

**Results** Out of the 30 infants born to syphilis seropositive mothers, we found 3 babies with different IgG WB profiles from those of their own mothers. Two out of these three newborns had also positive IgM WB result. Routine serological testing results of all the 30 newborns showed similar values to those of their own mothers.

**Conclusion** The use of comparative IgG WB test enabled us to diagnose CS in three cases in which the infection would have not been detected by classical serology techniques. Therefore the routine use of comparative IgG WB assay at birth on newborn-mother pairs could be a welcome addition to the conventional laboratory methods used for the diagnosis of CS.

### P3.351 CONGENITAL SYPHILIS PREVENTION IN HONDURAS

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**Introduction** Honduras is a Central American country whose priority is the elimination of congenital syphilis in 2015.

**Objective** To prevent transplacental transmission of syphilis from mother to daughter/son during the gestational period.

**Materials and Methods** Descriptive retrospective analysis from January 2008 to December 2012 in 117 health units without a laboratory from the Preventive Program transmission of syphilis from mother to daughter/son that detects syphilis during pregnancy in attending antenatal women, using rapid tests for free and voluntary screening.

**Results** Year 2008 4.950 pregnant women were screened, 10 of them were reactive, with a prevalence of 0.2%, in 2009 7.285 pregnant women were screened of which 17 were reactive with a prevalence of 0.2%, in the year 2010 5.310 pregnant women were screened, 5 out were reactive with a prevalence of 0.09%, in 2011 8.343 pregnant women were screened of which 20 were reactive with prevalence of 0.2% and 2012 9.320 women were screened of which 14 were reactive with a prevalence of 0.1%.

**Conclusions** During the five years 66 pregnant women were screened with syphilis, all received treatment with their partners and were followed until delivery, of which 57 (86%) of the children born were free of congenital syphilis, 7 pregnant women have not yet reached the time birth and 1 pregnant woman did not return for follow-up service.

Screening for syphilis during pregnancy is key to preventing transplacental transmission of syphilis mother daughter/son

The free screening with rapid tests for syphilis in pregnant women in places that do not have clinical laboratories, improved the access and permitted the early capture, and were provided with timely treatment with their sexual partner.

Rapid tests for syphilis are essential tool for early diagnosis of congenital syphilis prevention.

### P3.352 PREVENTION OF CONGENITAL SYPHILIS

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Congenital syphilis in Russia is an actual problem. The number of children with this disease was respectively 2005–325, 2006–321, 2007–325, 2008–249, 2009–190, 2010–175 persons. The source of the high morbidity are pregnant women with syphilis, who didn't know about their disease before childbirth. The aim is to evaluate the importance of prevention of syphilis that is possible with the deepest analysis of health of each child. Complex inspections of 51 children with early congenital syphilis revealed that 84.3% had manifested forms.

At birth 62.7% had Apgar score below 7/8 points, 25.4% - 7/8 points, 11.8% - above 7/8 points. While in the hospital 5.9% - had

satisfactory status, 13.7%— moderately grave condition, 80.3% - critical condition, among them 54.9% - premature babies.

Clinical signs of early congenital syphilis symptoms were bone changes - 66.7%. In 19.6% of cases, the bone changes were the only specific clinical signs. The skin and mucous membranes observed in 37.3%: syphilitic pemphigus - 27.5%, infiltration of the palms and soles with desquamation krupnoplachinchatym - 7.8%, roseola - 5.9%, rhinitis - 7.8%.

Changes in the internal organs was found in 68.6%, hepatomegaly - 60.8%, hepatitis - 9.8%, splenomegaly - 39.2%, myocarditis - 2%, pneumonia - 5.9% and nephritis- 3.9%.

Damage of nervous system (specific meningitis) registered at 23.5% that is every 4th child.

All children had a hypoxic-ischemic damage of central nervous system with syndromes of depression and agitation, psychomotor retardation, perinatal encephalopathy.

Almost all of them had immaturity of the functional-and-morphological systems (lengthening period of neonatal jaundice, syndrome of respiratory disorders and nervous regulation).

Thus the syphilis infection in pregnancy increases the risk of developing specific and non-specific disorders in formation of bodies and systems of a foetus.

Moscow Center uses obtained analytical data for planning preventive measures in this target group.

### P3.353 CONGENITAL SYPHILIS IN BUENAVENTURA, COLOMBIA: DESCRIPTION OF A CASE SERIES IN A NEGLECTED PACIFIC COAST TOWN

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**Background** Syphilis in pregnant women is a world-wide health problem leading to serious adverse outcomes. Although there are strategies to prevent congenital syphilis (CS) through antenatal screening, disease burden still remains high especially in low-resourced settings. Buenaventura, a municipality in the Colombian Pacific-Coast, is endemic for gestational syphilis (GS) and accounts for the 6.6% of CS in Colombia. This study describes the CS problem in Buenaventura, giving rise to strategies that could generate positive impact in prevention of syphilis mother-to-child transmission.

**Methods** A retrospective health record review of CS patients and mothers that attended to the Buenaventura Hospital during a 7-month period, 2011, was conducted. Demographic, antenatal care (ANC), syphilis diagnosis/treatment information from GS patients, and clinical information from CS cases was collected. A descriptive analysis of the information was performed, analysed using SPSS 20.0. Study procedures were approved by CIDEIM's human subject's board.

**Results** 100 clinical records were reviewed; 89 and 92 cases met definitions for CS and GS respectively. All GS mothers lived in the municipality of Buenaventura, mainly in urban areas. The majority (80%) were affiliated to private health-care providers. Although 70% of GS mothers attended to at least one ANC visit, and 64% had at least one VDRL test, only 10% received adequate antibiotic therapy, and 2% of the partners were treated. Stillbirths and early neonatal deaths (7/82), preterm births (15/82) were the main finding in the CS population. All infants were hospitalised for intravenous antibiotic treatment.

**Conclusions** The high CS incidence in Buenaventura (7/1000 live-births), is the result of lack of appropriate ANC, which ultimately leads to failures in syphilis screening and adequate treatment. CS prevention strategies should be focused in early syphilis

screening in pregnancy, with the now-a-day available point-of-care tests, and treating within the same visit with at least one dose of penicillin.

**P3.354 VERTICAL TRANSMISSION OF SYPHILIS: CURRENT REALITY IN THE CITY OF BAURU**

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**Introduction** Syphilis, a sexually transmitted disease caused by *Treponema pallidum* transmitted vertically during pregnancy, resulting in congenital syphilis.

**Methodology** This study results from a qualitative study from the research of statistical information system for Notifiable Diseases - SINAN, through the Division of Surveillance, the Municipal Health Secretariat of Bauru, referring to pregnant women with syphilis diagnosed during the prenatal period March 2009 to December 2011, residents in the city of Bauru, and the growing number of cases reported annually.

**Results** In 2009, 15 cases were reported of syphilis in pregnant women, and 3 (20%) resulting in congenital syphilis. In 2010, there were 24 reported pregnancy resulting in 9 cases of congenital syphilis reported (37.5%). In 2011, there were 33 reported cases of syphilis in pregnant women, and 17 cases of congenital syphilis (51.5%). In 2011, of the 33 cases of syphilis in pregnant women, 14 of them were reported by Santa Izabel Hospital at delivery, fetal death being 1 and 5 miscarriages.

**Conclusion** The results show an increasing number in the last 3 years, confirming the reality for the city of Bauru, which equates to the epidemiological profile of the State of São Paulo. The notification by the epidemiological surveillance all syphilis cases ensures epidemiological measures of disease control. The increasing cases pointed to the need to evaluate in detail the data to have knowledge of the scale of the problem, whether the late onset of the inadequate treatment of syphilis or even underreporting to develop control measures and planning of health policies public aimed at elimination of the disease.

**P3.355 COINCIDENCE OF SYPHILIS AND PREGNANCY IN SZABOLCS-SZATMÁR-BEREG COUNTY BETWEEN 1990–2011**

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The treatment of infected cases, active case finding and the follow-up are the tasks of the dermato-venereological network. Since data on treated syphilis cases were available from decades back, a retrospective analysis was done.

**Objective** Syphilis patients treated between 1990–2011 in Szabolcs-Szatmár-Bereg county compared with national data, with the following criteria:

- Changes in morbidity in the county and in the country with sex distribution,
- Analysis by age group among women, especially during pregnancy,
- Distribution by diagnosis in women and in pregnant women including the trimester,

**Results** between 1990–2011, the outpatient clinic in Szabolcs-Szatmár-Bereg county treated a total of 469 syphilis cases (women n = 243/52%, male n = 226/48%),

- out of 243 patients, 69 had applied the syphilis diagnosis during pregnancy,

- The diagnosis of syphilis among pregnant women was as follows: primary syphilis 1/1.5%, secondary syphilis: 17/25%, early latent: 48/69.5%, late latent: 3/4%.
- between 1990–2000 the syphilis occurred sporadically among pregnant women, the number of however the cases between 2003–2008 increased significantly (in 1990–2000 n = 6; in 2001–2011 years n = 63),
- According the age group distribution, syphilis infection in pregnant women were most common in the 20–34 age-group (20–24/30%, 25–29/20%, 30–34/23%) and the 15–19 age group was also affected (16%)
- In terms of ethnicity, 49% of pregnant women (n = 34) was roma, 22% of them was from Ukraine, (n = 15) and 29% of them was Hungarian (n = 20),

**Conclusions**

The following factors played a role in spreading of syphilis in Szabolcs-Szatmár-Bereg county

- The county's geographic location.
- Significant illegal prostitution (cross-border, massage parlours, roadside, living prostitution),
- The lack of knowledge of the professions about syphilis
- Lack of knowledge of the population

**P3.356 SYPHILIS SCREENING AMONG 27150 PREGNANT WOMEN IN RURAL SOUTHERN CHINA USING POINT-OF-CARE TESTS**

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**Background** Guangdong province in southern China is at the centre of a national syphilis epidemic, with a tenfold increase of reported syphilis cases in the past ten years. However, the epidemic remains poorly described in rural areas of Guangdong, where hygiene stations (community-level clinics) lack the capacity to undertake routine prenatal syphilis screening. The purpose of this research was to determine the prevalence of syphilis and its risk factors among pregnant women, and to assess the acceptability of point-of-care tests in resource-limited areas of Guangdong province.

**Methods** From June 2010 to April 2012, we invited 55 hygiene stations, 12 general hospitals, and four women and children's hospitals in resource-limited areas of Guangdong province to participate in the study. Free point-of-care syphilis testing were provided to each of the study sites, and positive samples were confirmed at local referral centres by toluidine red unheated serum test (TRUST) and *Treponema pallidum* particle agglutination (TPPA) test. Confirmed cases received free treatment with benzathine penicillin.

**Results** A total of 27,150 pregnant women were screened for syphilis by point-of-care syphilis tests, 106 (0.39%) syphilis cases were diagnosed, of which 78 cases (73.6%) received treatment for syphilis. Syphilis infection among pregnant women was associated with older age and a previous history of adverse pregnancy.

**Conclusions** Syphilis infection is a significant problem among pregnant women living in rural areas of southern China. Point-of-care syphilis testing was well accepted in resource-limited settings, and can increase case detection in rural areas with limited testing capacity.

**P3.357 INTEGRATION OF RAPID SYPHILIS TESTING INTO ROUTINE ANTENATAL SERVICES IN RURAL KENYA: SUCCESSES AND CHALLENGES**

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