unprotected anal sex. Endorsement of alternative sexual practises is also common, with men reporting lifetime history of sounding (5%), felching (10%), autoerotic asphyxiation (11%), fisting (12%), use of a sex sling (26%), oral exchange of semen between partners (27%), and group sex (66%). Experience with recreational drugs is also common, particularly methamphetamines (14%), poppers (24%), cocaine (29%), and marijuana (71%). STI/HIV results have been abstracted for 44 men to date: 11% had urethral *N. gonorrhoea* (GC), 9% had rectal GC, 9% had urethral *C. trachomatis* (CT), and 14% had rectal CT. Nearly one-quarter (23%) had tested positive for HIV previously, and another 7% were newly diagnosed at the clinic visit.

**Conclusion** In this preliminary analysis, endorsement of alternative sexual practises was common and the prevalence of HIV/STI was high. Analysis of the complete sample will permit robust, quantitative characterizations of associations between previously uninvestigated sexual practises and prevalent HIV and STI.

P3.151

#### WITHDRAWN BY AUTHOR

P3.152

#### PREVALENCE OF NEISSERIA GONORRHOEAE INFECTION IN TWO DISTINCT MEN-WHO-HAVE-SEX-WITH-MEN (MSM) POPULATIONS IN SLOVENIA IN 2012

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**Objectives** Infection with Neisseria gonorrhoeae represents a serious public health problem. According to the national reported incidence surveillance system in Slovenia, gonorrhoea is disproportionately more common in the MSM population. However, estimates of the prevalence of N. gonorrhoeae infection in the general MSM population in Slovenia are lacking. Herein, we present the prevalence of N. gonorrhoeae in two distinct MSM populations in Slovenia in 2012.

**Methods** Culture-based screening for N. gonorrhoeae infection was performed in two MSM population settings. In the first one (population (a), pharyngeal swab cultures were offered to attendees of two gay clubs and one Non-Governmental Organization based anonymous STI testing point. In the second one (population (b), asymptomatic MSM seeking for preventive STI screening at the specialised MSM clinic were comprehensively examined with pharyngeal, urethral and rectoscopy-guided rectal swab cultures. A short behavioural questionnaire was obtained in both settings.

**Results** A total of 306 MSM were investigated. The overall prevalence of N. gonorrhoeae infection from any site was 4.3% (95% CI; 2.5–7.1%). The overall prevalence of pharyngeal infection was 2.3% (95% CI; 1.1–4.7%). In population A (n = 239), aged 16–60 years (mean age: 29 years), the prevalence of pharyngeal gonorrhoea was 2.5% (95% CI; 1.2–7.3%). In population B (n = 67), aged 19–62 years (mean age: 35 years), the prevalence of pharyngeal, rectal and genital gonorrhoea was 1.7% (95% CI; 0.3–8.9%), 9.2% (95% CI; 4.3–18.7%) and 0% (95% CI; 0–6.6%), respectively.

**Conclusion** In two Slovenian MSM populations a relatively high prevalence (4.3%) of pharyngeal and rectal gonococcal infections, which are usually known to be asymptomatic, was identified. This prevalence may also be underestimated, since the culture diagnostics being used is known to display a suboptimal sensitivity

compared to NAAT diagnostics, particularly for pharyngeal and rectal specimens. These results might warrant a 3-site testing (urogenital, pharyngeal and rectal) of all MSM in Slovenia.

| P3.153 |

## CLINICAL FEATURES AND TREATMENT RESPONSES IN 300 PHARYNGEAL CHLAMYDIA TRACHOMATIS INFECTIONS IN MSM

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**Background** In men who have sex with men (MSM), orogenital sexual practises and an increase in triple site testing have resulted in detection of pharyngeal *Chlamydia trachomatis* (CT) infections. Clinical features are not well-described and there are no evidence-based treatment guidelines for this site of infection. We describe a cohort of MSM with pharyngeal CT seen in a large urban GUM clinic.

**Methods** Retrospective analysis of 300 MSM with pharyngeal CT seen from 2009–2012; 31% were HIV positive, > 50% on antiretroviral therapy. Diagnosis was by CT RNA detection by Aptima Combo2 (Gen-Probe).

**Results** Of 300 cases, 11.6% of patients described throat symptoms. Concurrent rectal CT was seen in 53%; urethral CT in 12%; 21 patients had CT at all 3 sites. Of 133 CT-positive specimens tested for lymphogranuloma venereum (LGV) DNA, 3 were positive (2.3%); only 1/3 had severe throat symptoms. The other two had symptomatic rectal LGV.

Patient Treatment comprised ≥ 7 days doxycycline (100mg bd) for 77% or azithromycin (1g stat) for 31%. Only 68% of patients (185/272) returned for pharyngeal test of cure (TOC) at a median 48 days. There were 5 positive TOCs; however 4 of these were likely re-infections rather than treatment failure, due to high levels of ongoing sexual risk (3 had received 7 days and one 14 days doxycycline). One patient had persistent chlamydial infection and CT conjunctivitis despite having received azithromycin 1g stat 5 weeks prior

**Conclusions** With the use of dual NAAT screening of throat swabs, pharyngeal CT detection will occur in 1–2% of MSM. It is a source of onward transmission and can occasionally cause throat symptoms. Both azithromycin 1g or 7+ days of doxycycline seem to be efficacious treatment, although with high rates of concurrent rectal CT infection doxycycline is preferred. An association with CT conjunctivitis needs further study.

P3.154

# ANATOMIC SITE DISTRIBUTION OF SEXUALLY TRANSMITTED DISEASES IN MEN WHO HAVE SEX WITH MEN AND HIGH RISK FEMALES BY ROUTINE TESTING, INCLUDING ANORECTAL AND OROPHARYNGEAL TESTING

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**Introduction** Insight in the anatomic site distribution of sexually transmitted diseases (STDs) is important because it is assumed that present anorectal/oropharyngeal STD are coincidentally treated with urogenital STD. However, it is not clear whether this anorectal STD control strategy is effective. Furthermore, there is ongoing debate on the appropriate treatment for extragenital STD and whether this may differ from genital STD. We evaluated the anatomic site distribution of STDs by routine testing in high risk females (hereafter females) and men who have sex with men (MSM).

#### **Poster presentations**

Methods From January 2010 to November 2012, all females and MSM were routinely tested for anorectal, oropharyngeal and urogenital Chlamydia trachomatis (Ct) and Neisseria gonorrhoeae (Ng). Data were collected on demographics and sexual behaviour.

**Results** The study population comprised 4829 consults. Overall Ct positivity was 6.8% (131/1937) in females and 10.0% (289/2892) in MSM, for Ng this was 4.3% (n = 83) and 6.7% (n = 193) respectively. The proportion isolated anorectal Ct was 16.8% (n = 22) in females and 63.0% (n = 182) in MSM, for Ng this was 10.8% (n = 9) and 44.0% (n = 85) respectively. Combined urogenital and anorectal Ct was 45.0% (n = 59) in females and 13.5% (n = 39) in MSM, for Ng this was 19.3% (n = 16) and 11.4% (n = 22) respectively. Isolated oropharyngeal Ct was 9.9% (n = 13) in females and 5.9% (n = 17) in MSM, for Ng this was 53.0% (n = 44) and 31.6% (n = 61) respectively. Isolated urogenital Ct was 28.2% (n = 37) in females and 17.6% (n = 51) in MSM, for Ng this was 16.9% (n = 14) and 13.0%(n = 25) respectively.

**Discussion** Anorectal and oropharyngeal STD were often isolated and thereby not coincidentally treated with urogenital STD. Therefore urogenital testing only is insufficient. Furthermore, these isolated infections remain undiagnosed if routine anorectal/ oropharyngeal testing is lacking. Combined anorectal/urogenital Ct/Ng were also highly prevalent, highlighting the importance of an effective treatment for simultaneous genital and extragenital Ct/Ng.

#### P3.155

#### ASSESSMENT OF KNOWLEDGE OF SEXUAL TRANSMITTED **DISEASES (STDS) AND A SEROPREVALENCE STUDY IN GAY** MAN IN KAYSERI, TURKEY

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Background Homosexual behaviour is prone to many sexual transmitted diseases (STDs) and many social problems. The aim of this study is to assess the knowledge, source, the reliability and accuracy of information resources and to assess the seropositivity for some STDs.

**Method** A questionnaire was prepared for the STDs including these; to learn their demographic and economical characteristics, having any chronic disease or, experienced any disease, use of any illegal drug, their sense for acceptability in public, number of partner in one year, main transmission route, prevention and source of their information about this diseases in gay people. In additional these, Another questions were to learn their to join an education programme for prevention of STDs and to give blood samples for the serologic investigation against hepatitis B, hepatitis C, syphilis and HIV. Voluntary people defined himself as gay, was entered to the study.

**Results** The questionnaire was replied by 94 people. Mean age was  $23.32 \pm 4.6$  year and 80.4% defined himself as gay. Of these, 72.6%was graduated from high school or university, 5.9% had a chronic disease and 3.9% had receiving any medicine. 29.4% had no any health insurance. Using one of these; cigarette, alcohol, heroin or cocaine were at percentage of 62.8, 46.8, 10.6 and 1.1 respectively. 23.4% had multiple partners and 76.7% single partners. Majority people knew the transmission of HIV/AIDS by sexual intercourse (88.3%) or blood/blood products (77.7%). 69.1% had a history of unprotected sexual relation. Major source of their knowledge about STDs was internet or other media. Blood samples could be taken from 39, one was positive for HIV. An education programme was used as a small group after questionnaire.

Conclusion This is a first basic study on homosexual group, summarising their problems in our region.

### P3.156 CONTRIBUTION OF SEXUAL PRACTISES OTHER THAN ANAL SEX TO THE TRANSMISSION OF BACTERIAL SEXUALLY TRANSMITTED INFECTIONS IN MEN WHO HAVE SEX WITH

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Background Syphilis, chlamydia and gonorrhoea are increasingly common amongst Australian men who have sex with men (MSM). Our objective was to quantify the proportion of cases and risk of primary syphilis (PS), urethral chlamydia (UCT) and urethral gonorrhoea (UGC) attributable to sexual practises other than anal sex. Methods Electronic medical records for MSM who attended Melbourne Sexual Health Centre between July 2002 (for PS) or January 2006 (for UCT and UGC) and October 2012 inclusive were exam-

Results There were 37 533 eligible consultations; 2374 (6%) of these reported no anal sex. There were 204 PS diagnoses, 673 UCT diagnoses, and 618 UGC diagnoses; 12 (6%), 16 (2%) and 44 (7%) cases respectively occurred in consultations where no anal sex was reported in the previous three months (PS, UGC) or twelve months (UCT). Amongst MSM who reported no anal sex, PS was diagnosed in 0.5 cases/100 consultations, UCT was diagnosed in 1.5 cases/100 tests for UCT and UGC was diagnosed in 14 cases/100 tests for UGC. UCT was significantly more common in MSM who reported anal sex (OR 2.18, 95% CI 1.32 – 3.59, p = 0.002), but PS (p = 0.82) and UGC (p = 0.14) were not. For MSM who reported anal sex, condom use was protective for all three infections (all p  $\leq$  0.03).

Conclusions UCT rarely occurs in MSM due to sexual practises other than anal sex; however these practises appear to contribute significantly to the acquisition of PS and UGC. Our figures probably underestimate the risk involved, as men who have anal sex also engage in other sexual practises. The implication is that successful programmes to control sexually transmitted infections, particularly PS and UGC, will need to utilise additional strategies, such as frequent testing, as well as promoting condom use.

#### P3.157

#### **INCREASING STI RATES IN YOUNG MSM IN THE** NETHERLANDS, 2006-2011

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Objective Young men having sex with men (MSM) are a high-risk group involved in on-going transmission of sexually transmitted infections (STI). To improve our understanding of this epidemic, distribution of STI and testing behaviour in young MSM attending STI clinics in the Netherlands was analysed.

Methods National STI surveillance data on young MSM (15-24 years) for 2006–2011 were analysed. STI included were chlamydia, gonorrhoea, infectious syphilis and HIV. Chi-square test for trend was performed to analyse time trends in testing behaviour and STI positivity rates, multivariable logistic regression was used to identify factors associated with STI positivity.

Results Number of consultations in young MSM increased from 1161 in 2006 to 3167 in 2011 (+166%). The proportion not aware of