

detect MG and macrolide resistance by targeting the 23S rRNA gene. Nested PCRs were used to detect mutations in quinolone resistant determination regions in *gyrA*, *gyrB*, *parC* and *parE* genes.

Results MG infection was detected in 27 MSM (17.1%); 18 (11.4%) at the genital site and 9 (5.7%) at the rectal site. The bacterial load ranged from 2–32,700 genome copies/μl. Macrolide resistant MG was detected in 19 men (70.4%), featuring typical 23S rRNA mutations (A2071G or A2072G transversions). One subject with MG had novel gene mutations (G1972T and G2038T) with unknown function. Eight (29.6%) had fluoroquinolone-resistant MG harbouring *parC* mutations that cause changes in amino acid position 83 (S83I or S83R); 4 of them had an additional P62S mutation in *parC* and 1 had a F475S mutation in *gyrB*. Five men (18.5%) had MG with dual macrolide and fluoroquinolone resistance. The prevalence of resistance was similar at rectal and genital sites.

Conclusion This is the first U.S. study to document a high frequency of macrolide and fluoroquinolone-resistant MG in HIV-infected MSM at rectal and genital sites. If these resistance mutations are associated with clinical treatment failure, more effective options to treat MG are needed.

LB3.261 TRENDS IN CONDOM USE AND SEXUAL POSITIONING AMONG MEN-WHO-HAVE-SEX-WITH-MEN IN THE ERA OF HIV PRE-EXPOSURE PROPHYLAXIS, AND RISK FOR DIAGNOSES OF INCIDENT HIV AND OTHER SEXUALLY TRANSMITTED INFECTIONS – NEW YORK CITY, 2011–2015

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Introduction Men-who-have- sex-with-men (MSM) may modify sexual practices to reduce HIV and sexually transmitted infection (STI) risk. HIV pre-exposure prophylaxis (PrEP) may impact risk behaviour and STI acquisition.

Methods We matched HIV-negative MSM attending New York City (NYC) sexual health clinics during 2011–2015 to the NYC HIV registry in 01/2017. We used visit-level data to assess trends in condom use during anal sex (consistent, inconsistent, no use; referent period=3 months), overall and by sexual positioning behaviour. We examined associations between condomless (inconsistent/no use) insertive, condomless receptive, and condomless versatile sex and incident HIV or STI (chlamydia/gonorrhoea/early syphilis). We used regression with generalised estimating equations (referent group=anal sex with condoms), controlling for demographics, partner number, and STI history.

Results The proportion of visits with reported consistent condom use decreased from 2011–2015 (39% to 31%, $p<0.001$); inconsistent use increased (48% to 55%), and no condom use was stable (13%–14%). There were significant declines in consistent condom use across all positioning categories. From all visits, MSM reported positioning as: 19% condomless insertive, 9% condomless receptive, 37% condomless versatile, 35% sex with condoms. For 25,216 STI testing visits that yielded 7438 diagnoses, all condomless-positioning

categories were associated with incident STI; highest risk was with condomless insertive sex (aOR 1.8, 95% CI 1.6–1.9). For MSM tested for HIV at 9744 visits, condomless receptive (aOR 2.8; 95% CI 1.9–4.1) and condomless versatile sex (aOR 2.2; 95% CI 1.6–2.8) were associated with incident HIV. Black MSM (~25% of MSM) had the highest risk for STI and HIV (41% of 368 new HIV diagnoses).

Conclusion We documented increases in condomless sex among a sentinel high risk group prior to and during the PrEP era. Insertive sex, perhaps perceived as a safer strategy, was associated with substantial STI risk when condoms were not consistently used. Assuring PrEP access for black MSM is critical.

LB3.262 LATE POSTNATAL HIV MOTHER TO CHILD TRANSMISSION THROUGH BREASTFEEDING: ANALYSIS OF INFANT CASES OF PREVIOUSLY SERONEGATIVE MOTHERS INFECTED DURING LACTATION

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Introduction Among children, the main postnatal HIV category of exposure is breastfeeding. When acute maternal infection occurs during lactation, the high maternal viral rate results in a higher risk of infant infection. There are few researches showing the impact of HIV infection on children of previously seronegative mothers, who acquire the HIV virus during breastfeeding. To elucidate the importance of this category of exposure, this study aims to evaluate HIV infection in infants assisted by a Paediatric Infectology Service in Brazil, emphasising the cases where vertical transmission occurred lately through breastfeeding.

Methods Transversal, analytical and descriptive study, with quantitative and qualitative approach analysing HIV infected patients from 0 to 16 years old. Data was collected during 2016, from charts of children assisted between 2010 and 2015. After previous selection, breastfed children of mothers who had negative HIV testing during pregnancy and/or at birth, had charts analysed in detail.

Results From a total of 122 cases, 95% were mother-to-child-transmissions. Between these cases, 11 were considered possible/confirmed late postnatal transmission through breastfeeding. This group characterisation showed that at diagnosis, 72,7% presented significant and/or recurrent symptoms of HIV infection. In 45,4%, mother and children were diagnosed at the same time and 72,7% of mothers were sexually infected.

Conclusion There was a significant prevalence of late postnatal transmission through breastfeeding in our sample. Differently from resource limited settings, most countries avoid breastfeeding by HIV infected mothers. Considering cases where women were infected only during lactation, our study highlights a gap in prevention of vertical transmission of HIV. The severity of infant symptoms, the moment of diagnosis and mother's category of exposure confirm the importance of preventive measures and scientific improvement to reduce postnatal HIV transmission.