Poster presentations

P3.248 THE EVOLUTION OF SEXUALLY TRANSMITTED INFECTION IN ROMANIA


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Objective to analyse the evolution of incidence of some sexually transmitted infections (STI) in Romania in the transition period.

Methods The study is based on data recorded at Dermato-venereological Center Bucharest. We had in view to evaluate the evolution of incidence of syphilis, gonorrhoea, Chlamydia trachomatis genitally infections and HIV infection/AIDS and to identify the main factors implicated in this evolution.

Results In 2011 we were recorded 2,209 new cases of syphilis. The incidence of syphilis has risen steadily from 7.1/100,000 in 1986 to 19.8/100,000 in 1989 and to 58.5/100,000 in 2002 and decreased to 10.34/100,000 in 2011. The incidence of gonorrhoea was also increasing, from no cases in 1986 to 425 cases in 2001 (after introduction of new criteria in 2004) decreased to 10 cases in 2011. Paradoxically, the incidence of gonorrhoea is decreasing, from 57.4/100,000 in 1986 to 35.7/100,000 in 1989 and to 2.46/100,000 in 2011 (546 cases). In 2011 153 new cases of Chlamydia trachomatis genitally infections were reported (0.62/100,000). Since the outset of epidemic were registered 17,445 cases with HIV infection/AIDS; the prevalence of HIV infection in patients with STI tested at Dermato-venereological Centre Bucharest is around 0.51% (1.59% in 2011).

Those at greatest risk for STD are the young, economically deprived, residents of the inner city. Comments: STI are a public health problem of major significance in Romania. Between mains factors that promote the increasing of STI (the incidence of gonorrhoea and Chlamydia trachomatis genitally infections is underestimated due the unreference of all cases) are the modification of sexual behaviour, prostitution, degradation of socioeconomic condition, and deficiencies in health behaviour.

P3.249 FACTORS ASSOCIATED TO SYPHILIS IN PREGNANT WOMEN IN VENTANILLA-CALLAO, PERU


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Background One of the main pregnancy complications in Peru is syphilis, a disease with severe complications that can be prevented through early diagnosis and treatment. The objective of this study was to estimate the factors associated with syphilis infection among pregnant women in the district of Ventanilla – Peru in 2012.

Methods The Project WaWiRed “Getting connected for a better maternal and child health” involved the implementation of an electronic health record (EHR) for maternal health, linked to SMS messages sent to pregnant women and tailored to their health profile and gestational age. A crossover study was performed using data collected via the EHR on 2012. Clinical and laboratory data from pregnant women attending one of 16 different health centres in Ventanilla were analysed. These included test results for a rapid syphilis test carried out in their first antenatal care visit.

Results A total of 4,915 pregnant women were included. The mean of age and age at first intercourse were 26.0 (95% CI: 25.8–26.2) and 17.3 (95% CI: 17.2–17.4) respectively. The prevalence for syphilis was 1.4 (95% CI: 1.1–1.7) and for HIV was 3.0 (95% CI: 1.4–4.6). There were 2 patients co-infected with HIV and syphilis. The factors analysed were: age, level of education, marital status, number of pregnancies, history of abortion, age at first sexual intercourse and contraceptive methods used. This study showed that pregnant women who use a intrauterine device (PR: 4.9, p < 0.02) as a contraceptive method as opposed to condom were at higher risk for syphilis, while older age at sexual debut was associated to a lower risk for syphilis (PR: 0.88, p < 0.01).

Conclusion Delayed sexual debut and condom use are once again identified as forms of preventing STI, and should be important components of family planning programmes.

P3.250 EARLY DIAGNOSIS OF ACUTE HIV INFECTION IN STI CLINIC PATIENTS AND PATIENTS WITH POSITIVE SYPHILIS SEROLOGY


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Background We sought to determine if pooled nucleic acid testing (pNAT) for HIV RNA would identify early HIV infections in stored samples collected in 2008 from Edmonton (Canada) patients who were: (1) Seronegative for HIV antibody (HIVAb-) at the STI clinic, and (2) Seropositive for syphilis (syphAb+) with no history of a positive HIV test.
Methods Using data from the Provincial Laboratory and STI clinic, an anonymized dataset with the last HIVAb- (HIVGOI/1, Abbott, AxSym +/- Western Blot) (STI clinic patients) or first syphAb+ (Architect, Abbott +/- RPR & Innoia) was constructed with: (1) All patients: age, gender, date of testing, N. gonorrhoea (NG) and C. trachomatis co-infection within 30 days of HIV/syphilis test, infectious syphilis stage, and HIV testing as of Dec 2010 and (2) STI clinic patients only: syphilis test results within 30 days of their HIVAb- test. Patients remaining HIVAb>-180 days after the sample receipt date were excluded from HIV pNAT. The remaining samples were divided into SyphAb+ and SyphAb-subsets. Pools of 25 samples were tested using the Roche COBAS AmpliPrep/COBAS Taq-Man HIV-1 Test (pNAT). Positive pools were broken down to identify positive individuals. Percentage calculations were based on patients with pNAT.

Results 7954 HIVAb- patients were eligible. Of these, 2237 were retested and were HIVAb>-180 days; 216 (10%) of this subset were SyphAb+, 5441 (95%) of the remaining patients had samples available for pNAT. 5001 were SyphAb-, 351 were SyphAb+, and 109 had no syphilis testing. Four SyphAb+ patients (0.07% of all, 1.2% of SyphAb+), all seen at STI clinic, had detectable HIV RNA using pNAT; one patient had Early Latent Syphilis and positive NG culture.

Conclusions pNAT testing can be used to identify acute HIV infections in high risk populations. Patients with positive syphilis serology may be an important subset for this approach.