

and Cx NPM for the detection of GC in women, highlighting a need to perform targeted training, review the criteria for NPM and develop additional point of care tests for GC.

#### P74 EPIDEMIOLOGY OF AN *NEISSERIA GONORRHOEAE* OUTBREAK IN A LOW PREVALENCE AREA

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<sup>1</sup>J Shone, \* <sup>1</sup>C Cunningham, <sup>1</sup>G Orange, <sup>2</sup>K Eastick, <sup>1</sup>D Yirrell, <sup>1</sup>S Allstaff. <sup>1</sup>Ninewells Hospital & Medical School, Dundee, UK; <sup>2</sup>Scottish Bacterial Sexually Transmitted Reference Laboratory, RIE, Edinburgh, UK

**Background** In January 2011, an increased number of gonococcal (GC) isolates was noted within the local bacteriology department. A "look back" exercise was initiated for all incidences of GC infections during the previous 13 months, while new episodes of GC infection were monitored to ascertain whether this increase represented an outbreak.

**Aims** To determine the epidemiology of GC infection observed during an outbreak of *Neisseria gonorrhoeae* within the local area.

**Methods** Cases of GC infection within our Health Board area were identified by culture or nucleic acid amplification test (NAAT) for the period December 2009 to April 2011. *N. gonorrhoeae* multi-antigen sequence typing (NG-MAST) was performed on positive isolates or NAAT samples. Patient demographics were gathered at the local sexual and reproductive health (SRH) clinic.

**Results** 73 episodes of GC infection were recorded in one geographically distinct area of our Health Board between December 2010 and April 2011 (the outbreak). Nineteen cases were documented for the same period the previous year. No similar increase in GC diagnoses was observed in neighbouring areas. Chlamydia cases remained relatively stable. Patient demographics were available for 62 of the 67 cases diagnosed at the local SRH clinic. Of these, the majority of cases were male (66.1%) (of which 22% were MSM), under 25 years of age (71%), heterosexual (78.5%) and of White Scottish ethnicity (95.2%). 40 (64.5%) patients (29 male and 11 female) presented with symptoms of GC infection and 19 (29.2%) as GC contacts. The predominant NG-MAST sequence type was ST26.

**Discussion** The epidemiology of this outbreak is atypical, since GC infection and NG-MAST ST26 has been more commonly found in men who have sex with men in Scotland. Despite enhanced surveillance, no sexual networks or links to specific venues were identified. A gonorrhoea awareness campaign was launched in May 2011.

#### P75 DO CASH INCENTIVES INCREASE THE UPTAKE OF CHLAMYDIA TESTING IN PHARMACIES?

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<sup>1</sup>S J Martin, \* <sup>2</sup>M J Currie, <sup>2</sup>L S Deeks, <sup>3</sup>G M Cooper, <sup>4</sup>R M Parker, <sup>5</sup>R Del Rosario, <sup>6</sup>J S Hocking, <sup>2</sup>F J Bowden. <sup>1</sup>Canberra Sexual Health Centre, Academic Unit of Internal Medicine, Australian National University Medical School, Canberra, Australia; <sup>2</sup>Academic Unit of Internal Medicine, Australian National University Medical School, Canberra, Australia; <sup>3</sup>Faculty of Health, University of Canberra, Canberra, Australia; <sup>4</sup>Australian Primary Health Care Research Institute, Australian National University, Canberra, Australia; <sup>5</sup>Canberra Sexual Health Centre, Canberra Hospital, Garran, Australia; <sup>6</sup>Centre for Women's Health, Gender and Society, Melbourne School of Population Health, University of Melbourne, Melbourne, Australia

**Background** Chlamydia screening uptake rates in Australian and overseas pharmacies vary widely (11% to 58%).

**Aim** To determine the effect on the uptake of chlamydia screening in community pharmacies when a cash reward is offered to young people and participating pharmacies.

**Methods** The study was advertised in print and electronic media. People aged 16–30 years requested, or were offered, chlamydia testing kits by pharmacy staff (assistants and pharmacists). Participants who provided a urine sample and completed a questionnaire received AUD\$10; pharmacies received AUD\$10 per person recruited. Urine specimens were tested in pools using PCR, with reflex testing of individual samples when the pool tested positive. Positive cases were notified by sexual health nurses and offered treatment.

**Results** Six urban community pharmacies took part in the study, each for 15 days. 979 testing kits were given out and 970 sample pots returned (99.1%); 66 (7%) did not contain urine. 74% (670/904) of the urine samples were determined to be from unique individuals, 65% of whom were male. 19 people (13 females and 6 males) tested positive; positivity rates were 5.2% (95% CI 2.8 to 8.8) for females and 1.4% for males. 11 (61%) of those testing positive were contacted and eight attended a local sexual health centre for treatment, three were treated elsewhere. Of the eight people treated at the sexual health centre, two females aged 15 and 20 years were diagnosed with pelvic inflammatory disease. Contact with the remaining eight positive individuals was not possible due to disconnected, incorrect or non-existent telephone numbers.

**Conclusion** The 68% specimen return rate found in this study significantly exceeds those reported elsewhere. Strategies to prevent repeat testing, non-urine specimens and incorrect contact numbers are needed to ensure good clinical care and optimum use of resources.

#### P76 EQUIVOCAL APTIMA COMBO 2 RESULTS: WHAT DO THEY MEAN IN CLINICAL PRACTICE?

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S Cassidy, \* R Artykov, J White. Guy's and St Thomas' NHS Trust, London, UK

**Background** Molecular diagnostic tests have become standard of care for detection of gonococcal (GC) and chlamydial (CT) infections. The Aptima Combo 2 (AC2) test is widely used and is highly sensitive and specific, even for non-genital specimens. Equivocal results occur when the initial AC2 assay detects target RNA but the confirmatory Aptima GC or CT assay fails to detect a different RNA sequence in the same specimen.

**Aim** To determine whether equivocal AC2 (EAC2) results were predictive of subsequently confirmed infection in our GUM/HIV clinic population.

**Methods** Retrospective review of all EAC2 results for GC or CT at 3 urban UK GUM/HIV clinics from January to December 2011. Patients with EAC2 results were routinely recalled for repeat testing unless treated at the initial visit.

**Results** From a total of approximately 38 000 AC2 tests performed in 2011, 3118 (8.2%) were confirmed positive: 1189 GC and 1929 CT infections. There were 222 EAC2 results in 2011 (0.6% of total AC2 tests); 45 (20.3%) occurred in women, the majority (73%) of which were equivocal genital CT results. Of the 177 EAC2 results in men (mostly MSM), 70% were non-genital specimens. Equivocal pharyngeal GC was common, comprising one-third of all male EAC2. Of 34 EAC2 patients analysed in more detail, 5 were GC/CT contacts and 24/34 reported unprotected sex at the site of the EAC2. None with equivocal GC had GC positive culture results, at the time or subsequently. Of 19 men with EAC2 GC results, 6 (all MSM) had confirmed GC at another mucosal site at that visit. 30/34 patients had the AC2 test repeated (range 7–24 days after initial test); 29 were AC2-negative and one remained equivocal (see abstract P76 table 1).

**Conclusions** EAC2 results are uncommon but seem to occur in those at higher risk for infection; yet the vast majority does not have infection confirmed on subsequent testing. This suggests that these are spurious results, possibly from contamination, or low organism load infections that do not persist; thus routine treatment is not necessarily warranted.

Abstract P76 Table 1 Rates of equivocal GC and CT results according to gender and site

| Gender and site of EAC2 test result | No. of patients with equivocal GC result | No. of patients with equivocal CT result |
|-------------------------------------|--|--|
| Women                               |  |  |
| EC                                  | 6  | 18                                       |
| SSVS                                | 2  | 15                                       |
| RS                                  | 1  | 0  |
| TS                                  | 1  | 1  |
| Urine                               | 0  | 1  |
| Men                                 |  |  |
| RS                                  | 29                                       | 20                                       |
| TS                                  | 60                                       | 14                                       |
| Urine                               | 30                                       | 22                                       |
| Other                               | 1  | 1  |

EC, endocervical; RS, rectal swab; SSVS, self-collected vaginal swab; TS, throat swab.

## P77 COLPOSCOPY OF CERVICAL WARTS

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J Evans,\* E Toeima, M Elsayy. *Norfolk and Norwich University Hospital Trust, Norfolk, UK*

**Background** BASHH guidelines for the management of genital warts do not recommend colposcopy for women with cervical warts unless there is diagnostic uncertainty or clinical concern. Our local cervical cytology guidelines advise colposcopy regardless of cervical cytology result.

**Aim** To review the colposcopic outcome of women referred from our genitourinary medicine department because of cervical warts.

**Method** Retrospective case note review of women referred for colposcopy because of cervical warts from December 2005 to November 2010.

**Results** 25 women with cervical warts underwent colposcopy. The median age was 22 years (range 17–52 years). Four of the 25 were found to have a normal cervix at the time of colposcopy. 21 of 25 had persistent cervical warts, three consistent with benign human papilloma virus (HPV) infection and in whom no further action was taken. 18 of 21 with persistent cervical warts underwent biopsy. Histological results indicated 10 had HPV only, six had CIN 1, one had CIN 2, and one had normal histology. The woman with CIN 2 and one with CIN 1 had a complete LLETZ excision of the lesion. All women with CIN were under 25 years old.

**Conclusion** A third of the women biopsied had CIN, however only one had a high grade abnormality. No invasive cancers were found. Conservative management for young women with CIN 2 is acceptable in current colposcopic practice. Our study indicates unscheduled screening or referral to colposcopy is unrewarding.

## Viral STIs

## P78 THE ACCEPTABILITY OF DIGITAL SELF-EXAMINATION IN MEN WHO HAVE SEX WITH MEN (MSM) AT RISK OF ANAL INTRAEPITHELIAL NEOPLASIA (AIN)

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<sup>1</sup>J Bayley, <sup>2</sup>N Perry, <sup>2</sup>S Shaw, <sup>3</sup>L Campbell, <sup>2</sup>D Richardson. <sup>1</sup>Kings College Hospital, London, UK; <sup>2</sup>Royal Sussex County Hospital, Brighton, UK; <sup>3</sup>Kings College London, London, UK

**Background** AIN is a pre-cancerous change in the anal mucosa caused by human papilloma virus (HPV) which untreated, may progress to anal squamous cell carcinoma with 500 new cases per year in the UK. There is currently no evidence about the efficacy of

self-examination, but this may be a quick, cheap and effective screening tool to aid early diagnosis and prevent cancer.

**Methods** Patients attending a GU/HIV clinic were given a questionnaire exploring knowledge and risk factors of AIN and attitudes to self-examination. They were then given an educational leaflet on what to do and feel for. Inclusion criteria were males >18 years old who identified as MSM. Results on an SPSS database were analysed using standard statistical methods.

**Results** 103 questionnaires were returned, 60 (58%) were HIV positive. 10/103 (9.9%) were aware of AIN. 68/93 (73.1%) who were unaware of AIN wanted more information about the condition. 95/103 (92.2%) thought digital self-examination was acceptable. 55/103 (53.4%) self-examined regularly. Of people who self-examined 26/55 (47.3%) had a history of warts, compared to 12/48 (25%) with no history of warts ( $p=0.02$ ). 38/48 (79.2%) who did not self-examine wanted more information compared to just 34/55 (61.8%) who regularly self-examined ( $p=0.06$ ).

**Discussion** This study highlights a lack of awareness about AIN and the acceptability of self-examination for this condition. Over half were regularly self-examining but only a small proportion had heard of AIN, suggesting that although they are happy to self-examine, they are unsure what to look for. Most MSM wanted more information. Digital self-examination may therefore provide a rapid, cheap, effective and acceptable screening tool. This may help to diagnose AIN earlier and allow education about self-examination and information regarding AIN to be regularly incorporated into clinic visits for MSM. Further research into the efficacy of this technique for detecting AIN is required.

## P79 COLPOSCOPIC MANAGEMENT OF CERVICAL WARTS

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A Nori,\* S Kola-Bankole, B T Goh. *Barts and The London NHS Trust, London, UK*

**Background** There is a paucity of evidence and guidance for genitourinary medicine (GUM) clinicians on the management of cervical warts (CW). These patients are either treated in a routine clinic without colposcopy examination (CE) or referred to gynaecology.

**Aim** To describe the management of patients in a GUM diagnostic colposcopy service where a CE ( $\times 7$  magnification) performed before and after application of 5% acetic acid to the cervix to identify flat acetowhite epithelium (AWE) in addition to the CW.

**Methods** Notes of patients who attended the service with a diagnosis code of C11 between June 2006 and December 2011 were reviewed and 48 patients with CW were identified. Details of demographics, presenting features, associated STI, cervical cytology, biopsy results, treatment and follow-up were analysed.

**Results** Median age of 48 patients was 24 years (range 16–63); 23 (47.9%) were Caucasians, 16 (33.3%) Afro-Caribbeans. 25 patients had no prior cervical cytology as they were under 25 years of age. Of the 23 patients who had a previous cervical cytology, six had a history of abnormal smears. 17 (35.4%) had CW alone, 31 (64.6%) also had vulvo-vaginal/perianal warts. Seven (14.3%) had other concomitant STIs. 15 (30.6%) had AWE that on biopsy showed histopathological evidence of HPV and, 10/15 (66.7%) also had evidence of CIN1/2. Of the 33 patients with no AWE, histopathology was available on 23 CW which showed CIN1/2 in 16/23 (69.5%). 10/48 (20.8%) patients were treated with electrocautery, 11 (22.9%) with excision biopsy and 26 (54.2%), with both. 31 patients responded after the first treatment; nine had a further 1–3 treatments. One recurred after 6 months. 26 patients with associated CIN were referred to gynaecology.

**Discussion** We report a high prevalence of CIN in CW and in associated subclinical lesions in this predominantly young cohort of women, suggesting the need for colposcopy to assess cervical warts or more careful follow-up with cervical cytology.