P3.34 CONGENITAL SYPHILIS IN THE STATE OF SÃO PAULO: "A PROBLEM THAT CONCERNS US ALL"

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Introduction To analyse congenital syphilis (CS) between 2007 and 2014, and case profile in 2014 in the state of São Paulo (SSP).
Methods Ecological descriptive study; sources: SINAN (cases) and Fundação Seade (live births-LB population).
Results 24 684 cases of syphilis in pregnancy (PS) and 12 479 of CS reported in the period. PS detection rate and CS incidence rate increased 2.8 times (3.5 to 9.9/1,000 LB) and 2.4 times (2.0 to 4.8/1,000 LB) in 2010 and 2014, respectively. There were 132 infant deaths and 1051 stillbirths and miscarriages by syphilis, about 9.5% (1,183) of total cases. In 2014, 29% (870/2,989) of CS cases did not complete clinical and laboratory protocol (no long bone x-ray or CSF) and 17% (499/2,989) did not comply with treatment protocol. About 20% (612/2,989) of mothers were ≤19 years old, 75% (2,244/2,989) underwent antenatal care (AN) and of these, 71% (1,597/2,244) were diagnosed with syphilis. Although most mothers had access to AN diagnosis of syphilis during pregnancy, the vertical transmission chain was not interrupted. It is emphasised that 55% (1,632/2,989) of the mother's treatment was considered inadequate, because the sexual partner was not treated (74%, 2,203/2,989).
Conclusion Albeit preventable, CS remains a public health problem with failures, especially during AN. Early diagnosis and treatment up to the 20th week of pregnancy can reduce fetal loss and prevent infant deaths. The case definition is sensitive considering the treatment of sexual partner in the mother's treatment classification. The public health challenge is to increase coverage and quality of AN, expand diagnosis and treatment of women and sexual partners in primary care services, and prevent STDs, especially in vulnerable women. To identify determinants of transmission and foster interventions, CS cases have been investigated using specific protocols and discussed in regional and municipal committees. The SSP proposed using Mother and Child Mortality Committees to discuss the cases, given they have already been established and are operating regularly.

P3.35 FREQUENCY OF HUMAN PAPILLOMAVIRUS AND GENOTYPES IN POPULATION ATTENDING A WOMEN`S CLINIC IN MONTERREY, MEXICO

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Introduction: Human papillomavirus (HPV) is the most common viral infection of the reproductive tract. The aim is to determine the frequency of HPV and its genotypes in population that came to a Women's Clinic.
Methods HPV detection was performed in endocervial samples from 339 patients that came to woman clinical in the Hospital "Dr. José Eleuterio González". DNA extraction was performed; After that, the β globin gene was detected to validate the presence of epithelial cells in the sample; HPV was detected by the PCR technique and nucleic acid hybridization; 17 high-risk genotypes (16, 18, 31, 33, 35, 39, 45, 51, 52, 53, 56, 58, 59, 66, 68, 73 and 82) and 17 low-genotypes (6, 11, 26, 40, 42, 54, 55, 61, 62, 64, 67, 69, 70, 71, 81, 83 and 84).
Results The mean age of the population was 50 (range, 18–89) years. Of the samples that were positive for the β *globin* gene (n=316); 7% (n=22) was positive for HPV. 18 HPV genotypes were detected; of which 65% (n=10) were at high risk. The most frequent genotypes were 16 (n=4), 59 (n=4), 51 (n=3) and 42 (n=3). In 77% (n=17) of the patients, high-risk genotypes were detected. In 59% (n=13) of the population a 1 genotype was detected, in 23% (n=5) 2 genotypes and in 18% (n=4) 3 genotypes.
Conclusions Of the 22 patients infected with HPV, 17 had been infected with at least one high-risk genotype. The most frequently detected genotypes were 16 and 59.

P3.36 FREQUENCY AND GENOTYPES OF *CHLAMYDIA TRACHOMATIS* IN PATIENTS ATTENDING IN MEXICO AND CORRELATION WITH SOCIODEMOGRAPHIC, BEHAVIOURAL, AND BIOLOGICAL FACTORS

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Introduction *Chlamydia trachomatis* is the causative agent of the most common bacterial sexually transmitted infection worldwide. The aim of this study was to investigate the frequency and genotypes of *C. trachomatis* in patients attending an obstetrics and gynaecology clinic in Jalisco, Mexico and correlates them with risk factors.
Methods *C. trachomatis* detection was performed in endocervical samples from 662 patients by direct fluorescence assay (DFA) and two PCR assays that amplified the phospholipase D endonuclease superfamily (PRPHA) and *OmpA* genes. Positive samples were genotyped using PCR-restriction fragment length polymorphism assays. Sociodemographic, behavioural, and biological data were collected.
Results The mean age of the study population was 31 (range, 14–78) years. *C. trachomatis* positivity was detected by DFA in 16.7% (n=111), PRPHA gene amplification in 14.2% (n=94), and *OmpA* gene amplification in 14.5% (n=96) of the population. Eight *C. trachomatis* genotypes were detected: E (39.6%), F (29.2%), D (15.6%), K (6.3%), L2 (3.1%), G, J, and I (2.1% each). *C. trachomatis* infection was associated with age, marital status, pregnancy, and hormonal contraceptive use (all p=0.01); intrauterine device use and previous premature birth (both p=0.03); *C. trachomatis* genotype K was more likely to be detected in women histories of ≥2 sexual partners, genotype F in pregnant women, genotype L2 in women with PID, genotype D in women who had had infection during previous pregnancies, and genotype E was more likely in those with previous ectopic pregnancies and green vaginal discharge (all p=0.01).
Conclusions The frequency of *C. trachomatis* in our population was higher than previously reported worldwide, but within the range reported for Mexico. Genotype E was detected most frequently in the study population. Infection by *C. trachomatis* and *C. trachomatis* genotypes K, F, D, and E was strongly associated with multiple sociodemographic,

behavioural, and biological factors. *C. trachomatis* genotype L2 was detected in women with PID.

P3.37 THE ROLE OF ENGAGEMENT WITH PARTNER NOTIFICATION IN UNDERSTANDING STI DIAGNOSIS INEQUALITIES ACROSS ETHNIC GROUPS: EVIDENCE FROM A LARGE PATIENT SURVEY IN ENGLAND

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Introduction STI diagnosis rates vary considerably by ethnicity in England and persist after adjusting for confounding factors including deprivation and sexual behaviour. We examine the extent to which partner notification (PN) experiences differ by ethnicity as a possible contributing factor to this health inequality.

Method 3986 patients attending 17ethnically-diverse sexual health clinics in England, between May and September 2016, self-completed an online survey, which included questions onsociodemographics, sexual behaviour, and PN experience. Prior to survey analyses, these data were linked to clinic data on STI diagnosis/es and services received at their clinic visit. Age-adjusted ORs (AORs) were calculated for the 6main ethnic minority groups in England(Black Caribbean, Black African, Asian, Mixed, and White other, and other) relative to White British patients (36% of the sample).

Results Overall, 25% of men and 20% of women reported STI diagnosis/es(past year), but this was higher among those of mixed ethnicity, Black Caribbeans and 'White others', (AORs:1.47, 1.40,1.27respectively). Of patients reporting STI diagnoses, 75% said that clinic staff advised them to inform their partners to test for STIs, while 60% of patientsdid actuallynotify all their partners. Reporting of both of these PN measures was higher among Black Caribbeans(AORs:2.05 and 1.92, respectively) and those of mixed ethnicity (AORs:1.92 and 1.59, respectively). Of those who had not informed all their partners, 69% of women and 55% of men reported condomless last sex, with this significantly higher for women (only) of Black Caribbean or mixed ethnicity (AOR:2.52 and 5.81, respectively). Partner numbers were larger for those who had not informed all partners: 40% reported 5+ (past year) vs. 31% of those who had; this did not vary significantly by ethnicity.The 3 mostcommonly reportedreasons for not informing partners were: not having their contact details (66%), embarrassment (57%), and not being concerned about notifying casual/one-off partners (54%).

Conclusion Overall, engagement with PN is relatively high and inequalities in PN experience do not appearto explain disproportionate STI risk in some ethnic groups. However, among those who did not notify all their partners STI risk behaviour was more commonly reported,suggesting efforts toimprove PN should be maintained. The development of strategies for empowering black Caribbean and mixed-ethnicity women to negotiate safer sex and condom use is a priority.

P3.38 USE OF RAPID DIAGNOSTICS FOR CHLAMYDIA AND GONORRHOEA FOR WOMEN IN THE EMERGENCY DEPARTMENT CAN IMPROVE CLINICAL MANAGEMENT: REPORT OF A RANDOMISED CLINICAL TRIAL

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Introduction In the Emergency Department (ED), accurate diagnosis and appropriate treatment of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoea* (NG) is a challenge. Lengthy routine result times for CT/NG tests often lead to empiric antibiotic over treatment or lack of treatment of infections. A randomised clinical trial was conducted to determine how use of rapid diagnostics could improve clinical management. The objective was to assess the effects of rapid CT/NG testing on over treatment and under treatment of women being evaluated for sexually transmitted infections (STIs) in the ED.

Methods Women undergoing pelvic examinations and STI testing in the ED (n=253) were consented and randomised to either a control or rapid testing group. The control group received standard of care (SOC), with CT/NG testing by nucleic acid amplification tests (NAAT) with a 2–3 day turnaround time. Patients in the rapid testing group provided an additional vaginal swab used for rapid Gene Xpert CT/NG testing with a 100 min turnaround time. Results from the rapid tests were presented to providers and patients were treated according to clinical judgment. Following discharge there was a 2 week phone follow-up and chart review.

Results 100% of CT positive (n=9) and 100% NG positive (n=5) patients in the rapid testing group received appropriate antibiotic treatment as compared to 54% (7/13) CT positive patients (p=0.046) and 43% (3/7) NG positive patients (p=0.081) in the control group. Additionally, in the control group, 36.8% (42/114) of CT negative and 38.3%, (46/120) of NG negative patients were over treated.

Conclusions Both under- and over treatment for CT/NG was observed in the SOC control group. Patients with positive results in the rapid test group were more appropriately treated. This study demonstrated the potential clinical impact and subsequent antibiotic stewardship of using rapid CT/NG testing the ED.

P3.39 MOLECULAR DETECTION OF *TRICHOMONAS VAGINALIS* VIRUS IN DIRECT *TRICHOMONAS VAGINALIS* POSITIVE CLINICAL SAMPLES FROM THE NETHERLANDS

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Introduction Two genotypes are described for *Trichomonas vaginalis* (TV). TV genotype I seems to be more susceptible to metronidazole, but also more prone to TV virus (TVV) infection, than type II. The release of TVV during treatment may in itself be pathogenic. Four TVV genotypes have been described, but epidemiological studies are rare as culturing TV ahead of TVV detection is laborious. We therefore developed a sensitive method to detect and type TVV in TV positive clinical samples directly.