Methods All cases of positive pharyngeal NAATs dating from 1<sup>st</sup> July 2014, to 1<sup>st</sup> August 2016, were identified from the clinical records portal and a case-note review completed.

Results 219 cases were included in the final data analysis median age 33 (range 19–58). 131/219 (60%) lone pharyngeal gonorrhoea cases were identified. 194/219 (95%) were MSM. 89/131 (67%) pharyngeal cultures were obtained: (16%) positive for *Neisseria gonorrhoea* – 9/16 demonstrated some antimicrobial resistance. Only 8/131 (6%) had a sore throat documented at screening. 205/219 (94%) received treatments in clinic (14 patients lost to follow up). Of those treated 113/205 (55%) received a test of cure with 100% negative NAATs. All patients receiving 2<sup>nd</sup> line treatments were clinically justified. 1 patient was diagnosed HIV+ within 6 months of pharyngeal gonorrhoea treatment.

Discussion The majority of infections were asymptomatic (94%) demonstrating validity of on-going triple site screening. The low sensitivity of positive pharyngeal *N.gonorrhoea* cultures (16%) reinforces importance of pharyngeal NAATs for detection of infection and review of culture sampling techniques. A low rate of TOC reflected the difficulties in completing patient follow up seen in our clinic population

### P023

## INVESTIGATING THE CLINICAL VALUE OF TREPONEMA PALLIDUM PCR WITHIN A UK GUM CLINIC

<sup>1</sup>Alice Parsloe, <sup>1,2</sup>David White\*, <sup>2</sup>Erasmus Smit. <sup>1</sup>Whittall Street Clinic, Birmingham, UK; <sup>2</sup>Heart of England NHS Trust, Birmingham, UK

10.1136/sextrans-2017-053232.69

Introduction Syphilis is a multistage STI caused by Treponema pallidum. The classic lesion of primary syphilis is a chancre – a single, painless, indurated ulcer with a clean base. The number of cases is on the rise, and it has been historically difficult to diagnose due to its variable presentation, requiring clinical correlation and multiple investigations. PCR use has increased recently in investigation of these ulcers. However, how crucial is PCR testing in primary syphilis, when cheaper investigations can lead to a diagnosis?

Methods Investigation results were collected from 58 patients presenting between January and December 2015 who were treated for primary syphilis, including presentation, serology and PCR status. How they were diagnosed as having primary syphilis was noted and whether this was on presentation, follow up or via PCR.

Results 47 patients had a positive PCR, 11 patients had a negative PCR but were treated for primary syphilis. We found 3 patients would have not been picked up as having primary syphilis if there was no PCR performed. The sensitivity and specificity of Treponema pallidum PCR was 81% and 100% respectively.

Discussion PCR was essential in diagnosing 3 patients with syphilis who would have been missed, therefore PCR is a crucial tool in contributing to the diagnosis of primary syphilis. The potential implications of missing syphilis diagnosis are serious, as patients can develop progressive disease and unknowingly affect sexual partners.

### P024

## REDUCING REPEATED CHLAMYDIA AND GONORRHOEA INFECTIONS

Sonia Raffe\*, Helen Patrick, Rebecca Murdock, Jozette Power, Gillian Dean. *Brighton and Sussex University Hospitals NHS Trust, Brighton, UK* 

10.1136/sextrans-2017-053232.70

Introduction The role of Sexual Health Services (SHS) is not only to treat sexually transmitted infections (STIs) but also to reduce repeat infection through appropriate antimicrobials, health education and partner notification (PN). We reviewed the management of patients with repeat infections.

Methods A retrospective case-note review of patients attending the SHS with more than one episode of chlamydia and/or gonorrhoea, July 2015 – June 2016.

Results 156 patients were identified of which a random sample of 30 (20%) were reviewed. All were male; median age 29.5 (range 21-58). 70% (21) were MSM, 23% (7) heterosexual, 7% (2) bisexual. 30% (9) were HIV positive. Risk-factors for unsafe sex (e.g. substance misuse/sex-work/mental-health diagnosis) were noted in 77% (23). 77% (23) had 2 infective episodes; 23% (7) had 3 episodes. Of the 67 infective episodes all were treated appropriately; 40% (27) were treated the same day, 9% (6) within 1-week, 24% (16) within 2weeks, and 22% (15) within 2-4 weeks. Patients reported 1-100 partners in the 6-months prior to review. 73% (48) saw a health advisor (HA); in the remaining 28% the most common reason for not seeing a HA was being managed in nonsexual health clinics e.g. PEP/HIV-research/general HIV. PN was undertaken in 82% (55) of episodes although only completed in 52% (35) largely due to untraceable partners.

Discussion Focusing on addressing risk factors for unsafe sex may facilitate a reduction in repeat STIs. While most patients were able to access HA support, referral pathways from non-SHS clinics need improving. PN remains challenging in the context of multiple casual partners and novel strategies such as electronic PN should be urgently explored.

### P025

# ACCURATE CULTURES FOR GONORRHOEA. HOW DO COMMUNITY SERVICES AND SECONDARY CARE COMPARE?

Thomas Board\*, Sue Mitchell, Judy Russell. Queen Elizabeth Hospital, London, UK

10.1136/sextrans-2017-053232.71

Introduction BASHH guidelines emphasise the importance of accurate cultures in the diagnosis and management of gonorrhoea. This audit's aim was to establish if there was a measurable difference in the positive culture yield between community and secondary care services in the months following a change in contract which has moved a proportion of walk in patients from secondary care to the community setting

Methods Relevant databases were searched for gonorrhoea patients after 1<sup>st</sup> October 2017 when the service was changed. A retrospective audit of the notes was then carried out to establish the rates of positive NAATS tests and positive culture yield and compared the two services.

Results In secondary care 25 patients (20 men & 5 women) were treated for gonorrhoea over two months. In these patients 22 had a positive NAATs test, of these 17 had a positive culture giving a positive culture yield of 77.2%.

In comparison the community service identified 10 patients in the first month of the new contract with a positive NAATs test, of these 9 had a culture. 1 culture was positive giving a NAATs/culture concordance rate of 11.1%; this is to be reaudited by the community service.

Discussion Accurate cultures are vital for the treatment of gonorrhoea, particularly in areas where antibiotic resistance is high. Appropriate storage and prompt processing is important to ensure the viability of these tests. This audit raises a question about viability of *Neisseria gonorrhoeae* during transfer from community settings to the central hospital laboratory.

P026

NEISSERIA GONORRHOEAE (GC): CHANGING PATTERN OF ANTIBIOTIC SENSITIVITY AND PERSISTENCE OF DNA DETECTION 2007 – 2016

Sarah Young, Shyamalie Bopitiya\*, Sris Allan. Coventry and Warwickshire Partnership Trust, Coventry, UK

10.1136/sextrans-2017-053232.72

**Introduction** Nucleic acid amplification testing (NAAT) is used in GUM clinics to diagnose GC infection; however its in-built sensitivity potentially detects DNA from non-viable organisms following successful treatment. BASHH guidelines stipulate that test of cure with NAAT (TOC) should take place 2 weeks post-treatment.

This study aims to determine whether this is an adequate time interval to perform TOC. We also analysed the changing pattern of antibiotic sensitivity between 2007 – 2016.

Methods All GC cases at our clinic between 01/01 and 30/06 in 2007–2016 were identified, assessed for antibiotic sensitivity and analysed for TOC data from 2013–2016.

**Results** Of 131 cases in 2016, culture and sensitivities were available for 80, with TOC in 63.

Susceptibility to Antibiotic groups	2007 (%)	2009 (%)	2011 (%)	<b>2012</b> (%)	2013 (%)	<b>2014</b> (%)	<b>2015</b> (%)	2016 (%)
Fully sensitive to antibiotic testing panel	46	67	59	49	79	59	43	55
Reduced susceptibility to 1	27	15	20	38	10	20	23	23
Reduced susceptibility to 2	15	10	16	8	6	13	21	15
Reduced susceptibility to 3	12	2	5	3	2	8	5	6
Reduced susceptibility to 4								1

TOC was performed between 6 and 77 days post-treatment with mean, median and mode of 18, 14 and 14 days respectively.

Discussion No cultures were resistant to ceftriaxone. This is the first year a case has shown reduced susceptibility to 4 antibiotic groups. From 2015-2016 there has been an increase in GC fully sensitive to the antibiotic testing panel.

Our data supports BASSH guidelines for TOC 2 weeks post-treatment.

P027

## RE-TESTING OF PATIENTS WITH POSITIVE CHLAMYDIA RESULTS IN PRIMARY CARE

<sup>1,2</sup>Sarah McConnell\*, <sup>1</sup>Jane Hutchinson, <sup>1</sup>Merle Symonds. <sup>1</sup>Barts Health NHS Trust, London, UK; <sup>2</sup>Tower Hamlets GP VTS, London, UK

10.1136/sextrans-2017-053232.73

Introduction We aimed to establish how many young people (aged 15–24 years) diagnosed with genital Chlamydia infection in General Practice (GP) in 2015 in an inner city area had Partner Notification (PN) discussed with them and were offered repeat testing three-six months after initial diagnosis in line with BASHH guidelines.

Methods We identified young people with positive Chlamydia diagnoses made in GP in 2015 by searching the Chlamydia screening dataset from the hospital laboratory. We cross referenced with subsequent data sets for the year 2015 onwards to see if/when the patient was retested and where they were retested. For those re-tested in local GU clinics, we checked their records for evidence of PN initiated in primary care.

Results Preliminary data from January – June 2015 shows that sixty nine 15–24 year olds were diagnosed with Chlamydia in GP; 11 re-tested within six months, seven of these between one and three months post-initial infection of which one was positive. Three of the 11 re-tested in GU clinics; two of these reported PN initiated by GP.

Discussion Results so far show less than 1 in 5 young people diagnosed with Chlamydia in GP are being re-tested appropriately. It is possible that patients are travelling outside the area for re-testing and are missed by our sampling. Recommendations should include routine recall in GP for re-testing after three months to increase re-test rates.

P028

# CHARACTERISING NEISSERIA GONORRHOEAE (NG) INFECTIONS AND TREATMENT IN A LARGE, URBAN COHORT

Taslima Rashid, Nirmitha Jayaratne, Marjan Taher, Tristan Barber, Nneka Nwokolo, Michael Rayment\*. Chelsea and Westminster Hospital NHS Foundation Trust, London, UK

10.1136/sextrans-2017-053232.74

**Introduction** Better detection and more frequent testing may explain increases in NG. We wished to characterise patients attending our clinics with NG, and audit management against BASHH standards.

Methods 300 sequential NG patients attending in 2016 were reviewed. Data collected: demographics, NAAT/culture positivity (per site), antimicrobial treatment and resistance, and test of cure (TOC).