P2.111 STREPTOCOCCAL BALANOPPOSTHITIS AS UNRECOGNIZED SEXUALLY TRANSMITTED INFECTION


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Purpose We investigated balanoposthitis caused by Streptococcus pyogenes following sexual intercourse to reveal an efficient diagnosis and treatment.

Materials and Methods: Five male patients complaining of genital inflammation after sexual intercourse were diagnosed as balanoposthitis arising from Streptococcus pyogenes infection between 2008 and 2012. The clinical characteristics were retrospectively reviewed.

Results Three cases presented with marked pyoedema of the glans and foreskin mimicking gonococcal or chlamydial urethritis. The remaining two cases presented with papules, scabs and erosions without discharge, which were similar to candidiasis or genital herpes. All cases were diagnosed as balanoposthitis arising from Streptococcus pyogenes infection, which was confirmed by cultures of genital area. Two of them underwent biochemical testing of rapid antigen detection (StatCheck Strep A IITM, Kainos Ltd., Japan) with urethritis. Data were analysed using Spearman’s coefficient of rank correlation (rho) and ROC curves.

Conclusion Streptococcal balanoposthitis has rarely been reported, and has not been recognised as a sexually transmitted infection. Because of common appearances and symptoms, it may have a higher prevalence than previously considered. These cases could be divided into two categories in terms of clinical characteristics, “discharge dominant type” and “eruption dominant type”. Rapid antigen detection of Streptococcus pyogenes should be attempted to use as first diagnostic tool for male genital inflammation for proper antibacterial therapy.

P2.112 THE ENYNGMA OF BUSCHKE-LÖWENSTEIN IN THE HPV VACCINE ERA


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Background and open questions Buschke-Löwenstein tumour (BLT) or giant condyloma acuminatum is a semimalignant neoplasm of the external genitalia and the perianal region. The hallmark of BLT is its possible transformation into squamous cell carcinoma (SCC) despite its histological benignity, and high rate of local recurrence. Most authors believe that BLT is a type of verrucous carcinoma (VC). Other authors suggested that BLT and VC are two distinct entities, in spite of all morphologic similarities, and the basic difference they investigate is correlation of BLT and HPV infection and p53 inactivation. It has been proposed that BLT represents intermediate state between CA and SCC. Malignant transformation to invasive SCC has been reported in 30–56% of cases. The variety of impressive clinical features in our patients with BLT, including the subjects in the age of 1.5 years support these findings. HPV DNA type 6 or 11 is regularly found in most (but not all) types of BLT, strongly suggesting its aetiological role in tumour development. In all of our BLT patients HPV DNA 6 has been revealed, except in 1 patient with HPV DNA 18. Accordingly, in this patient the histopathological evidence of malignancy (SCC) was documented! Due to lack of controlled studies about BLT, uniform treatment guidelines have not yet been established.

Conclusion An analysis of most published cases, including our own experience brought up conclusion that only consistently effective therapy is wide surgical excision of the tumour with clear margins, in spite of some anecdotal reports of the successful treatment with interferon or imiquimod. The recent introduction of a HPV vaccine (especially the quadrivalent one considering the prevention of the anogenital warts in men) has ushered in new hope of substantially reducing global prevalence of HPV disease and the burden of BLT.

P2.113 URINARY CALPROTEIN: A BIOMARKER OF URETHRAL INFLAMMATION


Background There is currently no reliable indicator of inflammation available for the evaluation of genital tract syndromes. We investigated the association of urinary calprotectin concentration, an innate immune system mediator protein, with urethritis.

Methods First catch urine specimens from men with and without urethritis (≥10 neutrophils/high power field of urethral smears) were tested for Neisseria gonorrhoeae (NG), Chlamydia trachomatis (CT), Mycoplasma genitalium (MG) and Trichomonas vaginalis (TV) by nucleic acid amplification tests (NAAT). Supernatants from these samples were tested in duplicate by ELISA for human calprotectin. Data were analysed using Spearman’s coefficient of rank correlation (rho) and ROC curves.

Results 159 urinary supernatants were tested. 54/159 had urethritis; 35/159 were NAAT positive for any of CT, NG, MG or TV of whom 27/35 had urethritis; 97/159 had no urethritis and were NAAT negative for all 4 pathogens. The correlation coefficient (rho) for calprotectin concentration and presence of urethritis/infec tion was 0.529 (95% CI: 0.407–0.633; p < 0.0001) with a calprotectin concentration of 95ng/ml (95% CI: 65–119.64ng/ml ROC curve AUC: 0.811, 95% CI: 0.741–0.869 p < 0.001) having a sensitivity of 0.771 (95% CI: 0.594–0.949) and specificity of 0.831 (95% CI: 0.746–0.915) compared to a sensitivity and specificity of urethral smears of 0.771 (95% CI: 0.594–0.949) and 0.782 (95% CI: 0.69–0.875) respectively in detecting CT, NG, MG or TV infections. The calprotectin assay had sensitivity and specificity of 0.629 (95% CI: 0.476–0.782) and 0.907 (95% CI: 0.834–0.981) respectively for detecting urethritis.
Conclusion Urinary calprotectin had similar sensitivity and specificity for common urethral pathogens as urethral microscopy. Low calprotectin concentration correlated well with the absence of inflammation. Use of the assay is currently limited by the unknown dilution effect of urine in estimating urethral calprotectin concentrations but calprotectin is a promising biomarker of inflammation in investigating reproductive tract infections (RTI) of different aetiologies particularly where microscopy may not be available, such as in community settings.

Background Although congenital syphilis and congenital CMV infections are preventable they are still the major causes of perinatal mortality and morbidity. Expectant mothers from lower socioeconomical status and intravenous drug users belong to the highest risk groups for vertical transmission of infections. Here we present a coexistence of congenital syphilis and CMV infection complicated to an intravenous drug user mother on the 26th gestational week. The expectant mother did not participated in the prenatal care and early latent syphilis (RPR 1:128 positive, TPPA and TpELISA positive), genital Streptococcus agalactiae and fungal infections were detected shortly before delivery.

The preterm and immature girl had jaundice, oedema, gluteal haematome and petechiae. Extremely enlarged liver and spleen (reaching the hip bone) and increased muscle tone with rigid joints were found. Multiple jejunal atresia was detected by bedside X-ray examination.

Anisoscytosis, thrombocytopenia, elevated liver enzymes (ASAT: 3850, ALAT: 558, GGT: 292, ALP: 436) and elevated LDH (38180) and CK (7.1) with direct hyperbilirubinaemia were found. During microbiological examinations high copy of CMV virus number was detected by quantitative real-time PCR and syphilis serology was positive (RPR: 1:16 positive, TPPA, Tp ELISA, T. pallidum IgM immunoblot positive).

Intravenous penicilline-G (100.000 IU/kg/dose for 10 days) and intravenous ganciclovir was administered. Gancyilovir was stopped after 6 weeks because of progressing thrombocytopenia. The multiple jejunal atresia was fixed by operation resulting in satisfactory intestinal passage.

Conclusions Although syphilis screening test within the prenatal care is mandatory in Hungary, congenital syphilis cases do occur. Immature immune system is predisposing factor for coinfections of a newborn. The symptoms of T. pallidum and CMV infection is very similar, presenting a diagnostic challenge.

Background Tuberculosis is a very common disease worldwide. In 2010 there were 71000 cases reported in Brazil. The genital presentation has a prevalence of 8–10 million cases worldwide. The vulvar/vaginal involvement is less than 2% of the cases. The clinical presentation can be variable and genital ulcers (GU) can be confused with sexually transmitted diseases (STD) such as syphilis and chancroid.

Methods/results (case report) MJS, 75y, G0P9, rural worker, attended at a clinic specialised in genital infections at the State University of Campinas-(UNICAMP)-Brazil with dysuria and pain/burning in the vulva for 3 months. Physical examination revealed ulceration of 3 cm in small genital right lip with bilateral inguinal painless adenopathy. The ulcer biopsy showed chronic granulomatous inflammation and search for AFB and fungi by techniques of Gomori and Ziehl-Nielsen were negative. Vaginal bacterioscopy and serologies were regular. Vaginal wall biopsy with search and culture resulted positive for complex M. tuberculosis. The Mantoux test resulted in strong reaction-13 mm and the AFB sputum (3 samples) was negative. Chest radiography showed no abnormalities. It was introduced the treatment with isoniazid +rifampicin for 6 months. After 60 days the patient presented ulcer resolution.

Conclusion The authors describe an unusual presentation of the disease, a painless chronic ulcer, for which differential diagnosis of GU by STD should be clarified. The isolation of M. tuberculosis in the culture of the ulcer is the gold standard for the diagnosis of genital tuberculosis. The ulcers caused by herpes virus, syphilis or chancroid are common, but it is essential to think of an infection by M. tuberculosis, especially in countries where the prevalence of the disease is high. It was suggested that the sputum of a subject with pulmonary tuberculosis when used as a lubricant during intercourse can transmit genital disease, making it an eventual STD. Chronic GU should be biopsied and the possibility of unusual etiologies should be considered.
P2.113 Urinary Calprotectin: A Biomarker of Urethral Inflammation

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