

## Letters to the Editor

### Microsporidia: a new sexually transmissible cause of urethritis

Microsporidia are worldwide ubiquitous intracellular protozoan parasites, which have recently emerged as a significant cause of morbidity in immunocompromised patients, particularly in those with AIDS.<sup>1</sup> Multiorgan microsporidiosis is well described in these individuals, which underscores the severity of immunodeficiency in patients with microsporidial infection.<sup>2,3</sup> In 15-30% of patients with advanced AIDS, *Encephalitozoon bienewi* is the causative agent of major chronic diarrhoea.<sup>1</sup> Many such patients have shown dramatic responses when treated with albendazole.<sup>4</sup>

The first case of urethritis associated with microsporidiosis has recently been reported in a 36 year old AIDS patient with urethritis, sinusitis and diarrhoea.<sup>5</sup> *Encephalitozoon*-like spores were isolated in a smear of expressed urethral pus. Microsporidial spores were also isolated from faeces, nasal discharge, sputum and centrifuged urinary deposit. We now report a similar case of microsporidiosis in a 35 year old homosexual patient with AIDS, who presented with sinusitis, urethritis and diarrhoea.

Our patient had multiple episodes of gross urethritis with a profuse brown urethral discharge, which was only partially responsive to antibiotics. His urethritis persisted despite courses of doxycycline, erythromycin, azithromycin, rifampicin and ciprofloxacin. Clindamycin, chloramphenicol and metronidazole produced some improvement, but had to be stopped owing to the development of drug related rashes.

Our patient initially presented with urethritis at the same time as his partner had diarrhoea due to intestinal microsporidiosis. We believe he was persistently infected, or reinfected, by his partner during regular unprotected sexual intercourse. Four months later our patient developed diarrhoea and microsporidium was detected in his stool. He received a four week course of albendazole 400 mg bd. It was this course of therapy that finally cleared his symptoms of urethritis. It is likely that the urethritis responded to the albendazole, which is known to treat successfully microsporidial infections.<sup>4,5,6</sup> However, it was at this time that his partner died, so it is possible that his lack of relapse was partially due to the fact that he was no longer being sexually exposed to microsporidia. Our patient died from multiple opportunistic infections three months later, but the urethritis never recurred.

We suggest that microsporidia represents an unlooked for cause of sexually transmissible urethritis. Microsporidia should be looked for actively in all non-responsive cases of urethritis in the immunocompromised. A study to this effect is currently underway.

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### Vertical transmission of human papillomavirus in cytologically normal women

The sexual transmission of genital type human papillomavirus (HPVs) has been recognised since 1971, but clinical, epidemiological and laboratory evidence suggests that other ways of transmission can be important especially in children.<sup>1,2</sup> In our department we conducted a polymerase chain reaction (PCR) based study with the following aims: (1) to evaluate the prevalence of HPV DNA in vaginal swabs of pregnant women clinically and cytologically free from HPV; (2) the prevalence of HPV DNA in nasopharyngeal aspirate of newborns and the frequency of perinatal transmission of HPV; (3) to evaluate the reliability of a single-point PCR test to predict the risk of perinatal transmission in clinical practice. For this purpose vaginal swabs were obtained from 124 pregnant women during the last three months of pregnancy and nasopharyngeal aspirates were collected, immediately after vaginal delivery, from 109 neonates born in the same hospital. All samples were coded and processed without knowing the presence and/or identity of mother/baby pairs. For HPV amplification and identification the protocol described by Bauer *et al* was used.<sup>3</sup> Briefly, HPV DNA was amplified with consensus primers MY09-MY11 and the presence of amplified DNA was checked by Southern blot hybridisation with a generic and type specific probes for HPV 6, 11, 16, 18, 31 and 33.<sup>3</sup> Hybridisation analysis of the PCR products with the generic probe was positive in 15/124 (12%) vaginal swabs and 10/109 (9%) nasopharyngeal aspirates. HPV typing of vaginal swab amplicates disclosed HPV6/11 in two cases, HPV16/18 in one, HPV31/33 in two and was negative in the remaining ten cases (unidentified HPV) (table). HPV typing of nasopharyngeal aspirates amplicates disclosed HPV6/11 in two cases, HPV16/18 in one case and HPV31/33 in one case. The other 6 samples positive with the generic probe were negative with the type specific probes (unidentified HPV) (table). On opening the code, we found 47 mother-baby pairs. Among this subgroup, HPV DNA was