

P3.231 *TREPONEMA PALLIDUM* MACROLIDE RESISTANCE SURVEILLANCE IN SOUTH AFRICA: 2008–2016

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Introduction Penicillin is the treatment of choice for syphilis worldwide. Macrolides (e.g. azithromycin [AZM]) have been used as a convenient oral and cost-effective alternative for syphilis treatment in many countries globally. High prevalence macrolide resistance, resulting in treatment failure for primary syphilis in USA, Europe and China has been attributed to an adenine (A) to guanine (G) transition in the 2058 or 2059 position of the *Treponema pallidum* 23S rRNA gene, resulting in target site alteration due to methylation. In 2014, AZM was added to the syndromic management guidelines for genital discharge in South Africa (SA). Individuals exposed to macrolides are twice as likely to have a resistant strain of *T. pallidum* within the next year. We sought to ascertain the prevalence of macrolide resistance-associated *T. pallidum* in genital ulcer disease (GUD) specimens from patients, presenting to nine primary health care facilities (PHCs) (one PHC per province) in SA, between 2008 and 2016.

Methods Swab samples from genital ulcers were collected from 2238 adult patients (>18 years of age) presenting to PHCs throughout SA. Macrolide resistance testing was done using established polymerase chain reaction (PCR) and restriction digest assays described by Lukehart *et al.*, (2004) and Matejkova *et al.*, (2009) on the G-Storm platforms (Vacutec). The resultant 628 base-pair (bp) fragment of the 23S rRNA gene was submitted to digestion with *BsaI*- and *MboII*-restriction enzymes to screen for the A2059G and A2058G mutations respectively. Amplicons with A2058G and A2059G mutations resulted in 2 distinct band sizes for each mutation. The SS14 strain (A2058G mutation), the A2059G (+) strain, and the wild-type Nichols strain were included as controls.

Results: *T. pallidum* was detected in 105/2,238 (4.7%) GUD specimens collected over a nine-year surveillance period. The A2058G mutation was detected in 4/105 (3.8%) specimens. The A2059G mutation was not identified. All specimens having macrolide resistance-associated mutations in *T. pallidum* were obtained in the years 2013 to 2016.

Conclusion This is the first report of macrolide resistance-associated mutations detected among *T. pallidum* in SA. Ongoing surveillance for AZM resistance is essential to inform future management guidelines.

P3.232 PROFILE OF PATIENTS FROM A SEXUALLY TRANSMITTED INFECTIONS UNIVERSITY AMBULATORY IN SÃO PAULO, BRAZIL: A SIXTEEN-YEAR RETROSPECTIVE

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Introduction There is scarce data concerning epidemiology and demography of Sexually Transmitted Infections (STIs) in Brazil, in spite of their high prevalence. Moreover, there are only

a few specialised centres for diagnosis and treatment. The Sexually Transmitted Diseases Combat Service (SCDST) was founded 30 years ago by medical students from UNIFESP-EPM and has maintained ever since an ambulatory specialised in diagnostics, treatment and follow-up for roughly thirty patients every week. In this scenario, it is relevant to quantify and classify patients seen at this service.

Methods This retrospective study was developed in the SCDST ambulatory at EPM-UNIFESP in São Paulo, Brazil. Data was collected from medical records of 1908 patients seen at the service from 1999 to 2015, including sociodemographic, sexual and medical history.

Results Most of the 1908 patients were men (1413–74%), with age between 19 and 23 years (20,8%). 792 of were single (56%) and 622 had studied up until secondary school (44%). The majority had sexual relations with women only (84,6%), while 215 (15,2%) were men who have sex with men (MSM). Sexual activities began between the age of 14 and 16 years for 620 of them (43,8%) and 885 had only one partner in the previous month (62,6%). Use of condom in every sexual activity was seen in 319 of them (22,5%), while 532 (37,6%) denied its use. The most common diagnosis among men and women was condyloma acuminatum (40,7% and 29,2%, respectively). 108 out of 120 cases of HIV seen at the service were men (90%) and 68 were MSM (63%). The vast majority of the HIV positive also presented with another STI (94,1%). Lost of follow-up was seen in 1039 patients (54,45%).

Conclusion The majority of patients were single, young men who did not practice safe sex. The most common diagnosis was condyloma acuminatum for both genders, and most of them did not receive medical discharge. HIV was more common in MSM. It is important to develop strategies to bring awareness about safe sex and the most common STIs, and improving care for these patients.

P3.233 OCCUPATIONAL ACCIDENT WITH BIOLOGICAL MATERIAL IN THE STATE OF SÃO PAULO 2007–2016

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Introduction Occupational accidents with biological material are an injury which can largely be prevented. This study describes the notified occupational accidents in the State of São Paulo.

Methods Descriptive data analysis of the accidents with biological material notified by SINAN in the State of São Paulo, in the period from 2007 to June 2016.

Results During this period 1 25 060 accidents were reported with biological material. 77.5% occurred in female health professionals and most frequently in the 20 and 39 years age group, in nurses and lab technicians (53.1%) followed by physicians (10.7%). Regarding the accident circumstances, 17.1% occurred during the administration of medication, inappropriate disposal of syringes and needles (15.5%) and surgical and dental procedures (15.1%). The proportions of accidents by inappropriate disposal over time remained unchanged. The accidents in procedures of realisation of capillary blood glucose test and recapping needles had a proportional decrease of two times. It was observed that 30.2% of