

**Conclusions** PCB is a benign condition, with characteristic clinical and histopathological features. Although various treatment modalities have been used, circumcision remains the treatment of choice. PCB is an expression of dysfunctional foreskin, moreover the curative effect of circumcision in 100% of our patients suggests that it is a non-specific reactive balanitis caused by a disturbed "preputial-ecology."

## P2.134 OPHTHALMIC AND OTOLARYNGOLOGICAL MANIFESTATIONS OF SYPHILIS IN PATIENTS WITH HIV

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**Background** Recently noteworthy aspect of the problem is associated with an increase in cases of syphilis as part of mixed infection including HIV. Mixed infection syphilis and HIV alters the clinical picture and prognosis of both diseases.

**Methods** 316 patients with early forms of syphilis were treated in city hospital in St. Petersburg in 2006–2010. The study group included 153 patients with syphilis + HIV (10 - primary syphilis, 117 - secondary syphilis, 26 - early neurosyphilis). Control group - 163 patients with syphilis (14 - primary syphilis, 115 - secondary syphilis, 34 - early neurosyphilis). Ophthalmic and otolaryngological manifestations of syphilis were estimated.

**Results** Ophthalmic and otolaryngological manifestations of syphilis were diagnosed in 18 (11.8%) patients of study group and 4 (2.5%) - control group ( $p < 0.05$ ). 12 and 2 patients with secondary syphilis, 6 and 2 patients with early neurosyphilis of study and control group respectively.

In none of the groups ophthalmic and otolaryngological manifestations in patients with primary syphilis were not determined. Specific papillitis (5 (3.3%)) and specific panuveitis (5 (3.3%)) as well as specific laryngeal neuropathy (1 (0.6%)) and specific bilateral hypoacusis (1 (0.6%)) were identified only in study group. Specific anterior uveitis was detected in both groups (1 and 2 patients), specific angina (3 and 1 patients) and specific laryngitis (monochorditis) (2 and 1 patients) of study and control group respectively.

Among 18 patients of study group with ophthalmic and otolaryngological manifestations were 12 cases of secondary syphilis and 6 - early neurosyphilis. 1 patient showed simultaneous ophthalmic, otolaryngological disorders and diffuse neurological symptoms.

**Conclusion** Clinical manifestations of syphilis were more varied in patients with HIV. Ophthalmic and otolaryngological manifestations of syphilis were more common in patients with mixed infection syphilis + HIV, which may indicate a more severe course of syphilis in these patients.

## P2.135 SITUATION OF SEXUALLY TRANSMITTED INFECTIONS IN MOST HIV/AIDS RISK POPULATIONS (MARPs) IN 8 PROVINCES IN VIETNAM

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**Background** Many studies show, STIs have a closed relation with HIV. STI increases the risk of getting HIV, HIV infection makes STIs more difficult to diagnose, treat. From 2011–2012, STI services were provided to most-at-risk populations (MARPs) in 8 provinces in Vietnam by the support from CDC/PEPFAR. The MARPs included commercial sex workers (CSWs), men have sex with men (MSM) and injecting drug users (IDUs).

**Method** A descriptive cross sectional study of 5187 MARPs in 8 provinces in Vietnam was undertaken from 10/2011–9/2012 to determine the prevalence of STIs in specific MARPs.

**Results** Among 5187 MARPs screened for STIs, 4,119 MARPs (79.4%) had STIs. Among STIs patients recorded, CSW had the highest proportion (83%), followed by IDUs (16%) and MSM only 1%.

Among STI patients, 59.7% ( $n = 2461$ ) were diagnosed by syndromic approach and 40.3% by etiologic approach. In the group of syndromic diagnosis: Among 2,105 CSWs recorded, 51.7% had vaginal discharge and 7.9% had genital ulcer. Among 353 IDUs, 89.4% had urethral discharge and the proportion of genital ulcer was accounted for only 0.6%. Regarding MSM, all of them have urethral discharged ( $n = 3$ ).

In the group of etiologic diagnosis: Among 1,313 CSWs tested to detect STI, 28.9% ( $n = 379$ ) had bacterial vaginitis, 22.7% ( $n = 298$ ) had vulvovaginal Candidiasis, 2.2% ( $n = 30$ ) had genital Chlamydia infection, and 1.2% ( $n = 16$ ) had vaginal Trichomoniasis. 26.9% ( $n = 352$ ) of the CSWs had genital wart. Among 303 IDUs, 32.6% ( $n = 100$ ) had genital wart, 17.9% ( $n = 55$ ) had gonorrhoea and 11.1% ( $n = 41$ ) had genital HSV infection. Among 42 MSM, 85.7% ( $n = 36$ ) had genital warts and, 7.1% ( $n = 3$ ) had gonorrhoea.

**Conclusion** Vaginal discharge syndrome was the most common syndrome among CSWs, urethral discharge was the most common syndrome among IDUs. Among CSWs, the most common STIs were bacterial vaginitis, HPV. Among IDUs and MSM, the most common STIs was HPV.

## P2.136 SEXUAL TRANSMISSION INFECTION SITUATION IN PEOPLE LIVING WITH HIV (PLHIV) IN 6 PROVINCES IN VIETNAM FROM 2008–2011

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**Background** Multiple studies have suggested that STIs (sexual transmission infections) are important cofactors in the transmission and acquisition of HIV infection. Thus control of one may have beneficial effects on the control of the other.

**Method** A descriptive cross sectional study of 2059 PLHIV and STIs were undertaken at 6 adult HIV outpatient clinics in Vietnam from 10/2008 to 11/2011 to determine the STIs situation among PLHIV.

**Results** Among 2059 PLHIV and STIs 48.2% ( $n = 991$ ) were male, 51.8% ( $n = 1068$ ) were female. The majority of PLHIV with STIs ( $n = 2010$ , 97.6%) are the ages of from 15 to 49 years, only 2.4% ( $n = 49$ ) of patients over 49 years. 65.6% ( $n = 1350$ ) of patients are diagnosed STI by etiologic approach. 34.4% ( $n = 709$ ) of STI/HIV patients were diagnosed by syndromic approach. Among 336 male patients ( $n = 47.4%$ ) diagnosed with STIs by syndromic approach: (80.1%) ( $n = 269$ ) patients had urethral discharge syndrome, (19.4%) ( $n = 65$ ) patients had genital ulcer syndrome. Among 373 female patients ( $n = 52.6%$ ) diagnosed with STIs by syndromic approach,  $n = 190$  (50.9%) patients had vaginal discharge syndrome,  $n = 148$  (39.7%) had abdominal pain syndrome. Of 655 male patients etiologically diagnosed of STI, 65.7% ( $n = 430$ ) had genital warts with human papillomavirus (HPV),  $n = 73$  (11.2%) had genital ulcers due to Herpes simplex virus (HSV),  $n = 38$  (5.8%) had gonorrhoea,  $n = 22$  (3.4%) had Chlamydia trachomatis 3%. Of 695 female patients,  $n = 295$  (42.4%) had warts due to HPV,  $n = 121$  (17.4%) had fungal vaginitis due to Candida,  $n = 117$  (16.8%) had bacterial vaginosis and  $n = 79$  (11.4%) had ulcers due to HSV.

**Conclusion** In patients with STIs/HIV, when using syndromic approach nearly half of the male patients had urethral discharge syndrome and over half of female patients had vaginal discharge syndrome. Etiologically, genital warts due to HPV were the most common cause.

**P2.137 SYNDROMIC MANAGEMENT OF VAGINAL DISCHARGE: IS IT JUSTIFIED?**

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**Introduction** Vaginal discharge constitutes an important symptom in women attending gynaecology outpatient clinics. Some of these cases are due to sexually transmitted organisms such as *N. gonorrhoeae*, *C. trachomatis* and *T. vaginalis* and can lead to poor reproductive health and co-infection with HIV. The control of these infections can lead to substantial reduction in the transmission of HIV. Given the high cost of diagnosis, National Aids Control Organisation advocates syndromic management of patients with genitourinary complaints and treatment with drugs that target the most frequent etiological agents. However, it can lead to emergence of antibiotic resistant strains due to overtreatment. Therefore, we tried to find out prevalence of these three pathogens in cases of symptomatic vaginal discharge and to determine the number of patients who were over-treated following syndromic approach.

**Methods** 320 non-pregnant women (16 – 60 years) attending the gynaecology outpatient clinic of VMMC & Safdarjung Hospital, New Delhi, with complaint of vaginal discharge and clinically suspected to be infected by *N. gonorrhoeae*, *C. trachomatis* & *T. vaginalis* were recruited. Endocervical swabs were used for detection of these organisms by PCR.

**Results** Of the 320 subjects 24 (7.5%) were positive for *C. trachomatis*, 19 (5.9%) for *N. gonorrhoeae* & 13 (4.6%) for *T. vaginalis*. Furthermore, 8(2.5%) patients had co-infection of *C. trachomatis* & *N. gonorrhoeae*, 07(2.1%) had co-infection of *C. trachomatis* & *T. vaginalis*, 07(2.1%) had *N. gonorrhoeae* & *T. vaginalis* and 06 (1.8%) cases had *C. trachomatis*, *N. gonorrhoeae* & *T. vaginalis*. Infection was found in 49/320 patients with infection rate of 15.3%. Since all the patients (320) were treated the overtreatment rate was 84.6%.

**Conclusion** Cost-effective technology for simultaneous detection of these pathogens is urgently required in developing countries so that all clinically suspicious cases of vaginal discharge are given treatment only after confirmed diagnosis.

**P2.138 CONGENITAL SYPHILIS IN A NEWBORN**

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**Objectives** Although congenital syphilis is a completely preventable disease, its incidence in Bulgaria has experienced an increase in the recent 15 years.

**Methods** A 25-day male newborn with a wide spectrum of clinical features of congenital syphilis is presented.

**Results** The child was hospitalised in a quite bad condition with fever, interstitial pneumonia, swollen and painful knee and tarsal joints, reduced active movement of the left shoulder, and erythemo-bullous rash of the palms and soles (palmoplantar pemphigus). The bone radiogram showed features of osteochondritis and periostitis of the femurs. The laboratory studies revealed

haematological abnormalities (anaemia, leucocytosis), signs of inflammation and increase in aminotransferases. The syphilis blood serology was positive. The mother did not attend for antenatal care during her pregnancy and early latent syphilis was diagnosed. The treatment with Penicillin G led to a rapid improvement of the clinical status of the newborn.

**Conclusions** This case stresses on the variety of clinical symptoms and the main factors contributing to the raise of the congenital syphilis, i.e. insufficient prenatal care and reduced or absent screening in pregnant mothers, suboptimal laboratory diagnosis, and lack of sexual knowledge especially among the vulnerable groups of the community. The need of optimal syphilis management is obviously.

**P2.139 SYSTEMATIC REVIEW: SYNDROMIC MANAGEMENT OF VAGINAL DISCHARGE FOR TREATMENT OF GONORRHOEA AND CHLAMYDIA**

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**Background** Syndromic management of vaginal discharge is common in both developed and developing countries. No systematic review has evaluated the performance of the WHO syndromic management algorithms as a case-management tool for symptomatic women. Our evaluation will inform health care professionals whether these algorithms have sufficient discriminatory power in identifying patients who would benefit from treatment for cervical infections.

**Methods** We conducted a systematic review and meta-analysis of diagnostic studies on syndromic management of vaginal discharge. We searched Medline, Embase and Global Health databases; we also searched relevant lists of references. We included the studies that reported their findings in sufficient detail to allow data abstraction for symptomatic women. Sensitivity, specificity and diagnostic OR (DOR) were used to evaluate the algorithms. ROC curves were pooled using the HSROC random effects model.

**Findings** We screened 896 abstracts for eligibility and included 101 articles for a full text review; 17 studies were included in the analysis. HSROC overall summary statistics were: sensitivity 0.58 (0.42–0.73), specificity 0.70 (0.61–0.78), DOR 3.25 (2.22–4.76) and sensitivity 0.81 (0.71–0.87), specificity 0.46 (0.40–0.52), DOR 3.71 (2.42–5.67) for the WHO algorithms without and with speculum examination respectively. For the algorithms that were modified to include local risk factors the overall sensitivity was 0.75 (0.51–0.90), specificity 0.58 (0.35–0.77) and DOR 4.18 (2.84–6.15) for the algorithms without speculum exam; sensitivity 0.70 (0.41–0.89), specificity 0.64 (0.42–0.82), DOR 4.24 (2.55–7.54) for the algorithms with speculum exam; and sensitivity 0.91 (0.68–0.98), specificity 0.54 (0.31–0.75), DOR 11.97 (4.93–30.0) for the algorithms with microscopy.

**Interpretation** Overall, diagnostic algorithms for the management of vaginal discharge had poor to moderate performance in symptomatic women. Incorporating locally-identified risk factors resulted in small improvement in the performance of the algorithms, however, considerable number of women were overtreated due to low specificity.

**P2.140 TIME TRENDS OF C. TRACHOMATIS SEROTYPE DISTRIBUTIONS IN FERTILE-AGED WOMEN IN FINLAND**

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