Background The prevalence of pharyngeal CT is low but its incidence and duration are unknown. A high incidence and/or duration may support the role of pharyngeal CT in sustaining CT transmission among MSM.

Methods From March 2016 to December 2018 we enrolled MSM in a 48-week natural history cohort study in Seattle, Washington. Participants self-collected pharyngeal specimens weekly. We tested specimens using nucleic acid amplification testing (Aptima Combo-2) at the conclusion of the study. In primary analyses, we defined incident pharyngeal CT as ≥2 consecutive weeks with a CT-positive pharyngeal specimen. In sensitivity analyses, we defined incident pharyngeal CT as ≥1 week of a CT-positive specimen. We used Kaplan Meier methods to estimate the duration of pharyngeal CT, censoring at loss to follow-up, receipt of antibiotics, or end of study. We tested for differences in duration with the log-rank test.

Results 140 participants contributed 70.5 person-years (PY) of follow-up. The mean age was 37, 51% were living with HIV, and 34% had CT in the past year. Two (1.4%) MSM had pharyngeal CT at enrollment and 16 (11.4%) tested positive for pharyngeal CT during ≥1 week of follow-up. In primary analyses, there were 8 pharyngeal CT cases among 6 MSM (incidence=11.4 per 100 PY; 95% CI=6.0–21.9). In sensitivity analysis, there were 19 cases among 16 MSM (incidence=27.1 per 100 PY; 95% CI=18.5–39.8). Median duration of pharyngeal CT was 6.0 weeks in primary analyses and 2.0 weeks in sensitivity analysis. In primary analyses and 2.0 weeks in sensitivity analysis. In primary analysis, median duration was significantly shorter for those with a history of CT (3.6 weeks) vs. no history of CT (8.7 weeks), and significantly shorter for those living with HIV.

Conclusion Incident pharyngeal CT was relatively common but the duration of infection was short, supporting the theory that pharyngeal CT likely contributes little to sustained population-transmission of CT.
caused by masturbation from 3.9% (95% CI 2.0 to 6.8) to 7.8% (95% CI 4.3 to 15.6) which was primarily due to solo masturbation (estimates of 3.5% (95% CI 1.7 to 6.1) to 7.1% (95% CI 4.0 to 13.1)) with little contribution from partnered masturbation (estimates of 0.3% (95% CI 0.0 to 1.5) to 0.7% (95% CI 0.1 to 4.0)).

Conclusions Our model suggests that saliva use as a lubricant for solo/partnered masturbation plays a negligible role in chlamydia transmission in MSM.

**STI treatment**

**O11.1 TOLERABILITY OF TOPICAL IMIQUIMOD AGAINST HIGH-RISK HUMAN PAPILLOMAVIRUS INFECTION IN MEN-WHO-HAVE-SEX-WITH-MEN LIVING WITH HIV**

1-2D Durukan*, 1-2T Phillips, 3-4G Murray, 1-2Ong, 5A Grulich, 6M Poynten, 1F Jin, 1-2C Bradshaw, 1-2Aguime, 3-4Silvers, 6H Kent, 3-4S Atchison, 6B Balgond, 3-4A Cornall, 1-2M Chen, 1-2E Chow, 1-2C Fairley. 1-2Central Clinical School, Monash University, Melbourne, Australia; 3-4Melbourne Sexual Health Centre, Alfred Health, Carlton, Australia; 5-6Murdoch Children’s Research Institute, Parkville, Australia; 7Centre for Women’s Infectious Diseases, The Royal Women’s Hospital, Parkville, Australia; 8Amsterdam University Medical Center (UMC), Amsterdam, The Netherlands.

Methods We conducted an open-label, single-arm pilot study to assess the utility of imiquimod cream against hrHPV among MSM living with HIV [ACTRN12617001355369]

Results We enrolled 10 MSM in phase 1 (37%) and 21% grade 3 AEs. Eighteen MSM (67%) required treatment were reported by 33.8% (98/290) receiving doxycycline and 45.1% (134/297) azithromycin (risk difference=-11.3%; 95%CI: 94.9, 98.9) for doxycycline and 227/297 (76.4%; 95%CI: 73.8, 79.1) for azithromycin, with an adjusted risk difference of 19.9% (95% CI: 16.4, 25.3; p<0.001) in favour of doxycycline. Adverse events including nausea, diarrhoea and vomiting were reported by 33.8% (98/290) receiving doxycycline and 45.1% (134/297) azithromycin (risk difference=-11.3%; 95%CI: -19.5, -3.2). Chlamydial load at baseline was greater for those in the azithromycin arm who failed treatment compared to those who did not.

Conclusions The efficacy of doxycycline was found to be substantially superior to azithromycin in the treatment of asymptomatic rectal chlamydia infection among MSM. Doxycycline must replace azithromycin as first-line treatment for symptomatic rectal chlamydia.

**O11.2 TREATMENT EFFICACY OF 1G AZITHROMYCIN VERSUS 100MG DOXYCYCLINE BI-DAILY FOR SEVEN DAYS FOR ASYMPTOMATIC RECTAL CHLAMYDIA TRACHOMATIS**

1LAu, 1-2F Kong, 1-2C Fairley, 1-2Templeton, 1-2AImin, 1-2Phillips, 1-2AMaw, 1-2CBradshaw, 1-2Donovan, 1-2AMcNulty, 1-2MBoyd, 1-2Timms, 1-2EChow, 6DRegan, 1-2CKhaw, 1-2DLevis, 1-2Kalbro, 1-2MRatnayake, 1-2NCarvalho, 1-2Hocking. 1Melbourne Sexual School of Population and Global Health, The University of Melbourne, Carlton, Australia; 2Melbourne Sexual Health Centre, Alfred Health, Carlton, Australia; 3Central Clinical School, Monash University, Carlton, Australia; 4RPA Sexual Health, Camperdown, Australia; 5Macquarie University, Macquarie Park, Australia; 6The Kirby Institute, Kensington, Sydney, Australia; 7Sydney Sexual Health Centre, Sydney, Australia; 8Adelaide Medical School, University of Adelaide, Adelaide, Australia; 9Geneology Research Centre, University of the Sunshine Coast, Sippy Downs, Australia; 10Adelaide Sexual Health Centre, Adelaide, Australia; 11Western Sydney Sexual Health Centre, Parramatta, Australia.

Methods The study was conducted at Melbourne Sexual Health Centre between April 2018 and June 2020. MSM aged ≥ 18 years, living with HIV, who tested positive for any hrHPV in the anus, and a high incidence of anal cancer. We instructed men to apply 5% imiquimod cream (6.25 mg) in the anus intra-anally and peri-anally 3 doses per-week for 16-weeks (Phase 1), followed by a maintenance period of 1 dose per-week for 48-weeks (Phase 2). We collected adverse events (AE) using text messages and questionnaires.

Results Thirty MSM were enrolled to phase 1 and 27 completed the week 16 follow-up (median age 50). Twenty-four men (86%) applied at least 50% of imiquimod doses. All MSM took at least 50% of doses. No treatment-limiting AEs were reported. 10 MSM in phase 1 (37%) and none in phase 2 reported their sex life was negatively impacted from imiquimod use.

Conclusions Intra-anal and peri-anal imiquimod at 3 doses per-week was poorly tolerated over 16 weeks and most men required treatment interruption due to AEs. In contrast, once-a-week application was well tolerated with no treatment-limiting AEs reported over 48-weeks.