Abstracts

**P09.02 REATTENDANCE RATES IN MEN PRESENTING WITH SYMPTOMS OF URETHRITIS – CAN POINT OF CARE TESTING FOR CHLAMYDIA AND GONORRHOEA IMPROVE OUTCOMES?**

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**Introduction** Chlamydia and gonorrhoea are common causes of urethritis. Management is often based on a syndromic approach while awaiting results. This can necessitate prescribing to cover a range of potential pathogens, and uncertainty for patients. Point of care testing (POCT) for chlamydia and gonorrhoea in men with symptoms of urethritis could alter care pathways and reduce reattendance in these patients. The aim of this study was to measure reattendance rates in men presenting with symptoms of urethritis and develop a decision tree care pathway model in order to estimate potential benefits of replacing standard nucleic acid amplification testing with POCT.

**Methods** All men with urethritis symptoms presenting over a three month period were identified using electronic patient records. Urethritis was defined as ≥ 5 pmmi/lpf on a Gram stained urethral smear. Reattendances within 30 days of initial clinic visit and reasons for reattendance were recorded for both microscopy-positive and negative groups. Review of literature was used to provide estimates of improved outcomes if the chlamydia/gonorrhoea POCT result was available prior to the clinical consultation.

**Results** 431 men with urethritis symptoms were identified in a 3 month period. 192 had confirmed urethritis on initial microscopy. 31% of microscopy-positive men and 42% of microscopy-negative men reattended at least once within 30 days of initial visit. Common reasons for reattendance were early morning smear (20%), persistent symptoms (18%), results (16%) and gonorrhoea test of cure (9%). It was estimated that POCT could reduce microscopy by 25% and repeat reattendance following treatment by 75% through improved pathogen-directed treatment and the introduction of gonorrhoea POCT sample drop-off as a test of cure.

**Conclusion** This service evaluation using decision tree care pathway modelling has identified high reattendance rates in men with urethritis symptoms which POCT has the potential to reduce substantially.

**Disclosure of interest statement** PH has received funding from Cepheid directly and indirectly for lecturing on point of care testing and undertaking research on the cost effectiveness of their CT/NG assay. Has also received payment from Atlas Genetics for an article in the Parliamentary Review on the benefits of point of care technology in improving the cost effectiveness of sexual health services. Has also received an honorarium from Hologic for an education talk on STI diagnostics.

**P09.03 TREATMENT OF MYCOPLASMA GENITALIUM WITH AZITHROMYCIN 1 G IS LESS EFFICACIOUS AND ASSOCIATED WITH INDUCTION OF MACROLIDE RESISTANCE COMPARED TO A 5-DAY REGIMEN**

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**Introduction** Mycoplasma genitalium (MG) is an emerging important STI. Failure rates with azithromycin 1 g appear to be increasing. This may be due to the emergence of macrolide antimicrobial resistance as a consequence of extensive use of azithromycin 1 g. An extended regimen of azithromycin 500 mg on day one then 250 mg daily for 4 days (5 day regimen) was introduced in the 1990s for treatment of MG and has high efficacy rates (if no pre-existing macrolide resistance) and is less associated with induction of macrolide resistance. There are no comparative trials of the two regimens. We undertook a meta-analysis of MG treatment studies using the two azithromycin regimens to determine which is more effective.

**Methods** Medline was used to identify published articles including the search terms Mycoplasma genitalium and resistance up to March 2015. Treatment studies using azithromycin 1 g or 5 days were identified in which patients were initially assessed for macrolide resistance genetic mutations, and those who failed were again resistance genotyped were selected. Sensitivity analyses included only patients without prior treatment.

**Results** Six studies were identified totaling 424 patients of whom 78 (18.4%) had received the 5 dy regimen. Only one person failed the 5 day regimen and no resistance was detected. Compared to the 5 day regimen, azithromycin 1 g had a higher risk of failure (difference: 12.9%, 95% CI: 8.4%, 17.3%) and more developed macrolide resistance (risk difference: 12.1% (8.7%, 15.6%)). The 5 day regimen included 52 patients with prior doxycycline treatment when these were excluded sensitivity analysis showed a failure risk difference of 10.3% (2.1%, 18.6%). Resistance risk did not change.

**Conclusion** Azithromycin 1 g is more likely to result in treatment failure and the development of macrolide antimicrobial resistance than 500 mg on day one then 250 mg daily for 4 days.

**Disclosure of interest statement** PH: - Has received funding for providing expert advice on M. genitalium diagnostics. HM – has received a honorarium and travel expenses from Becton Dickenson for a lecture on Mycoplasma genitalium. SI, FG, FK and KB – none to declare.

**P09.04 TRICHOMONAS VAGINALIS AND MYCOPLASMA GENITALIUM: AGE-SPECIFIC PREVALENCE AND DISEASE BURDEN IN MEN ATTENDING A SEXUALLY TRANSMITTED INFECTIONS CLINIC IN AMSTERDAM, THE NETHERLANDS**

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**Introduction** Trichomonas vaginalis and Mycoplasma genitalium (MG) are both common sexually transmitted infections (STI). Both cause similar symptoms in men, namely urethritis and can be treated with antibiotics. Both are also strongly associated with hyperinfection in sexually transmitted infections (STI) clinic in Amsterdam, the Netherlands. This study aims to determine the age-specific prevalence of T. vaginalis and MG and their disease burden in men attending a sexually transmitted infections clinic in Amsterdam, the Netherlands.