low national chlamydia prevalence (estimated prevalence in 2009-2010 was 1.7%, 95% CI 1.0% to 2.3%) combined with small survey sample sizes results in unstable estimates limiting the ability to monitor trends in demographic subpopulations.

Discussion The current US chlamydia surveillance system does not provide valid and timely data to estimate disease burden and monitor trends in chlamydial infection. The use of multiple data sources is not sufficient to offset inherent biases in each surveillance method. Consequently, new approaches to monitoring chlamydia morbidity are needed. Sentinel surveillance may provide higher quality data and a more comprehensive understanding of chlamydia trends

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PATIENT-REPORTED EFFECTS OF VAGINAL LACTOSE AS A PREBIOTIC FOR BACTERIAL VAGINOSIS

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Background Bacterial vaginosis (BV) is a common, frequently recurrent condition typically treated with oral metronidazole. Using lactose as a vaginal prebiotic to support Lactobacilli growth and lactic acid production is a new approach to treating and preventing overgrowth of vaginal pathogens. A vaginal tablet containing lactose 1.2 mg (LadyBalance ApS, Denmark) has been available in Denmark since 2004. For the treatment of BV, it is administered once daily for 1-week; it can subsequently be used on alternate days to prevent recurrence and to maintain the vaginal environment.

 $\pmb{\mathsf{Aims}}$ To evaluate the perceived effect of a lactose vaginal tablet (LVT) on vaginal health.

Methods Women who had used the LVT between 2005 and 2009 were invited to complete a web-based questionnaire.

Results In the 728 responders who had used the LVT, the most commonly reported reasons for use were vaginal discharge with/without malodour (73%/18%), vaginal itching or irritation (37%), and vaginal dryness (16%). 90% of women with self-reported vaginal discharge with offensive odour reported improvement within 1 week. Improvement of symptoms within 1 week was also reported by 81% of women with vaginal discharge without odour, 83% with vaginal itching and irritation, and 76% with vaginal dryness. These effects were generally maintained in women who continued to use the product over longer periods (up to 1 year). Reported side effects were minor and included clear or powdery discharge.

Discussion An LVT offers the potential of a natural treatment for BV, vaginal itching, irritation and dryness and for protection against recurrent BV or vaginal candidiasis. Its lack of serious side effects and drug interactions could make it an attractive alternative to standard therapies. The clinical effectiveness and tolerability of the LVT require further investigation.

Conclusions The LVT was perceived as highly effective in treating a range of vaginal symptoms.

P52

NEW TREATMENT GUIDELINE OF NEISSERIA GONORRHOEAE AND TEST OF CURE: HOW FEASIBLE IS IT?

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Background Treatment failure with oral cephalosporins in gonorrhoea caused by multidrug resistance has been reported. The national guidelines were updated in 2011 due to reduced sensitivity

to antimicrobials. Test of cure (TOC) is recommended in all cases. However data regarding timing of TOC is limited.

Aims To assess (1) the feasibility of implementing new treatment regimen and (2) the optimal time to perform TOC.

Method Retrospective case note review of patients diagnosed with gonorrhoea in a GUM clinic between 1 June 2011 and 30 November 2011 was carried out. Data including demographics, HIV status, sites of infection, treatment and TOC were analysed.

Results 271 (242M, 29F) patients were included. 202 were men who have sex with men (MSM) of which 24% were HIV positive. In MSM group, 87 were urine TMA positive (95% had cultures performed), 115 positive pharyngeal TMA (97% with cultures done), 115 positive rectal TMA (96% had cultures done). 39 heterosexual males had positive urine TMA (94% with cultures done). 18 (62%) females had positive cervical TMA, all with culture performed. 12 (41%) pharyngeal, 5 (17%) vulvo-vaginal and 3 (10%) rectal were TMA positive; 58%, 60%, and 33% of these had cultures performed respectively. First-line treatment was given in 96% of cases. Second line treatments were given mostly due to penicillin allergy. TOC was attended by 55% of patients. 67% of TOC were done within 20 days of treatment. Three of these were positive, 2 within 20 days and one at 57 days post treatment which was a re-infection.

Conclusions New treatment of gonorrhoea is generally accepted by patients. 4% received alternative treatments, which were valid and documented. The majority of patients (74%) had culture performed prior to treatment. TOC uptake was low (55%). However the majority were performed within 20 days of treatment. Follow-up strategies must remain a priority to increase rates of TOC. Further studies are required to determine optimum time for TOC.

P53

PCR SCREENING TESTS FOR CHLAMYDIA TRACHOMATIS OR NEISSERIA GONORRHOEAE DO NOT REQUIRE A SECOND TEST TO CONFIRM: AN AUDIT OF PATIENTS ISSUED WITH EQUIVOCAL RESULTS

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Background UK testing algorithms for chlamydia or gonorrhoea should have a positive predicative value (PPV) >90%. Repeat of testing of screen positive samples might be required to achieve this. Patients issued with unconfirmed positive (equivocal) results are recalled to clinic to submit another sample.

Objectives To assess the clinical utility of supplementary PCRs following a positive PCR screening test result.

Methods Laboratory reports for *Chlamydia trachomatis* or *Neisseria gonorrhoeae* issued to GUM patients between April 2010 and April 2011 were reviewed retrospectively. Positive reports were routinely confirmed by supplementary PCRs and *N gonorrhoeae* culture. Clinical records of patients with equivocal reports were retrieved to determine if infection was confirmed by a second sample on patient recall and the impact of this process on antibiotic management.

Results Over 15 000 patients were tested during the study period. The prevalence of chlamydia and gonorrhoea was 972 (5.75%) and 76 (0.50%), respectively. A further 78 chlamydia and 2 gonorrhoea equivocal reports were issued. Only 56 (72%) patients with an equivocal chlamydia report returned to clinic, and of these, only 41 (73%) gave a second sample to retest. PPV of the PCR screening test was calculated at 98.0% and 97.5% for detection of chlamydia infection from urine and rectal swabs, respectively. Most patients accepted antibiotic treatment before infection status had been confirmed. Prevalence of gonorrhoea infection was low but PPV of the screening PCR remained high (98.75%).

Poster presentation

Conclusions Equivocal reports introduce delays to patient management while the risk of unnecessary antibiotic therapy appears acceptable to most patients. The cobas 4800 CT/NG PCR screening assay can achieve UK testing standards (PPV >90%) in extragenital swabs and low prevalence gonorrhoea population without supplementary tests. A patient-led confirmation algorithm is proposed.

P54

OCULAR SYPHILIS: LESSONS FROM 4 DECADES OF EXPERIENCE

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Background Ocular syphilis can affect most eye structures and can be the result of congenital and acquired infection. Many ocular signs are not specific to syphilis and it can be difficult to make the diagnosis.

Aim This study aims to investigate the epidemiology of ocular syphilis presenting to an oculogenital clinic.

Method Retrospective case notes review of ocular syphilis cases seen between 1965 and 2011. Of 307 cases with ocular signs and positive treponemal serology, 85 cases with a history of yaws were excluded, leaving 222.

Results Of the 222 cases, 93 (42%) were late congenital (CS), and 129 (58%) were acquired (AS). Of the CS cases, the mean age was 47.5 (range 7-86), 37 (40%) were male, of whom 1 was MSM. 55 (59%) were from the UK, 19 (20%) from the Caribbean, 9 (10%) from Europe. Eye signs were as follows: interstitial keratitis 73, anterior uveitis 23, posterior uveitis 10, panuveitis 3, Argyll-Robertson pupils (ARP) 1 and optic neuritis (ON) 1. Of the AS cases, the mean age was 50.9 (range 17-85), 99 (77%) were male, of whom 15 were MSM. 31 (24%) were from the UK, 15 (12%) from Europe, 51 (40%) from the Caribbean and 16 (12%) from Africa. 17 (13%) were early syphilis (secondary/early latent) and 112 (87%) were late latent or tertiary syphilis. Eye signs were as follows: anterior uveitis 63, posterior uveitis 21, panuveitis 13, optic atrophy 9, ON 8 and ARP 5. 35 (38%) of CS cases and 8 (6%) of the AS cases had extra-ocular signs of syphilis. Treatment was with a neurosyphilis regimen. STI screen were offered to all patients. Concomitant STIs are shown in the abstract P54 table 1.

Abstract P54 Table 1 Number of patients presenting with concomitant STIs

	Congenital	Acquired-early	Acquired-late
Gonorrhoea	2	3	9
Chlamydia	2	2	7
NSU	1	0	3
PID	6	0	0
Herpes	2	1	4
HIV	0	1	1
TV	2	1	5
Scabies	3	0	1
Warts	0	4	1
Any STI	17	7	25

Conclusions (1) Ocular syphilis has varied presentations. (2) Screening for other STIs is important even in late CS and AS. (3) Ocular syphilis can be the only sign of syphilis: clinicians should consider syphilis as a cause of undiagnosed eye signs.

P55

EVALUATION OF NAAT AND POCT FOR DETECTING TRICHOMONAS VAGINALIS INFECTION IN WOMEN AT A LONDON SEXUAL HEALTH CLINIC

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Background TV is a common infection in our clinic, but the true prevalence is likely to be higher since microscopy-the current diagnostic test has a low sensitivity. Nucleic Acid Amplification (NAAT) and Point of Care Tests (POCT) are commercially available and are reported to have much higher sensitivities. To our knowledge this is the first study to evaluate four different tests for TV in a London Clinic.

 $\pmb{\mathsf{Aim}}$ To evaluate the clinical utility of NAAT and POCT compared to microscopy and culture.

Methods All symptomatic women who presented to the clinic on Monday and Tuesday from September 2011 were invited to participate in the study. Swabs for a validated in-house NAAT, POCT (OSOM Genzyme Diagnostics) and culture using TV In-pouch culture system were taken. Technicians processing the POCT, NAAT and cultures were blinded to all other results.

Results A total of 247 symptomatic women were recruited over a 6-month period. 21 (8.5%) tested positive on culture, 22 (9%) on POCT and NAAT, 9 (3.6%) on microscopy. Using culture as the reference standard the sensitivities/specificities were: POCT 100% [95% CI 84 to 100]/99.6% [95% CI 97.5 to 99.9], NAAT 95.2% [95% CI 76 to 99.9]/99.1% [95% CI 96.8 to 99.9], microscopy 42.9% [95% CI 22 to 56]/100% [95% CI 98.4 to 100] and prevalence 8.5% [95% CI 5.4 to 12.8]. Using NAATas the reference standard the sensitivities were: culture 90.9% [95% CI 71 to 98.9], POCT 95.5% [95% CI 77 to 99.9], microscopy 36.4% [95% CI 17 to 59] and prevalence 8.9% [95% CI 5.7 to 13.2].

Conclusions The sensitivity of POCT and NAAT were as anticipated much greater than microscopy alone, resulting in a prevalence over double than previously estimated. Molecular methods for detecting TV infection in this population would diagnose a significantly greater number of women with TV. Clinics with high rates of TV may benefit from using POCT with the advantage of a rapid turn-around result over NAAT.

P56

DOES CEFTRIAXONE PLUS AZITHROMYCIN REDUCE GONORRHOEA RETREATMENT COMPARED TO CEFTRIAXONE PLUS DOXYCYCLINE? A RETROSPECTIVE COMPARISON

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Background Currently, the combination of Ceftriaxone (CTX) and Azithromycin (AZM) is favoured over CTX and Doxycycline (DOXY) for treatment of uncomplicated *Neisseria gonorrhoeae* infections (GC) in both the UK and the USA.

Aims/Objectives To retrospectively compare retreatment rates between patients receiving CTX + AZM and those receiving CTX + DOXY.

Methods We analysed clinic records for all patients treated for GC at either of Baltimore's public STD clinics between January 2004 and June 2011 and measured time to retreatment from the date when the CTX regimen was administered. Patients were censored 2 years after treatment was received or on 30 September 2011, whichever came first. Kaplan—Meier curves and Cox Proportional Hazards models were used to compare retreatment rates.