

**Introduction** Urethral swabs are used for culture of gonorrhoea (NG) in males and for detection of chlamydia (CT) and NG by nucleic acid amplification tests (NAATs). We hypothesised self-collected penile swabs would perform as well as urethral swabs for detection of CT, NG, trichomonas (TV) and mycoplasma (MG).

**Methods** Men having urethral swabs obtained for NG culture in the STD clinic volunteered to collect penile swabs. Urethral swabs were placed into NAAT transport media; then self-collected penile swabs were placed in transport media. NAATs were performed for CT, NG, TV, and MG for urethral and penile swabs. Acceptability questionnaires were given.

**Results** For 203 urethral/penile pairs, there were 32 penile positive for CT (15.8%), 31 urethral positive for CT (15.3%); [sensitivity 96.8% and specificity 98.8% compared to urethral swabs]. There were 29 penile positives for NG (14.3%) and 27 urethral positives for NG (13.3%); [sensitivity 100%, specificity 98.9%]. 25 were Gram stain positive; 21 by culture. For TV, there were 23 penile positives (11.3%), 20 urethral positives (9.9%); [sensitivity 85.0%, specificity 96.7%]. For MG, 24 penile swabs were positive (11.8%); and 29 urethral were positive (14.3%); [sensitivity 79.3%, specificity 99.4%]. CT: 2 samples were penile+/urethral-, 1 was penile-/urethral+. NG: 2 samples were penile+/urethral-. TV: 6 samples were penile+/urethral-, 3 were penile-/urethral+. MG: 1 pair was penile+/urethral-, 6 were penile-/urethral+. There were no significant differences between self-collected penile swabs and clinician-collected urethral swabs for NAATs ( $p = 0.625$  for CT;  $p = 0.248$  for NG;  $p = 0.344$  for TV; and  $P = 0.070$  for MG). 100% of men preferred penile swabs for diagnosis.

**Conclusions** Self-collected penile swabs were as accurate as urethral swabs for the detection of sexually transmitted infections for NAAT assays and could expedite express visits in a busy STD clinic. Penile swabs show promise as a method of utilising one sample for multiple STIs.

**Disclosure of interest statement** The research group has previously received research funding from GenProbe/Hologic. No pharmaceutical grants were received in the development of this study.

#### 010.5 RAPID DIAGNOSIS OF *TRICHOMONAS VAGINALIS* BY TESTING VAGINAL SWABS IN AN ISOTHERMAL HELICASE-DEPENDENT AMPLIVUE® ASSAY

<sup>1</sup>M Chernesky\*, <sup>2</sup>C Gaydos, <sup>3</sup>J Marrazzo, <sup>4</sup>M Hobbs, <sup>5</sup>J Schwabe. <sup>1</sup>McMaster University, Hamilton, ON, Canada; <sup>2</sup>Johns Hopkins University, Baltimore, MD, USA; <sup>3</sup>University of Washington, Seattle, WA, USA; <sup>4</sup>University of North Carolina, Chapel Hill, NC, USA; <sup>5</sup>University of Alabama, Birmingham, AL, USA

10.1136/sextrans-2015-052270.136

**Introduction** Infections due to *Trichomonas vaginalis* are treatable. Diagnostic methods such as wet mount microscopy are rapid but insensitive. Culture or traditional molecular assays are more sensitive but lack rapid results. Biohelix (a Quidel company) has created an isothermal, cassette-based, point-of-care molecular amplified test for the diagnosis of *T. vaginalis* in vaginal samples which can provide a diagnosis in 5 min. The objective was to demonstrate the clinical performance of the AmpliVue® Trichomonas assay on vaginal swabs from women with or without symptoms living in 5 geographical areas of North America.

**Methods** Women attending STD, family planning, colposcopy and OB/GYN clinics were invited to participate using an

investigational research board approved consent form. A health-care worker collected 4 swabs. The first and second swabs were randomised for wet mount and culture (In-Pouch system, Biomed Diagnostics). Cultures were inoculated and read at 2 and 3 days, and wet mount microscopy performed within 1 h of collection. The third was tested in AmpliVue® and the fourth in Aptima TV (ATV; Hologic, Inc), a transcription-mediated amplification assay. AmpliVue® and ATV testing was performed within 48 h. Positives by diagnostic method were compared to each other and agreements with kappa values were calculated between AmpliVue® and ATV.

**Results** A total of 1132 women (373 symptomatic and 759 asymptomatic) were enrolled. Comparing AmpliVue® to culture and wet mount as a patient infected status demonstrated 100% sensitivity, 98.2% specificity and 87.9–100% positive and negative predictive values in patients with or without symptoms. AmpliVue® showed strong overall agreement with ATV (97.5% 0.89 kappa).

**Conclusion** The AmpliVue Trichomonas Assay identified substantially more *T. vaginalis* infections and yielded accurate results in 45 min for the diagnosis and treatment of *Trichomonas vaginalis* in symptomatic and asymptomatic patients representing high and low-prevalence clinics. Clinicians can use this information for their clinics.

**Disclosure of interest statement** Dr. Chernesky has received research funding from Quidel.

## 011 - Partners, places and STI risk

### 011.1 PATIENT-DELIVERED PARTNER THERAPY (PDPT) INCREASES THE FREQUENCY OF PARTNER NOTIFICATION AMONG MSM IN LIMA, PERU: A RANDOMISED CLINICAL TRIAL

<sup>1</sup>Jesse L Clark, <sup>1</sup>Eddy R Segura, <sup>2</sup>Catherine Oldenburg, <sup>3</sup>Jessica Rios, <sup>4</sup>Silvia M Montano, <sup>3</sup>Javier Salvatierra, <sup>3</sup>Manuel Villaran, <sup>3</sup>Jorge Sanchez, <sup>1</sup>Thomas J Coates, <sup>3</sup>Javier R Lama. <sup>1</sup>David Geffen School of Medicine, University of California, Los Angeles; <sup>2</sup>Harvard University School of Public Health; <sup>3</sup>Asociación Civil Impacta Salud Y Educación; <sup>4</sup>US Naval Medical Research Unit-6, Callao, Peru

10.1136/sextrans-2015-052270.137

**Background** Patient-Delivered Partner Therapy (PDPT) improves treatment outcomes among sexual partners of individuals with curable STIs. Although use of PDPT with MSM has been questioned due to the high prevalence of undiagnosed HIV and syphilis in MSM networks, increasing partner notification (PN) through PDPT may promote testing and treatment of otherwise unidentified partners. We assessed the impact of PDPT on self-reported partner notification (PN) among Peruvian MSM with gonorrheal (GC) and/or chlamydial (CT) infection.

**Methods** We screened 898 MSM in Lima, Peru for GC and/or CT between 2012–2014. Screening included syndromic management of urethritis/proctitis and nucleic acid testing for GC/CT at urethral, pharyngeal, and rectal sites (Aptima Combo-2 TMA). Enrollment was limited to participants with symptomatic urethritis/proctitis ( $n = 44$ ) and/or laboratory-diagnosed GC/CT infection ( $n = 263$ ). 173 eligible participants were randomly assigned to receive either standard PN counselling ( $n = 84$ ) or counselling and PDPT (Cefixime 400 mg/Azithromycin 1 g) for up to 5 recent partners ( $n = 89$ ). Self-reported notification of recent partners was assessed by CASI with 155 participants who returned for 14-day follow-up.