV outcome was stratified by vaccination status and cytology. Follow up histology, where indicated, was also assessed.

Results
Fifty two percent (n = 321) were vaccinated. The Cobas HPV test was positive in 36.3% and 45.0% of vaccinated and non-vaccinated women respectively. Prevalence of HPV 16 /18 in the vaccinated was 3.7% compared to 13.7% in non-vaccinated women. Of these 58.3% and 65.0% respectively were co-infections. One in 10 infections in vaccinated women were due to HPV 16/18 compared to less than 1 in 3 in non-vaccinated women. There were 38 (11.9%) abnormal smears in vaccinated and 48 (16.6%) in non-vaccinated women respectively. We diagnosed 1 CIN2 and 1 CIN3 in vaccinated and 6 CIN 2 and 3 CIN 3 in non-vaccinated women.

Conclusion
Catch up vaccination changed overall prevalence by 8.7%. Positivity associated with HPV16/18 infection has been significantly reduced. We have preliminary evidence to suggest that catch-up vaccination has decreased the number of high grade lesions in the first round of screening.

P-77

PRELIMINARY EXPERIENCE WITH CINtec plus IN PRIMARY SCREEING IN SCOTLAND

Grazyna Stanczuk[1], Heather Currie[1], William Forson[1], Gwen Baxter[1], Lynne Patterson[2], Lynn Govan[2], Janice Black[2], Kate Cuschieri[3], Allan Wilson[3], Adele Foster[1]

[1]Dumfries and Galloway Royal Infirmary, Dumfries, UK
[2]Monklands Hospital, Airdrie, UK
[3]Scottish HPV Reference Laboratory, Edinburgh, UK

Background
Two in three women, who test HPV positive in routine cervical screening in Scotland, have negative cytology. It has been proposed, that immunochemistry with concomitant over-expression of P16 and expression of Ki-67 biomarkers (CINtec plus) can identify women harbouring CIN2+. This therefore may positively complement HPV-based screening program.

Objectives
We aim to report the performance of CINtec plus in two groups of women: those who are Cobas 4800 HPV test positive and have negative cytology (CYTO-/HPV+) and those with positive cytology (CYTO+).

Methods
5330 women attending for routine smear between April 2013 and July 2014 consented to Cobas 4800 HPV testing and further immunochemistry as part of the PaVDaG study. ThinPrep cervical samples were processed for P16/Ki-67 dual-staining using CINtec plus kit. CYTO-/HPV+ women were offered colposcopy if they tested HPV-16/18 positive twice, 4-6 months apart. We aim to offer colposcopy to all women with CINtec plus positive results.

Results
CINtec plus was positive in 18.4% of 249 CYTO-/HPV+ women. In this group, up to date we have identified 7 CIN2+ lesions. Four of them were CINtec plus negative and 38 women are awaiting colposcopy.

In 103 CYTO+ women CINtec plus was positive in 70% of cases. CIN2+ was identified in 38.5% of those. So far 3 CIN2+ lesions would have been missed by CINtec plus screening.

Conclusion
This is a preliminary report which indicates, that further work should be done to examine CINtec plus application in HPV driven cervical screening.

P-78

PRIMARY EXTRA MAMMARY PAGET DISEASE OF THE VULVA (EMPDV): 20 YEARS SINGLE INSTITUTE EXPERIENCE

Eva Myriokefalitaki, Vishanthi Shesha, Kriti Singhania, Esther Moss, Quentin Davies

University Hospitals of Leicester, Leicester, UK

Objective
Extra mammary Paget disease of vulva (EMPDV) is a very rare genital neoplasia associated with a high frequency of local recurrences. The aim of this study was to identify the clinicopathologic features and treatment outcome of EMPDV.

Materials and Methods
Retrospective study of all EMPDV vulvar over a 20 year period (01/10/1994 – 31/12/2014). We identified 18 patients biopsy proven, who were diagnosed and managed in a tertiary University hospital.

Results
The mean age of patients was 74 years (range = 48-93 y) and 89% were Caucasian. Symptoms at presentation included irritation, soreness and redness. Lesions were 43% hyperkeratotic in appearance and 29% had leucoplakia. 60% of lesions were on labia. Surgical excision was the primary treatment and in 80% of cases margins were involved. Local corticosteroids (hydrocortisone, clobetazol) have been used on an on and off fashion on 22.2% of patients. Median follow-up was 80.9 months (range = 6-276). Local recurrence occurred in 9 patients (50%), and 4 (22.2%) developed invasive EMPDV. All these patients required further surgical treatment. Median time to recurrence was 25.4 (range 6 -113) months. 5 (27.8%) experienced more than recurrences.

Conclusions
Recurrence rate of EMPDV was high. Repeat surgical excision for recurrent EMPDV and long-term follow up are necessary for improvement of symptoms and prognosis.

P-79

FERTILITY AND EARLY PREGNANCY OUTCOMES AFTER TREATMENT FOR CERVICAL INTRA-EPITHELIAL NEOPLASIA: A SYSTEMATIC REVIEW AND META-ANALYSIS OF THE LITERATURE

Maria Kyrgiou[1], Anita Mitra[1], Marc Arbyn[2], Sofia Melina Stansinou[3], Pierre Martin-Hirsch[5], Phillip Bennett[1], Evangelos Paraskevaidis[4]

[1]*Imperial College London, London, UK*
[2]*Scientific Institute of Public Health, Brussels, Belgium*
[3]*Create Infertility Clinic, London, UK*
[4]*University Hospital of Ioannina, Ioannina, Greece*
[5]*Lancashire Teaching Hospitals, Preston, UK*

Background
Treatment for cervical intra-epithelial neoplasia (CIN) increases the risk of preterm birth in subsequent pregnancies. Its effect on fertility and early pregnancy outcomes remains unclear.

Objectives
To determine the impact of cervical excision on fertility and early pregnancy outcomes.

Methods

Design
systematic review and meta-analysis of cohort studies

Data sources
MEDLINE and EMBASE.

Eligibility criteria
We included all studies assessing fertility and early pregnancy outcomes in women with previous treatment for CIN versus untreated controls. We classified included studies according to treatment type and fertility or early pregnancy endpoints.

Analysis
We calculated pooled relative risks and 95% confidence intervals using a random-effect model and assessed inter-study heterogeneity with I2 statistics.

Results
Fifteen studies fulfilled the inclusion criteria. Meta-analysis did not provide any evidence that treatment for CIN adversely affects the chances to conceive. The overall pregnancy rate was higher for treated (43%) versus untreated women (38%) (4 studies; RR=1.29, 95%CI: 1.02-1.64), although inter-study heterogeneity was high ($p<0.00001$). The pregnancy rates in women with intention to conceive (2 studies; 88%vs95%, RR=0.93, 95%CI:0.80-1.08) and the number of women requiring more than 12 months to conceive (3 studies, 15%vs9%, RR=1.45, 95%CI:0.89-2.37) was no different. Although the total miscarriage (10 studies; 4.6%vs2.8%, RR=1.04, 95%CI:0.90-1.21) and 1st trimester miscarriage rate (4 studies; 9.8% vs 8.4%, RR=1.16, 95%CI: 0.80-1.69) was similar for treated and untreated women, cervical treatment significantly increased the risk of 2nd trimester miscarriage. The rate was higher for treated (1.6%) versus untreated women (0.4%) (8 studies; 16558 women; RR=2.60, 95%CI:1.45-4.67). The number of ectopic pregnancies (1.6%vs0.8%; RR=1.89, 95%CI:1.50-2.39) and terminations (12.2%vs7.4%; RR=1.71, 95%CI:1.31-2.22) was also higher after treatment.

Discussion
This meta-analysis suggests that CIN treatment does not adversely affect fertility. Treatment does, however, significantly increase the risk of second trimester miscarriages in subsequent pregnancies. Future research should explore mechanisms that may explain this increase in risk.

P-80

ACCEPTANCE OF HIV POINT OF CARE TEST IN PATIENTS HAVING A SMEAR TEST

Fatima Nathani, Ashraf Dalil, Tracy Bridgewater, Sharon Gordon, Nyasha Chandani

Contraception and Sexual Health Clinic, Birmingham, UK

Around 100,000 people are living with HIV infection (diagnosed and undiagnosed) in the UK1.Cervical malignancy is a AIDS defining illness. It is recommended that patients attending colposcopy units should be offered HIV test.

In Cash clinic in Dudley we are routinely offering HIV test to all our clients.

Method

Standard procedure was At the appointment the history was taken. Discussion about routine offer of HIV test to all attendees.

Results

80 patients had smears done in main clinic. 1 in central clinic and 5 in halesowen and 6 in GU

Patients attending the service only for smear 26. Complex smears referred are 8 and opportunistic smears 26 IUS and IUD and smears are 11

Patients accepting the HIV test 60 patients were offered the test and 30 did the test and one was reactive. On confirmatory test with blood venous sample this test was negative.

30 patients declined the point of care test. Reason in pregnancy, test done before, been only with one partner, cannot have HIV. One declined at CASH but had the test at GUM later.

Peripheral clinic one wanted the test and was not available, two declined and the rest had the test out of the 12

Results of the smear test

Three did not need the test due to various reasons.one was inadequate, one couldn't be done, one had to be repeated two low grade dyskaryosis and were referred to colposcopy. One BNA HPV and another HPV positive referred to colposcopy. One was referred due PCB and previous abnormal smear

Discussion

The clinic had posters about the test and leaflets were available to read Staff normalised the test. This approach helped the uptake of the test

Ref

1. HIV: surveillance, data and management. From: Public Health England First published: 31 July 2014

P-81

IMPROVED DETECTION OF HIGH GRADE CIN (HG-CIN) USING ZEDSCAN (ELECTRICAL IMPEDANCE SPECTROSCOPY) WITH COLPOSCOPY

John Tidy[1], *Brian Brown*[2], *Jamie Healey*[1], *Rachel Lyon*[1], *Julia Palmer*[1]

[1]*Sheffield Teaching Hospitals, Sheffield, UK*
[2]*University of Sheffield, Sheffield, UK*

Aims
To establish performance of ZedScan with colposcopy in detection of HG-CIN in a routine colposcopy service.

Methods
569 unselected women were evaluated by six colposcopists, three nurse colposcopists two consultants and a trainee. 91% of the women were evaluated by nurse colposcopists. 10-12 ZedScan readings were taken after the application of acetic acid. Results were displayed immediately, sites for biopsy indicated and single point mode used to locate these sites. Confirmation of women who are suitable for 'See and Treat' was also provided. All data were collected prospectively.

Results
494 women were referred with abnormal cytology, 75 had other indications. 148 (30.0%) had high grade cytology, 346 (70.0%) had low grade cytology. 179 women were found to have HG-CIN, 16 of these women were identified as having HG-CIN by ZedScan alone resulting in a 9.8% increase in the detection of high grade CIN. 165 women were negative for HG-CIN by ZedScan and colposcopic impression but 22 women underwent directed biopsy by the colposcopist. Only 3cases of HG-CIN were found. 79 of the high grade referrals underwent 'See and Treat' (53.0%), 100% had HG-CIN. A further 36 women with a high grade referral had ZedScan readings suggesting they could have undergone See and Treat but were biopsied instead. Thirty biopsies (83.3%) were high grade CIN. Performance metrics for detection of HG-CIN were Sensitivity 100%, Specificity 51.7%, PPV 54.1%, NPV 100%, Accuracy 75.9%, +LR 2.07, DOR 384.

Conclusion
Performance of ZedScan with colposcopy significantly exceeds those of colposcopy compared with published studies. Evaluation has demonstrated the combination of colposcopy with ZedScan improves detection of HG-CIN leading to more appropriate disease ascertainment at first visit and improved healthcare outcomes for the women referred to colposcopy. This evaluation confirms data from a published health economic analysis demonstrating use of ZedScan reduces healthcare costs.

P-82

ZEDSCAN (ELECTRICAL IMPEDANCE SPECTROSCOPY) WITH COLPOSCOPY INCREASES THE DETECTION OF HG-CIN IN WOMEN REFERRED WITH LOW GRADE CYTOLOGY

John Tidy[1], *Brian Brown*[2], *Jamie Healey*[1], *Rachel Lyon*[1], *Julia Palmer*[1]

[1]*Sheffield Teaching Hospitals, Sheffield, UK*
[2]*University of Sheffield, Sheffield, UK*

Aims
To establish the performance of ZedScan with colposcopy in the detection of HG-CIN women referred with low grade cytology (low grade dyskaryosis and borderline nuclear changes)

Methods
569 unselected women were evaluated by six colposcopists. Having completed a ZedScan examination the colposcopist is directed to take biopsies from sites at high probability for HG-CIN. Using the ZedScan single point mode the site for biopsy can be identified. All data were collected prospectively.

Results
494 women were referred with abnormal cytology, 346 (70.0%) had low grade cytology, 52 (15.0%) of these women were identified as having HG-CIN. 38 (11.0%) cases were identified by colposcopy alone with an additional 14 cases identified as HG-CIN by ZedScan. The use of ZedScan resulted in a 36.8% increase in the detection of HG-CIN compared with colposcopy. The biopsy rate for women with low grade cytology was 52.6% and the number of biopsies taken was 1.06 per woman biopsied. 163 women were negative for HG-CIN by ZedScan and colposcopic impression but 22 women underwent directed biopsy by the colposcopist. Three cases of high grade CIN were found. Performance metrics in the low grade cytology group were Sensitivity 100%, Specificity 55.4%, PPV 28.4%, NPV 100%, Accuracy 77.7%, +LR 2.24, DOR 129.

Conclusion
ZedScan with colposcopy detects additional cases of HG-CIN and helps identify women who do not have disease. The increase in cases of HG-CIN was not due to more women undergoing directed biopsy, between 2011 and 2013 our biopsy rate for low grade cytology was 62.0- 64.7%. The national rate for 2012/13 was 63.2%. In fact there was at least a 15.4% reduction in the biopsy rate. ZedScan improves performance and has led to more appropriate disease ascertainment at first visit leading to improved healthcare outcomes for the women referred to our colposcopy clinic.

P-83

USING ZEDSCAN WITH COLPOSCOPY IN PATIENTS UNDERGOING 'SEE AND TREAT' RESULTS IN 100% OF WOMEN HAVING HG-CIN/HG-CGIN IN THE EXCISED SPECIMEN

John Tidy[1], *Brian Brown*[2], *Jamie Healey*[1], *Rachel Lyon*[1], *Julia Palmer*[1]

[1]*Sheffield Teaching Hospitals, Sheffield, UK*
[2]*University of Sheffield, Sheffield, UK*

Aims
To establish the performance of ZedScan with colposcopy in women offered 'See and Treat' after referral with high grade cytology.

Methods
569 unselected women were evaluated by six colposcopists. Women referred with high grade cytology were offered treatment at first visit if thought to be suitable. All underwent examination colposcopy with ZedScan. ZedScan can be used to assess the probability that HG-CIN will be present in the excised tissue in >90% of cases. All data were collected prospectively.

Results
494 women were referred with abnormal cytology, 148 (30.0%) had high grade cytology. 79 underwent See and Treat (53.0% of all high grade cytology referrals). 100% had HG-CIN/CGIN in the excised specimen. An additional 36 women had ZedScan readings suggesting they could have undergone See and Treat but were biopsied instead. 30 of these biopsies showed high grade CIN (83.3%). 38 women with low grade cytology had readings suggesting See and Treat, 24 had confirmed CIN2+ (63.2%), 4 other referrals were also suitable for See and Treat, 2 had confirmed CIN2+.

Conclusion
Using ZedScan with colposcopy in women referred with high grade cytology who are suitable for 'See and Treat' would result in 94.8% (109/115) having high grade CIN or CGIN in the excised specimen. NHSCSP No20 guidance for See and Treat is exceeded (>90% must have evidence of HG-CIN in the excised specimen). ZedScan may allow more women to be offered a See and Treat option; in this case 46% more women would have been treated. With the need to minimise overtreatment of women, avoid short and long term morbidity and reduce healthcare costs, a See and Treat approach incorporating ZedScan has been shown to be cost effective.

P-84

PREVALENCE OF HIV AMONG WOMEN IN HIGH GRADE CERVICAL SMEAR ABNORMALITIES

Najum Qureshi[1], *Kaveh Manavi*[2]

[1]*Birmingham Women's Hospital, Birmingham, UK*
[2]*University Hospital Birmingham, Birmingham, UK*

The purpose of this prospective study was two-fold, to assess the acceptance of HIV testing and prevalence of HIV in women presenting with high grade cervical smear abnormalities at Coloposcopy clinic, Birmingham Women's Hospital from september 2013 to January 2015. The study is ongoing. The patients already diagnosed with HIV infection were excluded from the study. Of the 182 patients who were offered the blood test, 174 (95.6%) accepted to have the blood HIV test. The age range of participants to the study between 24-46 years was 160 (92%) and remainder 14(8%) patients were between 46-65 years. Of 174 patients, 126 (71%) had severe dyskaryosis, 26 (15%) moderate dyskaryosis. A control group of 24(14%) patients had low grade cervical abnormalities. None of the patient recruited to the study were found positive for HIV infection. 8(4.40%) patients declined to have blood test for HIV because of reasons like: does not like blood tests, needle-phobia,had to rush back home and had blood test during recent pregnancy.

Conclusion
HIV testing seems well accepted in patients attending colposcopy clinics. To date, no patient recruited is found positive for HIV infection. The counselling/consent of patients for HIV testing does not prolong clinic duration.

P-85

A COMPARISON OF THE EFFECTS THAT THE DIFFERENT REFERRAL PATTERNS HAVE HAD ON THE INCIDENCE OF HIGH GRADE CIN IN WOMEN WITH LOW GRADE CYTOLOGY

Richard Flint, Dante Zamblera, Olabisi Folayan, Kate McCarthy, Adeboye Jolaoso, Dhiraj Uchil

University Hospital Lewisham, London, UK

Aim

The aim of this audit is to examine if the effect of change in referral patterns of low grade cytology on the pick-up rate of high grade lesions at a south London colposcopy unit.

Background

Over the last few years the referral pattern from the cytology labs to Lewisham Hospital has changed

Method

A retrospective analysis of the women referred to the colposcopy unit at Lewisham Hospital from March 2012 to September 2014 performed. Women were referred to our colposcopy unit after a second low grade cytology result until April 2013. From April 2013 to December 2013 referral was on the first low grade cytology report. From January 2014 HPV triage with the referral of low grade smears was introduced. The analysis looked at the outcome of women referred to the colposcopy unit with Mild dyskaryotic smears in the above time period. These were then divided into groups depending on referral criteria for comparison. Analysis looked at the incidence of high grade CIN on biopsy in the different cohorts.

Results

The results showed as predicted an increase in number of referrals of women with mild dyskaryosis in the different time periods. Moving to first mild referrals increased the number seen in colposcopy with a reduction in total CIN rate as well as reduction of HG CIN pickup. Introduction of HPV triage also increased the referrals to our unit with a reduction in CIN rate. However there was also an increase in the percentage of HGCIN in women with Mild Dyskaryotic smears and positive HPV.

Conclusion

In women referred to our unit with a mild dyskaryotic smear, HRHPV positivity increases the risk of HG CIN being found after colposcopy and biopsy. Our data over the last 9 months our figures show that of our referrals 15% had HG CIN.

P-86

SCREENING INDIVIDUALS AT HIGH RISK FOR ANAL CANCER IN CLINICAL CONTEXT: THE ANALOGY STUDY

Alice Martha Schofield[1], *Laura Sadler*[1], *Ashish Sukthankar*[2], *James Hill*[2], *Mina Desai*[2], *Raymond McMahon*[2], *Alex Sargent*[2], *Julietta Patnick*[3], *Henry Kitchener*[1]

[1]*University of Manchester, Manchester, UK*
[2]*Central Manchester Foundation Trust, Manchester, UK*
[3]*Public Health England, Sheffield, UK*

Background
Anal cancer and its precursor, anal intraepithelial neoplasia (AIN), are uncommon in the general population but incidence is greater in immunocompromised individuals such as transplant recipients (TR). Female TR are a subset of patients recruited to a large prospective cohort study involving men and women. The ANALOGY study is being performed to evaluate the feasibility and acceptability of anal screening in high-risk groups.

Methods
Female TR recruited to study received anal screening at two visits 3-6months apart. Screening included liquid based cytology, HPV testing and high-resolution anoscopy (HRA) with an anal biopsy if abnormal. Self-completed questionnaires evaluating knowledge, views of anal cancer and screening were given at both visits. All patients with high-grade tissue biopsies were referred urgently for examination under anaesthetic.

Results
Since March 2012, 41 female TR have been recruited. 17% (7/41) of TR had abnormal cytology, 26.8% (11/41) high-risk HPV infection and also 26.8% (11/41) had an abnormal HRA. The overall prevalence of AIN (grades 1/2 and 3+) was 19.5% (8/41). 26.8% (11/41) had an abnormal HRA requiring biopsy, of which 63% (7/11) had AIN grade 1/2, 9% (1/11) had AIN3+, which was referred urgently. Cytology and HPV testing was negative in 62.5% (5/8) and 45.4% (5/11) cases of AIN respectively. To date, 81.4% believed those at increased risk should be offered screening. 65.8% (27/41) TR have completed follow-up questionnaires; 74.2% agreed they would attend screening again with the majority willing to attend annually (64.5%).

Conclusion
Anal screening is feasible in terms of diagnostics and acceptability with evidence of disease prevalence in TR. HPV and cytology screening alone would have missed 45.4% (5/11) cases of low grade lesions. HPV and cytology negative lesions can be detected by HRA, which is feasible and acceptable to patients.

P-87

HOW APPROPRIATE ARE TARGET REFERRALS FOR AN ABNORMAL CERVIX?

V Romanova, K Doufekas, L Ridgwell, L Morgan, P Rodriguez, A.N Rosenthal

University College Hospital, London, UK

Background
Women with an abnormal cervix should be referred for examination and onwards to colposcopy if cancer is suspected. They should be seen within two weeks of referral. Similarly women with symptoms of cervical cancer, e.g. post-coital/inter-menstrual bleeding or persistent discharge should follow the same pathway if cancer is suspected (NHSCSP 20).

Objectives
To assess whether target referrals to colposcopy for women with an abnormal cervix are appropriate.

Setting
University hospital colposcopy clinic.

Methods
We reviewed all GP target referrals to the colposcopy clinic at University College Hospital, London from January to December 2012. Clinico-pathological data were extracted onto a spreadsheet for analysis.

Results
There were 1,332 referrals during the study period, of which 73 (5.5%) were target referrals. Of these 73, 36 (49%) were for women with an abnormal appearing cervix. 13 (36%) of these 36 had concerning symptoms (PCB, IMB). All women were seen within 14 days. 5 (14%) of the 36 women had an entirely normal cervix. 6 (17%) had ectopy only. 12 (33%) had a benign cervical polyp and 7 (19%) had Nabothian cysts. 2 (6%) were diagnosed with CIN2 and another 2 women (6%) had malignancy (advanced stage squamous cervical cancer -symptomatic, vaginal recurrence of known endometrial cancer -asymptomatic). The overall rate of significant pathology (CIN2 or worse) was 11%. 14 (61%) of 23 asymptomatic women had normal cervix/ectopy/nabothian follicles only.

Conclusions
Over half of target referrals for an abnormal cervix with no concerning symptoms had an entirely normal cervix or a physiological variant of normality. Possible reasons include lack of knowledge of normal/benign cervical appearances and/or poor understanding of what constitutes a target referral. Improved education on these issues may help to reduce the anxiety for women referred inappropriately to colposcopy, and allow better use of resources.

P-88

KNOWLEDGE OF HPV AND THE HPV VACCINE IN EUROPEAN ADOLESCENTS: A SYSTEMATIC REVIEW

Hersha Patel, Yadev Jeve, Esther Moss

University Hospitals Leicester, Leicester, UK

Background
In 2006/2007 two HPV vaccines were licensed with the aim of preventing cervical cancer. Twenty-six European countries now recommend the HPV vaccine for female adolescents, however independent of the funding discrepancies, there is huge variation in the uptake of the vaccine, ranging from 17-84%. We conducted a review of literature to ascertain how much European adolescents, really know about HPV and the HPV vaccine.

Methods
Two electronic databases, Ovid Medline and PsychInfo, were searched from 1946 and 1806 respectively to September 2014, for suitable papers. 20 full papers were screened for suitability and assessed for quality. 13 papers were included in the final review (3 qualitative studies and 10 survey's).

Results
Overall the level of knowledge regarding HPV and the HPV vaccine in this group was poor. Most of the studies were conducted in countries that offer the HPV vaccine as part of a state funded vaccination programme, where vaccine introduction had been preceded by a media campaign. This however, did not appear to be advantageous when compared to countries where the vaccine was not funded or even in some groups, when knowledge was tested pre and post media campaign. Age and female gender appear to be associated with a greater level of knowledge. Factors resulting in reduced intention to be vaccinated include misconceptions about HPV only affecting those that are sexually promiscuous and the belief that the prevalence of HPV is low. Uncertainty exists on the level of protection offered by the HPV vaccine and the requirement for cervical screening in the future.

Conclusion
The delivery of information to European adolescents needs to be re-evaluated since at present there appears to be huge deficiencies in knowledge of both HPV and the HPV vaccine.

P-89

AUDIT OF THE FAILED TESTS OF CURE WITH NEGATIVE CYTOLOGY BUT HPV +VE HAS ABNORMAL COLPOSCOPY AND POSITIVE BIOPSY DIAGNOSED AS CIN2 OR WORSE

Debarati Dutta, Onig Tamizian

Nottingham University Hospitals NHS Trust, Nottingham, UK

Background
Test of cure outcome (report of sentinal study)

In the sentinal report
65.9% of all women who failed test of cure and attended colposcopy were negative at biopsy or were considered colposcopically normal and did not undergo biopsy and 12.2% had CIN2 or worse detected. This is lower than the rate of CIN2 or worse at original colposcopy (16.3%) but not significantly so. The rate of CIN2 or worse is higher among women referred to colposcopy with abnormal cytology compared to those referred with a positive HPV test; 16.0% and 6.3% respectively, but the difference is not significant.

Aims
How many of the failed tests of cure with negative cytology but HPV +ve has abnormal colposcopy and positive biopsy diagnosed as CIN2 or worse against the sentinel report figures retrospectively in 6 months

Results
Total 137 patients attended for the test of cure—CIN1 -12 cases, —CIN2 -33 cases, CIN3- 58 cases

34 cases followed annually with colposcopy and the exact date and record of treatment is not available.—CIN1 cases with normal cytology but HR HPV +ve : 1(9.09%) -Biopsy NAD —CIN2 cases with normal cytology but HR HPV +ve : 2 (6.6%) 1)NAD 2)Chronic inflammation —CIN3 cases with normal cytology but HR HPV +ve : 8(15.6%)

1 case-CIN1, 2cases-Normal colp, 3 cases-HPV, 1-Biopsy NAD, 1-Colp metaplasia

Conclusion
The figures for the test of cure were comparable to the sentinal study—Out of 11 cases of failed test of care with negative cytology but HPV positive, only 1 case (9.09%) was diagnosed as CIN1 in biopsy and did not have any repeat treatment.

P-90

EXPERIENCE OF CERVICAL CANCER EDUCATIONAL AND SCREENING PROGRAMME IN RURAL UGANDA, OCTOBER 2014

Sarah Platt[1], *Jessica Preshaw*[2], *Jo Bailey*[1]

[1]*St Michael's Hospital, Bristol, UK*
[2]*Musgrove Park Hospital, Taunton, UK*

Cervical Cancer is the primary cause of female cancer in Uganda and is common, with an age-standardised incidence of 45.6/100,000 and age-standardised mortality of 27.2/100,000. Over 80% have advanced disease at diagnosis and survival rate is subsequently poor. In comparison, the UK age-standardised incidence is 8.9/100,000 with mortality 2.1/100,000. Discrepancies are due to differences in education, vaccinations and screening programmes alongside higher HIV prevalence. Health care providers in Uganda are working on strategies to address cervical cancer prevention.

As part of the Bristol-Mbarara Link Programme, colposcopists from Bristol joined gynaecologists and nurses from Mbarara Regional Referral Hospital to deliver a two day university-sponsored screening camp at Kinoni Level 4 Health Centre. Regional hospitals have established colposcopy and cervical screening departments; a service not provided in health centres. Accessing healthcare is restricted by financial and practical barriers such as transport difficulties so transferring expertise to these local centres allows greater patient access. This initiative also encompassed diabetes and hypertensive screening and circumcision.

Over 200 patients attended for cervical screening. The patient journey commenced with a group counselling session delivered by a gynaecologist in local dialect. A pictorial guide accompanied the lecture. They completed a registration form, health and symptom questionnaire and then underwent visual cervical inspection with acetic acid.

Patients with positive findings or unsatisfactory examination were referred for formal colposcopic assessment and treatment at Mbarara Regional Referral Hospital. Other outcomes included referral for cervical pap smear and prescription of antibiotics for pelvic inflammatory disease and anti-fungal therapy for candidiasis. HIV testing and contraceptive advice was offered.

This programme was popular and well received by patients. An annual outreach service is proposed with visits to other rural health centres. The combination of health education and earlier diagnosis will be fundamental in ultimately reducing cervical cancer incidence and mortality in Uganda.

P-91

SURVEY ON AWARENESS OF HPV IN PATIENTS AND STAFF OF COLPOSCOPY CLINIC, LEEDS TEACHING HOSPITALS NHS TRUST

Bramara Guruwadayarhalli[1],[2], *Deesha Patel*[1]

[1]*West Middlesex University Hospital NHS Trust, London, UK*
[2]*Leeds Teaching Hospitals NHS Trust, Leeds, UK*

Introduction
Human Papilloma Virus (HPV) is responsible for several types of cancers in men and women. The Jade Goody effect transiently improved awareness. Several surveys to check awareness of HPV and HPV vaccine show lack of awareness in patients and staff.

Method
Survey questionnaires were handed out by the receptionist to patients attending appointments and staff (nurses and healthcare assistants) working in the colposcopy clinic over a period of one week.

Survey included – awareness of HPV, its implications in women and men; Awareness of vaccine and its acceptability; Factors that influence the HPV – contraception and smoking. Aim was to identify the level of awareness to help suggest the educational methods. All forms were filled anonymously.

Findings
Participants included 36 patients and 32 staff. Age group ranged from 18 to 53 in patients and 24 to 56 in staff.

2 used condoms, 13 smoked; 1 used condom and 6 smoked in patients and staff respectively.

23 patients were aware of HPV. 25 stated it caused cancer in women and 15 were not aware of other cancers it caused in women. 19 stated it caused cancer in men although 22 were not aware of what types of cancer. 26 staff members were aware of HPV. 26 stated it caused cancer in women and 8 not aware it caused other cancers in women. 15 stated it caused cancer in men and 18 were not aware of the types of cancer.

Majority would vaccinate their children. 1 felt vaccines were dangerous and few wished more information.

Conclusion
The need to educate both patients and staff across the hospitals continues. Verbal information and leaflets on HPV and its effects smoking and contraceptive advice for patients. Staff and public can be educated by introduction of screen savers on effects of HPV, screening program and vaccination.

P-92

A STUDY OF KNOWLEDGE AND ATTITUDES ABOUT HUMAN PAPILLOMA VIRUS IN THE BELFAST POPULATION

Elaine Craig, Aine Hannity, Gwen Thompson, Stephen Dobbs

Belfast City Hospital, Belfast, UK

Background

It is well established now that infection with HPV is a prerequisite for cervical cancer. Despite widespread acceptance and knowledge throughout the medical community there still seems to a lack of public awareness on the aetiology of cervical cancer and HPV awareness.

The objective of the study was to assess knowledge and attitudes about human papillomavirus (HPV), smears and cervical cancer amongst young women, and to gain an insight into the understanding of the local Northern Ireland population.

Methods

A closed answer 14 - point questionnaire was administered to 100 colposcopy attendees at a Belfast clinic. There was an excellent 90% response

Results

The patients ranged in age and socio-demographics. The age range was between 25-60. Despite 70% of the women having at least one positive smear in the past there was poor understanding of HPV. There was large uncertainty regarding incidence of the infection, the majority believing it to be less prevalent (under 50%) than the reported 80%. Only 66% of the women understood HPV to be a virus associated with Cervical Cancer and less than a third (29%) were aware that HPV could be transmitted skin-to-skin. 60% felt they had received adequate information on HPV from the clinic with preferred methods of information being face-to-face consultations and internet resources and hand-outs. Social media was an important source of information

Conclusion

Public awareness of HPV is generally very low, particularly with respect to its relation to abnormal smears and cervical cancer. Knowledge levels vary according to age and to some extent to socio-demographic characteristics.

There are still significant education issues that need to be addressed and perhaps the use of social media should be exploited in this young population.

P-93

A 'SEE AND TREAT' POLICY FOR WOMEN REFERRED WITH BORDERLINE OR MILD DYSKARYOSIS ON SMEAR: IS IT JUSTIFIED?

Satyam Kumar[1], *Saurabh Phadnis*[1], *Saima Abbasi*[1], *Krishen Sienarine*[2], *Michael Menzies*[1], *Malcolm Padwick*[1], *Fatal Ade Sanusi*[1]

[1]*West Hertfordshire Hospitals NHS Trust, Watford, UK*
[2]*Kettering General Hospital, Kettering, UK*

Introduction
There is concern regarding possible overtreatment when a policy of 'See and treat' is used in women referred with a smear suggestive of a minor cytological abnormality (borderline or mild dyskaryosis)

Study Objective
We aim to study the prevalence of high grade CIN in women referred with a borderline nuclear abnormality or mild dyskaryosis who were managed with a 'See and treat' policy on colposcopic suspicion of high grade CIN.

Methods
We performed a retrospective observational study of 123 women who were referred to our colposcopy clinic between 1st January 2000 and 31st December 2012 on account of smear suggestive of either a borderline nuclear abnormality or mild dyskaryosis and were diagnosed with a high grade CIN on colposcopy. They were offered an excisional biopsy of cervix using a 'See and treat' policy. We aim to study the colposcopy-histology correlation.

Results
Four thousand six hundred and one excisional treatments were performed during the study period. One hundred and twenty three women (2%) were referred with a minor grade abnormality and had an excisional treatment due to a colposcopic diagnosis of high grade CIN. The mean age of borderline nuclear abnormality (BNA) group was 35 years and that of the mild dyskaryosis group was 31 years. In the BNA group, eight women had no CIN on histology, twenty six women had CIN 1, thirteen had CIN 2, and ten with CIN 3. In the MD group, eleven women had no CIN on histology, twenty nine women had CIN 1, fifteen had CIN 2, and eleven with CIN 3. There were no cases of cancer in either group. The overall prevalence of high grade CIN was 39%.

Conclusion
A 'See and treat' policy for women referred with a borderline or mild dyskaryosis smear is not justified.

P-94

IMPROVEMENT IN THE QUALITY OF LARGE LOOP EXCISIONS OF THE TRANSFORMATION ZONE (LLETZ) BY NOVICE TRAINEES USING A PLAY-DOH™ TRAINING MODEL

Priya Deol, Russell Luker

Royal United Hospital, Bath NHS Trust, Bath, UK

Background
Trainees learning to perform LLETZ for the first time are often confronted by a real patient. This has significant clinical and ethical implications. LLETZ training models using porcine or sausage meat have been described1 but these are inconvenient, require prior planning and cannot be modelled to represent a real cervix. We developed a simple, cheap, easily available and realistic LLETZ training model using Play-Doh™, a lunchbox and other sundry items (details of this model can be seen in a separate poster submission).

Objective
This study aims to see if a Play Doh™ model is effective at teaching novice trainees the fine motor skills required to complete LLETZ effectively.

Method
We used Play-Doh™ to make a model cervix with a 1cm lesion displayed on its surface. Ten 4th year medical students received a short lecture and were then asked to complete ten consecutive LLETZ. We measured time taken to complete the procedure, number of attempts, quality and depth of excision.

Results
Trainees showed consistent improvement in all parameters used to measure the motor skills learnt whilst performing LLETZ procedures. Following ten consecutive LLETZ attempts, the average time taken to carry out a LLETZ excision when compared to the first attempt improved by 40% (equivalent to 17.8 seconds). Overall, the average success rate of complete lesion excision measured 68%, further supporting an enhancement in the quality of lesion excised following LLETZ simulation training.

Conclusion
The Play –Doh™ model is simple, cost-effective and easy to replicate. Our findings confirm previously documented research that training using simulation models for LLETZ improves motor skills prior to performing the procedure on live patients; ultimately improving quality of care and patient safety.

References
1. Walters CL, Whitworth JM, Tyra SL, Walsh-Covarrubias JB, Straughn JM Jr. Constructing a Novel Simple LEEP Training Model. J Grad Med Educ. 2013 Jun;5(2):320-2.

P-95

SUCCESSFUL BIRTH OF EGG DONATION PREGNANCY FOLLOWING RADICAL TRACHELECTOMY FOR CERVICAL CANCER

Anna McDougall, Fredric Willmott, Arjun Jeyarajah, Vincent Oon, Kalpana Rao

Barts Health, London, UK

We present the case of a 48 year-old nulliparous woman with a post- trachelectomy pregnancy following an 'in vitro fertilization' with a donor egg. Only one case of egg donation pregnancy post RT has previously been described in literature.

She presented at 5 weeks gestation to the Early Pregnancy Unit in Newham University Hospital, having undergone radical abdominal trachelectomy (RT) and laparoscopic pelvic node dissection for Stage 1b Grade 3 squamous cell carcinoma of the cervix, 13 years ago. She had essential hypertension and gestational diabetes requiring insulin. An individualised care plan with oral progesterone, fortnightly isthmic scans, vaginal swabs, relative inactivity from 20 weeks gestation, second trimester prophylactic steroids and antibiotics, serial growth scans and an elective caesarean section at 34 weeks.

The most frequent pregnancy complications reported in literature are miscarriage (34%), followed by chorioamnionitis with or without rupture of membranes (15.5%).

If a woman labours following RT, there is a serious risk of uterine rupture and haemorrhage. A classical caesarean section is therefore frequently performed to avoid tearing the scarred, attenuated lower segment held together by the isthmic cerclage. In this case, serial trans-vaginal scans showed progressive lengthening of the isthmus from 6 to 18mm.The lower segment was found to be well formed at caesarean section at 34 weeks facilitating a lower transverse uterine incision and delivery of a healthy female infant.

Cervical cancer is the second most common cancer among women up to 65 years of age. With advances in assisted reproductive techniques, post/peri-menopausal women may wish to preserve their uterus for reasons of future fertility. This case illustrates how women requiring egg donation fertility treatment following RT can achieve a successful outcome.

P-96

WHAT IS THE RATIONALE FOR COLPOSCOPIC DIRECTED PUNCH BIOPSY IN THE MANAGEMENT OF HIGH GRADE DYSKARYOTIC SMEARS

Mohammed Abdullah Agha, Sumita Nayak, Philip Reginald

Wexham Park Hospital, Slough, UK

Background and aim

The role of colposcopy- directed biopsy in the management of high grade dyskaryosis is under debate. It improves accuracy of colposcopy. However, punch biopsies may be poor in quality, unrepresentative, miss early invasive disease, delay treatment, increase patient's anxiety and costs, threaten compliance.

Our objective is to determine the value of colposcopic directed biopsy compared to the practice of See and Treat policy in the management of women with high grade dyskaryosis.

Methods and material

A list of patients referred with high grade dyskaryosis to our trust's colposcopy clinics in the period from 2011-2013 was reviewed.

Details of age, colposcopy assessment, experience of the colposcopist, management decisions and histology results were collected. Rates of the need to attend for subsequent treatment after colposcopy directed biopsy and of the normal histology in women who had treatment at the first visit were analysed.

Results

A total number of 1029 of referrals were included in our study. Colposcopic directed punch biopsy was performed in 132(12.8%) patients, while 849(82.5%) were treated with diathermy loop excision. 48 (4.7%) patients had no intervention. Out of those who underwent loop excision, 33(3.9%) of them showed either normal histology or HPV related changes in their specimens. The 132 patients who had colposcopic directed punch biopsy, 66(50%) returned for definitive treatment. Of the remainder, 12(9.1%) had no further follow-up recorded, 34(25.8%) had normal follow-up smears and did not need further intervention. 20 (15.1%) patients had abnormal follow-up smears at 6 months (with or without HPV testing) and 10(7.6%) of those had loop excision, the loop histology of one of them showed invasive cancer.

Discussion

In our data, more than half of those who had colposcopic directed punch biopsy, needed a further appointment for definitive treatment. If everyone with high grade dyskaryosis is treated at the first visit, it would clearly lead to over-treatment in some cases. Factors that determined the decision at the time of colposcopy would be discussed.

P-97

IS ENDOCERVICAL CYRPT INVOLVEMENT BY CIN2-3 ON PRETREATMENT CERVICAL BIOPSY AND MULTIPARITY A RISK FACTOR FOR TREATMENT FAILURE FOLLOWING COLD COAGULATION? AN OBSERVATIONAL COHORT STUDY

Dimitrios Papoutsis, Martyn Underwood, William Parry-Smith, Jane Panikkar

Shrewsbury and Telford Hospitals NHS Trust, Shropshire, UK

Introduction
Cold coagulation has been shown in a recent metanalysis of 13 studies to have comparable cure rates with other excisional methods for the treatment of CIN2-3 pathology. Nevertheless, on review of literature no subgroup analysis study has been found to highlight any risk factors for increased failure rates following cold-coagulation. The aim of our study was to identify the risk factors that increase the cytology recurrence at follow-up after cold-coagulation treatment.

Methods
We investigated the cohort of women who underwent cold-coagulation treatment between 2001-2011. We retrospectively collected data from our colposcopy unit database. Women with previous cervical treatment were excluded.

Results
559 women were identified with a mean age of 28.7 (SD=6.2) years. 66.3% were nulliparous with smokers involving 35.3% of women. Referral cytology, pretreatment cervical biopsies and colposcopy were high-grade in 51.9%, 71.9% and 45.8% respectively. Endocervical crypt involvement (ECI) on pretreatment cervical biopsy involved 9.7% of patients. Mean follow-up was 37.2±28.8 months. Overall cytology recurrence (mild/moderate/severe dyskaryosis) at 6 and 12-months follow-up was 7.4% and 5%. High-grade cytology recurrence (moderate/severe dyskaryosis) involved 2.7% (n=15) of women over the entire follow-up period. Multiple regression analysis showed that ECI on pretreatment cervical biopsy was a risk factor for high-grade cytology recurrence (HR=3.72; 95%CI:1.18-11.71;p=0.024). There were no risk factors identified for overall cytology recurrence. However, when cytology tests with borderline nuclear changes at follow-up were pooled with mild/moderate/severe dyskaryosis cytology tests, then parity≥2 was a risk factor for cytology recurrence (HR=1.71; 95%CI:1.08-2.69;p=0.022).

Conclusion
Our study has shown that multiparity (≥2) and the presence of ECI on pretreatment cervical biopsy are significant risk factors for cytology recurrence following cold-coagulation. These two risk factors should be taken in consideration when deciding to perform ablative methods of treatment for CIN pathology.

P-98

TOC SMEARS – CYTOLOGY NEGATIVE, HPV HR POSITIVE

Niamh Doherty, Kevin Devlin, Daniel Douglas

Altnagelvin Hospital, WHSCT, Derry, Northern Ireland, UK

Background

Virtually all cervical cancers are caused by HPV with HPV16 responsible for approximately 70% of cases and HPV18 the next most prevalent.

HPV Test of Cure (TOC) was introduced to the Western Trust on 28/1/2013. 2 patients groups were identified for benefit. The first included those patients who had had treatment for CIN and re-attended for first follow-up smear at 6 months.

NHS Cervical Screening programme dictates that patients with TOC smear: Cytology Negative, HRHPV Positive should be referred to colposcopy.

Aim

This study aimed to review

(1) Circumstances of TOC

(2) Typing of HRHPV identified in such patients

(3) If and when follow up colposcopy took place

Method

All patients reporting TOC Cytology Negative, HRHPV positive in the first 20 months of introduction were identified from lab records, n=146. A random sample of 50 patients was reviewed using Excelicare database

Results

(1) Of the 50 patients attending for TOC following treatment, 43/50 patients attended a smear only clinic while 7 patients has a smear at colposcopy

(2) HRHPV Distribution in cytology negative smears: HPV 16, 9 (18%); HPV 18, 3 (6%); HPV Other, 33 (66%); HPV Other +16, 5 (10%)

(3) Follow up. 4% of patients were automatically discharged following TOC smear result. 18% of patients had follow-up smear only. 78% of patients were followed up at colposcopy with an interval range of 2-12 months and most frequent follow-up at 6 months.

Conclusion

Persistent HRHPV distribution did not reflect background rates of HPV subtypes with 76% of cases reporting HRHPV Other.

Only 78% of patients were followed up in colposcopy as recommended. Of those followed up, follow up varied significantly with a range in intervals 2-12 moths. This may reflect the lack of clear evidence and standards in this area.

P-99

AUDIT ON THE MANAGEMENT OF WOMEN WITH CGIN AT A DISTRICT GENERAL HOSPITAL

Amita Sahare, Michael Ekong, Yatin Thakur

Basildon Hospital, Basildon, UK

Management of women with glandular neoplasia on cervical smear has been controversial as the origin of cells can be endometrial or cervical. These cases are few and have high risk of adenocarcinoma of cervix and endometrium. NHSCSP guideline advise cylindrical shaped cervical excision which includes transformation zone and portion of endocervix.

Aim

To determine whether NHSCSP May 2010 guideline is followed in managing? Glandular neoplasia detected on cervical cytology report and to study the histology result of the excisional biopsy

Methodology

Retrospective audit on patients who had? Glandular neoplasia detected on cervical cytology between 2012 -2014. There were total 27 women in this study.

Results

100%women with? Glandular neoplasias on cervical cytology were offered target appointment of within 2 weeks. Only 44% women were detected to have high grade lesion on colposcopy. LLETZ with excision of some endocervical component was performed for 100 % women. Histology of the LLETZ specimen showed 15% women had adenocarcinoma, 44% had CGIN with or without CIN , 15% had CIN.

In 33 % histology specimens, margins were not clear of diseases which were discussed in MDT meeting for further plan of management. In 44%, margins were clear and were followed up after 6 months for colposcopy and cervical smear. The repeat smears did not reveal any lesion.

Conclusion

The NHSCSP May 2010 guideline was followed, which was facilitated streamline and uniform management of these cases. No women had recurrence of the disease at the 6 month follow up. Screening protocol Algorithm for HPV triage and TOC was released by Public health England in July 2014 and this will be a useful tool to manage women after LLETZ treatment.

P-100

THE OUTCOME OF CONSERVATIVELY-MANAGED CIN2 IN A DISTRICT GENERAL HOSPITAL

Charles Baker[1], *Jake Tempo*[2], *Louise Melson*[1]

[1]*Poole Hospital NHS Foundation Trust, Poole, UK*
[2]*University of Southampton, Southampton, UK*

Background
Cervical Intraepithelial Neoplasia (CIN) 2 progresses to invasive carcinoma in approximately 5% of cases. Standard treatment is with a Large Loop Excision of the Transformation Zone (LLETZ), but this is an invasive procedure with associated risks; there is an increase in second trimester miscarriage and premature labour associated with cervical insufficiency.

Aim
The aim of this study is to investigate the rate of regression of conservatively-managed disease amongst patients with histologically confirmed CIN 2 to verify the safety and efficacy of this method of management.

Method
In the period 2011-2014, 51 patients in colposcopy clinic with confirmed CIN 2 were managed conservatively. These were carefully selected young nulliparous women with the entire lesion visible at colposcopy, who were considered likely to attend follow-up. All had CIN 2 or CIN 1-2 on biopsy. At the follow-up appointment a biopsy or LLETZ procedure was performed as per local protocol and the histology result was used to determine progression, persistence or regression of dysplasia.

Result
CIN 2 regressed in 37 patients (73%), it persisted in seven patients (13%), and seven patients' (13%) CIN 2 had progressed to CIN 3. No patients' neoplasia had progressed to carcinoma.

Conclusion
Conservative treatment of CIN 2 with regular observation is a suitable alternative to LLETZ procedure, particularly in women of a child-bearing age.

P-101

IS DEPTH OF EXCISION THE PRIMARY CAUSE OF FAILURE OF THE 'TEST OF CURE'?

Neelam Potdar, Esther Moss, Ilze Silina, Kristine Pcolkina

University Hospitals of Leicester, Leicester, UK

Introduction
The Test of Cure (TOC) HPV test was introduced in order to identify women at low risk of recurrence following local cervical treatment for CIN.

Methods
A retrospective review of a cohort of women undergoing a LLETZ for abnormal cervical cytology and/or colposcopic examination selected by consecutive hospital number. Statistical analysis was performed to identify factors significantly associated with failing the TOC (High Grade cytology or HPV +ve).

Results
In total 899 cases were reviewed, TOC information was available for 611 cases. The median age of the cohort was 31 years, range 18 to 69 years. There was a difference in the referral cytology between the two groups with the women who failed TOC (TOC-) having a higher rate of low-grade cytology (34.8%) as compared to the women that passed TOC (TOC+) (23.3%). There was however, no significant difference in the histological diagnosis in the LLETZ specimens between the groups, with 84.2% CIN2-3 for TOC+ and 83.0% for TOC-. The depth of LLETZ biopsies did not significantly differ between the TOC+/TOC- groups. Multivariate logistic regression identified that age >50 years was a significant factor in failing TOC, independent of depth of excision, with women in this age group having an odds ratio of 2.20 (95% CI 1.26, 3.85) of failing compared to women under 50 years, p=0.006.

Conclusions
Depth of excision does not appear to be a significant factor in TOC failure, however in our cohort, women >50 years who have undergone a LLETZ biopsy had a significantly higher rate of TOC failure than women <50 years.

P-102

IS THERE A PLACE IN PRE-PREGNANCY FOR CERVICAL LENGTH SCANNING?

Nikita Deegan[1], Sinead Cleary[1], Tom D'Arcy[1], Nadine Farah[1]

[1]Colposcopy Unit Coombe Women and Infants University Hospital, Dublin, Ireland
[2]UCD Centre for Human Reproduction Coombe Women and Infants University Hospital, Dublin, Ireland

Excisional treatment for cervical intra-epithelial neoplasia (CIN) can shorten the cervix and increase the risk of preterm delivery[1]. Cervical cerclage may be warranted in women with a short cervix on scan in early pregnancy and occasionally an abdominal cerclage may be required[2].

The aim of this study was to examine whether pre-pregnancy cervical length scanning can identify women that may benefit from pre-conceptual trans-abdominal cerclage.

Women who attended the colposcopy unit at CWIUH from January 2012 to October 2014 who had a histroy of at least one excisional treatment and were considering future pregnancy were recruited. Age, parity, indication for scan, and depth of the excised specimen were recorded prospectively and cervical length was measured by trans-vaginal ultrasound.

In total 97 women were recruited. Fifty women had a history of multiple excisional treatments of which 13 had a short cervix (<25mm) and 15 had a borderline short cervix (25-30mm). Thirty nine women had a history of one treatment and a clinically short cervix on examination. In this group 7 had a short cervix and 14 had a borderline short cervix. Eight women had a history of preterm delivery following excisional treatment. Of those 2 had a short cervix and 4 had a borderline short cervix. In total, 22 of 97 women were referred for pre-pregnancy trans-abdominal cerclage.

Our results demonstrate that pre-pregnancy cervical length scanning after excisional treatment to the cervix can identify women that may benefit from pre-conceptual trans-abdominal cerclage.

1 Poon LC, S. M. (2012 May). Large loop excision of transformation zone and cervical length in the prediction of spontaneous preterm delivery. BJOG, 119(6):692-8.

2 Burger NB, E. J. (2012 Oct). Preconceptual laparoscopic abdominal cerclage: a multicentre cohort study. American Journal of Obstetrics and Gynaecology, 207(4):273.

P-103

COLPOSCOPY SERVICE FOR WOMEN UNDER 25- IS THIS JUSTIFIABLE? A RETROSPECTIVE OBSERVATIONAL STUDY

GRC Silwa, L Rathnasekara, Gulafshana Khan, Anita Juliana

Queens Medical Centre, Nottingham, UK

Introduction
In England since 2004 cervical screening begins at age the 25 years. One study in 2009 found no evidence that screening women aged 22–24 reduced the incidence of cervical cancer at ages 25–29 (OR 1.11, 95% CI 0.83–1.50) which was also confirmed by earlier studies done by other groups. By contrast abnormal vaginal bleeding is relatively common in this age group.

Study population
This study looked at the data of under 25 who presented to the colposcopy clinic from 1st January 2013 till 30th June 2013.

Aims of the Study
To study the incidence of high grade CIN and the presenting symptoms amongst this cohort.

Results
Total of 153 women attended the clinic in a six month period. The Mean age of the study population was 22.67 years.

The most common presenting complaint was post coital bleeding followed closely by abnormal smear.

Amongst these 153 referrals 58.16% (n=89) women underwent cervical punch biopsy at their first visit and 8.9% (n=8) of results were normal. Half of these women (50.55%, n=55) showed Inflammatory and HPV changes and low grade CIN. CIN2,CIN3, CGIN and micro-invasive cancer were diagnosed respectively in 14.6%(n=13),16.85%(n=15), 1.12%(n=1),1.12%(n=1).

21.5% (n=33) of these women presented with abnormal smear and 44.4%(n=14) of those with abnormal smear had High-grade CIN.

49% (n=39)) women of our study population had LLETZ. High grade CIN was diagnosed in 32.57 % (n=29) of the cohort that underwent biopsy.

Conclusion
This study concludes that high-grade lesions in the cervix were found in 32.57% of the women under 25 presenting to the colposcopy clinic in a six-month study period. Approximately 22 %(n=33) women were referred due to abnormalities in their smear and 30%(n=10) of those women had high grade CIN. Approximately 12% (n=10) of those women with high grade CIN presented with post coital bleeding.

This emphasizes the fact that women under 25 do need surveillance if they are high risk or if they have persistent symptoms.

P-104

COMPARATIVE TREATMENT OUTCOMES FOLLOWING CERVICAL TREATMENTS: LOOP EXCISION & THERMOCOAGULATION

Sanchaita Das, Satthiyabama Arutchelvam, Debbie Doyle, David Ankers

Mid-Cheshire NHS Foundation Trust, Crewe, Cheshire, UK

Introduction
Several excisional and ablative methods exist for treatment of CIN. This analysis compares LLETZ with thermocoagulation, which is an uncommonly used technique, but is suitable for all grades of CIN.

Methods
This is a prospective analysis where all women treated for CIN (any grade) and known HPV status during a twenty-one month period from 17th July 2012 until 23rd April 2014 at Mid Cheshire NHS Foundation Trust were included. With a total of 80 women identified, 40 patients had themocoagulation and 40 patients had LLETZ. All patients were followed with test of cure. NHS Cervical Screening Programme and local Trust guidelines on colposcopic management were used as standards.

Results
From the thermocoagulation group 16/40 (40%) were CIN 1, 14/40 (35%) were CIN 2 and 5/40 (12.5%) were CIN 3, one of which also had CGIN. From the LLETZ group 4/40 (10%) were CIN 1, 6/40 (15%) were CIN 2 and 30/40 (75%) were CIN 3, one of which also had CGIN. 30/40 (75%) from the thermocoagulation group and 31/40 (77%) from the LLETZ group had a negative smear at 6 months post treatment. 4/40 (10%) patients had persistent low grade abnormalities following thermocoagulation treatment, with 1/40 showing high grade abnormality and 1/40 showing inadequate result. This compares with 5/40 (12.5%) showing persistent low grade changes following LLETZ with 1/40 showing high grade abnormality. 3/40 (7.5%) from the themocoagulation group had no results by 6 months.

Conclusion
This analysis illustrates the effectiveness of thermocoagulation for the management of CIN in appropriately selected patients. Criteria for thermocoagulation included the lesion being completely visible, could be easily assessed by at least two punch biopsies including its upper limit, with no suggestion cytologically, colposcopically or histologically of invasive disease and the woman had not undergone any previous destructive cervical treatment.

P-105

AUDIT OF REPEAT LLETZ BIOPSIES FOR HISTOLOGICALLY POSITIVE MARGINS: IS THE INCREASED RISK OF MORBIDITY NECESSARY?

Christopher Flood[1], *Natalie Tang*[2]

[1]*Nottingham City Hospital, Nottingham, UK*
[2]*University of Nottingham, Nottingham, UK*

Aim

To assess the value of repeat LLETZ procedures for positive histological margins and whether the site of the positive margin determined persistent disease. This was in response to a perceived high rate of repeat LLETZ and the associated inherent increased morbidity associated with repeat LLETZ, especially in the population under the age of fifty(anxiety, miscarriage, preterm birth, PROM, increased caesarean section rate, cervical stenosis, unsatisfactory colposcopy and hysterectomy). There is an associated increased risk of progression and recurrence with high grade disease at the margins of LLETZ biopsies.

The audit standard was to find 21% of the repeat LLETZ biopsies with residual disease (A.Treacey et al, 2010, IJGP).

Methods

Retrospective review of histology of 89 patients who had undergone repeat LLETZ procedures for positive margins between 2010 and 2013 at Nottingham University Hospitals. The grade of CIN was noted in initial and repeat LLETZ and which margin(s) were positive.

Results

42% of Repeat LLETZ biopsies had residual disease/positive histology. Highest rate of positive repeat LLETZ if initial positive margins were Deep Stromal or all (ecto/endocervical and deep stromal) but not significantly. The repeat LLETZ biopsies were found to have positive margins in 13.4%.

Conclusion

Whilst there was a concern that there was a high rate of repeat LLETZ procedures being performed, the necessity has been confirmed with a high rate of positive histology found after a repeat procedure. Further analysis is to be arranged to determine causal factors including depth of excision and whether the positivity is operator dependent.

P-106

SCREENING AT 25 – ARE WE MISSING CANCER?

Tim Hookway[1], *Jessica Mcloughlin*[2], *Paul Carter*[1,2]

[1]*St George's Hospital, Tooting, London, UK*
[2]*St George's Hospital Medical School, Tooting, London, UK*

In 2004, the age at which women were enrolled into the national cervical screening programme (NHSCSP) was raised from 20 to 25. Many clinicians have felt uneasy about this change. Recent statistics show that the incidence of invasive disease, in the under 25 age group, is now similar to that seen before the introduction of screening. We reviewed 10 years of colposcopy data, since the guideline change, in order to establish the effect on the incidence of high grade abnormalities detected at the first ever smear test.

Data from the ViewPoint colposcopy software was analysed retrospectively. All women who attended for colposcopy, with an abnormal first smear, were included. A total of 6,036 cases were identified and included in the analysis. In the 3 years prior to 2004, there were no women, over 25, with an abnormal first (ever) smear who had high-grade change. Eighteen per cent of women, under 25 with an abnormal (first smear, had histologically proven high grade changes, of which 1% had invasive disease. In contrast, since 2004, there were 14 % of women, under 25, referred with an abnormal first smear test who had confirmed high-grade change (of which 0.4% had invasive disease). Of concern was the finding that, of the women in the over 25 age group, referred with an abnormal (first) smear, 37% had high grade change, of which 2.3% had invasive disease.

Our data suggests, therefore, that the increase in the age at first smear may delay the detection of both high-grade change, and invasive disease in this younger population. If other units report similar trends then a change in the age of first smear could be, urgently, considered.

P-107

A REVIEW OF THE VOLUME AND DEPTH OF EXCISED TISSUE FROM LLETZ PROCEDURES AT POOLE HOSPITAL

Jake Tempo[1], *Charles Baker*[2], *Richard Henry*[2], *Anni Innamaa*[2]

[1]*University of Southampton, Southampton, UK*
[2]*Poole Hospital NHS Foundation Trust, Poole, UK*

Background
Large Loop Excision of Transformation Zone (LLETZ) is linked with preterm delivery (Relative risk 1.19 in women who have undergone LLETZ compared to a punch biopsy (CI=1.01-1.41) and risk is positively correlated with excision volume and depth. Recent studies have shown that excisions of >15mm depth and volumes >2.66cm3 are associated with a doubled risk of preterm birth.

Aim
This study investigates the depth and volumes of all LLETZ procedures performed over a three month period at an NHS colposcopy clinic with particular focus on the sub-group of patients who underwent large excisions.

Methods
Data was analysed from all LLETZ procedures performed between July and September 2014 at Poole Hospital, UK. 54 patients in total were investigated with data including dimensions of biopsy, patient age, presenting cytology results and histological grade. Large excisions were classed as either >15mm or >2.66cm3.

Results
83% of LLETZ excisions performed were of a volumes <2.66cm3 or depths <16mm. There was no significant correlation between colposcopy diagnosis or presenting smear and size of excision (p=0.260 and p=0.329 respectively). The nine large excisions were graded histologically as CIN 1 (n=1), CIN 2 (n=5) and CIN 3 (n=3). The patient with a large excision who had CIN 1 confirmed had a large lesion extending into the cervical canal. The average age for patients undergoing large excisions was 32 years (CI=25-47 years).

Conclusion
Large LLETZ procedures performed at the studied clinic were not the norm and all large excisions could be justified according to current NICE guidelines. Monitoring the depth of excisions of all patients undergoing LLETZ allows interpretation of data to reflect on whether large LLETZ procedures are justified and in patients' best interests.

P-108

STUDY ON MANAGEMENT OF CGIN

Cho Cho, Onnig Tamizian, Sivananadana Korrapati

Royal Derby Hospital, Derby, UK

Objectives
The aim of this study were to review the diagnostic pathway and management of women referred with abnormal glandular smear, to improve the quality of standard in management of cervical glandular intraepithelial neoplasia in colposcopy clinic, to assess the correlation of cytological and histological diagnosis of women with abnormal glandular smear, to identify the percentage of women who needs repeat excision or hysterectomy and to identify the incidence of recurrence.

Study design
Retrospective audit.Total 45 women with abnormal glandular smears were identified over a 5 years period from the cytology database at the Royal Derby hospital. Methods included a review of the case notes for the demographic details, referral smears, referral time to colposcopy clinic, treatment procedures, histology, final diagnosis and incidence of recurrence.

Results
All women with abnormal glandular smear had colposcopic assessment showing 100% compliance. About half of the women (48%) were in the age group of 25-35 years with mean age of 36.3 at the time of referral. 15% of women were parity 0. 40% of women with abnormal glandular smear were seen in the colposcopy clinic within 2 week showing 40 % compliance. 95% of women had excisional treatment at their first visit. 60% of women had complete excision. Histology showed 22% of women had invasive adenocarcinoma, 13% had concomitant CIN, 20% had CIN alone, 42% had CGIN. 27% of women need hysterectomy .1 woman needs chemoradiation due to the advanced disease at the time of referral. No recurrence was noted during study period.

Recommendations
All women with glandular cytological abnormality should be referred to colposcopy clinic within 2 weeks. Initial treatment should aim to get cylindrical shape excisional biopsy including whole TZ with disease free margins. Possibilities of other genital tract glandular abnormalities should also be considered. Any cases with discrepancy between smear and histology should be discussed in MDT meeting. All women with clinically suspected cervical cancer should be referred immediately. To re-audit in 12-24 months.

FOR YOUR NOTES

AUTHOR INDEX

FOR YOUR NOTES

Protect her from cervical cancer and from overtreatment

Roche Cervical Cancer Portfolio
For each woman there is a strategy

Come and visit the Roche Stand Nos. 5 & 6 in the Exhibition Hall

www.hpv16and18.co.uk
Roche Diagnostics Limited, Charles Avenue, Burgess Hill RH15 9RY
Tel No. 01444 256000