autoinoculation. Notably, the presence of viable CT in anorectal samples indicated the presence of an active anorectal infection, which should be accounted for in comprehensive CT management.

Poster presentations

P023 INTERNET EXPOSURE ON SEXUAL PARTNERS AND SEXUAL RISK BEHAVIOR AMONG SEXUALLY EXPERIENCED COLLEGE MALES: EVIDENCE FROM A POPULATION-BASED STUDY

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Background As a young subgroup, college students have become the main participants of mobile social networks. Considering the increase of HIV infections in male college students, it is important to explore the status of using the internet to meet sexual partners among these young students and examine the correlates of this use with risky sexual behaviors.

Methods A population-based cross-sectional study was conducted among male students from 44 colleges located in Hangzhou. A total of 1045 sexually experienced male students were incorporated in our analysis. Sequential logistic regression models were employed to determine the independent influence of meeting sexual partners via the internet on sexual risk behavior after controlling for factors associated with risk sexual behaviors.

Results Anonymous social software (e.g., Momo, Tantan, Blued and Aloha) were the most common sites (87.6%) for males to seek sexual partners online. The risk sexual behavior was heterogeneous among the aims for finding partners online and the risk was the highest for males who meet partner for sex (75.52%-85.36%). Compared to non-internet partners' seeker, internet partners' seekers tend to have more casual (53.87% vs 10.14%), paid (5.9% vs 2.39%) and homosexual sex (64.39% vs 8.15%), use psychoactive drugs (35.82% vs 12.2%) and more partners. With the increase of HIV/STD knowledge, the probability of having unprotected sex was increasing for internet partner seekers. Meeting sexual partner on internet was statistically associated with unprotected sex (OR=0.255, P<0.05).

Conclusions Meeting sexual partners via the internet were common among male colleague students, and those meeting partners online exhibited higher levels of risk sexual behaviors although they had enough HIV/STD knowledge, especially students with the aim of finding partners for sex. Thus, more attention should be paid to those general young adults to address the risky sexual behaviors that may contribute to increase HIV spread among this population.

P024 PAINFUL ANO-RECTAL SYPHILIS IN MEN WHO HAVE SEX WITH MEN (MSM)

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There has been a significant increase in infectious syphilis in men who have sex with men (MSM). Recent data also suggests a corresponding increase in ano-rectal syphilis. Despite this, there is a lack of syphilis testing in MSM with ano-rectal symptoms.

The aim of this study is to describe the presentation and management of MSM with ano-rectal syphilis. The sexual health clinic in Brighton sees 6500 MSM per year for sexually transmitted infection testing and treatment. We reviewed the electronic clinic notes of MSM with ano-rectal syphilis from January 2017 to August 2020 and collected data on patient demographics, HIV status, previous syphilis, syphilis serology including VDRL titre, TP-PCR testing and details of treatment.

In the study period, 128 MSM were diagnosed with early syphilis, 108 (84%) with genital lesion(s), 4 (3%) with oral lesion(s) and 16 (13%, 95%CI=7.3–19.5) with painful ano-rectal lesion(s). All 16 had reactive serology and 12/16 had a TP-PCR taken of which 12/12 was positive. The median age was 51 years (IQR 40–58) and 7/16 (44%) were HIV positive and 4/16 (25%) had a previous history of syphilis. Clinicians treated 6/16 (38%) presumptively for syphilis on the day of presentation; the 10/16 who were not treated presumptively on the day waited a median of 8 days (6–28) for treatment. HIV positive MSM with ano-rectal syphilis were significantly more likely to have had previous treated syphilis (OR=24.4, 95%CI 1.03–580.7, p<0.05) than HIV negative MSM, and clinicians were significantly more likely to treat HIV positive MSM presumptively on the day (OR=20.0, 95%CI=1.4–282.5, p<0.03).

We have shown that a small, but significant number of MSM with syphilis present with painful ano-rectal symptoms and suggest that all MSM with ano-rectal symptoms should be tested for syphilis. Point of care testing for syphilis from ano-rectal samples would support syphilis control and prevention.

P025 HIV-1 TRANSMITTED DRUG RESISTANCE BETWEEN 2014 – 2020 IN A HIV LARGE POPULATION IN BRIGHTON, UK

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Background HIV-1 transmitted drug resistance (TDR) is associated with sexually transmitted infections (STIs) and sexual clusters including MSM and non-MSM. TDR can lead to anti-retroviral failure, and therefore UK guidelines recommend TDR testing in all new HIV patients. Subtype B is most common in urbanised western populations however is decreasing in proportion. Within the UK TDR is estimated to be 7.5% and non-B subtype 51%.

Methods Using the WHO TDR list, we aimed to determine from our clinic database; the prevalence of TDR, non-B subtype and associated features in our large tertiary HIV department (~2500 patients) from 2014–2020.

Results Of the 218 new diagnoses, 217 had a resistance test attempted (1 stored due to COVID-19). 212/217 had an available genotype (5 failed to amplify). 191/212 (90%) were MSM, 12/212 (6%) cis-female, 80/212 (38%) non-UK born and the median age was 36 years (IQR=29–46). The overall prevalence of TDR was 17/212 (8%; 95%CI=5.0–12.4), seven

(3%) had a NRTI mutation, six (3%) had at least one nNRTI mutation and 4(2%) had a PI mutation. There were no dual/triple class/INI mutations. There was no significant change in the prevalence of TDR over the study period. The overall prevalence of non-B subtype was 53/212(25%;95% CI=19.6–31.2), and was not more frequently seen in non-UK born individuals (OR=1.24;CI=0.66–2.33,p=0.51). Patients with TDR were older [45.v.36 years, p=0.006] and have non-B subtype (OR=2.96;CI=1.08–8.13,p=0.03). Although overall rates of bacterial STIs was high (34%), having a bacterial STI was not associated with TDR (OR=1.77;95%CI=0.66–4.82,p=0.26).

Conclusion TDR is associated with age and non-B subtype in our population. HIV TDR is not decreasing locally and remains a small but significant concern despite effective HIV prevention strategies, which may not reach hidden populations affected by HIV. Continued efforts to reduce HIV transmission must target hidden populations and we must maintain adequate surveillance of TDR.

P026 SEXUALLY TRANSMITTED SHIGELLA FLEXNERI AND SHIGELLA SONNEI IN MEN WHO HAVE SEX WITH MEN

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Shigella outbreaks in MSM are associated with sexual networks involving transmission of other sexually transmitted infections (STIs), geosocial app use for meeting sexual partners and chemsex. There is increasing antimicrobial resistance (AMR) in Shigella amongst MSM. We aimed to describe cases and patterns of AMR amongst MSM with Shigella between 2016–2019.

There were 33 cases of shigellosis in MSM identified, with a median age of 38-years (IQR 34–47). 11/33(33%) reported recent chemsex use, 14/33(42%) were HIV positive. Of the 19/33 HIV negative MSM, 7/19(37%) were using HIV pre-exposure prophylaxis. The mean number of sexual partners in the previous 3 months was six. 15/33(45%) had Shigella sonnei, 5/33(15%) Shigella flexneri, and 13/33(39%) were DNA-PCR positive but culture negative. 14/33(42%) were diagnosed with at least one other STI. MSM with Shigella flexneri were more likely to be HIV positive than Shigella sonnei(p<0.05). Antimicrobial sensitivities were only available in 11/15 cases of Shigella sonnei[fully sensitive(9%), resistant to ciprofloxacin (9%), resistant to azithromycin(36%), resistant to ciprofloxacin and azithromycin(45%)]. 7/33(21%) were treated presumptively on the day of presentation with intramuscular ceftriaxone 2g for 1–3 days followed by oral ciprofloxacin. No MSM with ciprofloxacin resistance received ciprofloxacin; the remaining 26/33 (78%) did not receive antimicrobials and their diarrhoea resolved.

We have shown that Shigella flexneri is more frequently seen in HIV positive MSM and is associated with chemsex, and resistance to both azithromycin and ciprofloxacin is common in Shigella sonnei. The increasing use of PCR culture independent diagnostic tests make it more difficult to identify cases and clusters within sexual networks in MSM of multi-drug resistant shigellosis: clinicians and microbiologists should be vigilant when managing MSM with diarrhoea to prevent large outbreaks of highly resistant shigellosis.

P027 HOW WOULD SEXUAL HEALTH CLINICIANS MANAGE FIRST ATTENDANCE OF MEN WHO HAVE SEX WITH MEN WITH ANO-GENITAL ULCERS?

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Background There has been a significant increase in infectious syphilis in men who have sex with men(MSM). Primary syphilis classically presents as painless ano-genital ulceration however recent data suggests that up to 50% of lesions are painful. We aimed to discover current clinical practice when experienced sexual health clinicians are faced with MSM presenting with ano-genital ulcers.

Method An anonymous online survey was sent to clinicians in Brighton, UK and Western Sydney, Australia.

Results Twenty-nine sexual health clinicians (17 doctors and 12 nurses) from the UK (Brighton) and Australia (Sydney) responded to an anonymous online survey; (16/29,55%) had been working in sexual health for more than ten years. In the absence of dark-field microscopy, when faced with a scenario of a non-penicillin allergic MSM with a 5-day history of a large painless penile ulcer, 26/29(90%;95%CI=78.6–100.7) would treat presumptively on the day. Most(21/29, 72%;95% CI=56.1–88.7) would treat MSM presumptively for syphilis with a large painful anal ulcer. Sexual health clinicians are more likely to offer empirical treatment based upon (1) clinical history (number of sexual partners, previous syphilis, sexual contacts of syphilis, PrEP use, HIV positivity, chem-sex), (2) clinical examination (confidence with clinical diagnosis or having ‘classical features’ of syphilis) or (3) patient factors (vulnerability factors, less likely to return for treatment or abstain from sex), and are less likely to offer presumptive treatment if they have penicillin allergy, a painful lesion and acceptable laboratory reporting times.

Conclusion In the absence same day highly sensitive assays, experienced sexual health clinicians are managing MSM with ano-genital ulcers based upon sexual history, clinical examination and patient factors. The turn-around-times for laboratory-based assays are vital for syphilis control and prevention. To reduce infectious syphilis, we need to improve access to real time, ideally point-of-care, molecular assays for detection of Treponema pallidum in ano-genital ulcer samples.

P028 SYMPTOMATIC LYMPHOGANULOMA VENEREUM (LGV) PROCTITIS IN MEN WHO HAVE SEX WITH MEN (MSM)

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Lymphogranuloma venereum (LGV) is a sub-type of Chlamydia trachomatis and is associated with proctitis. LGV proctitis is associated with recreational drug use particularly chemsex, HIV, hepatitis C, and other sexually transmitted infection transmission. The presenting symptoms of LGV proctitis are not well characterised. We aimed to describe the rectal