30.011

Recurrent vulvovaginal candidiasis- where does *Candida albicans* persist?

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Background: 5-8% of all women of childbearing age suffer from recurrent vulvovaginal candidiasis (RVVC). In most cases, recurrences are caused by identical *Candida* strains suggesting a site of *C. albicans* persistence in female genitalia. The purpose of this study was (1) to investigate where *C. albicans* persists despite prolonged oral therapy, (2) to determine the clinical symptoms and signs related to *C. albicans* positive vulvar cultures and (3) to evaluate a new therapeutic approach in women with positive interlabial cultures.

Methods: A total of 469 women with recurrent vulvovaginal complaints were examined by colposcopy and microscopy of vaginal smears was performed. Swabs were obtained from both vagina and interlabial sulcus of the external vulva and cultured for fungal growth. Women with positive *C. albicans* cultures from the external vulva received 100 mg of oral fluconazole daily for 20 days and topical ciclopiroxolamin cream applied in the interlabial sulcus and perianally for 4 weeks. Follow-up visits were at 3, 6, 9 and 12 months.

Results: Of 469 women with chronic vulvovaginal complaints, 139 patients (30%) had positive *C. albicans* cultures. Of these 139 patients, 70% had both *C. albicans* positive vulvar and vaginal cultures, 24% had positive cultures from the vagina only and 6% from the interlabial sulcus only. Pruritus (OR 5.4; 95% CI 2.0 - 14.9), signs of vulvar edema (OR 3,8; 95%CI 1.0-16.8) and fissures (OR 2.4; 95%CI 1.0-5.8) correlated with positive vulvar cultures.

Recurrence rates for the combined treatment were 27% at 6 months and 34% at 12 months.

Conclusion: Our results point at the stratum corneum of the moist interlabial sulcus rather than the non-keratinizing vaginal epithelium as the site of *C. albicans* persistence and source of endogenous re-infection in patients with recurrent vulvovaginal candidiasis. Based on this hypothesis and analogous with the treatment of nail mycosis, we used a combination of the fungistatic fluconazole and fungicidal ciclopiroxolamin cream. This new approach showed promising results.

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Delayed diagnosis of disseminated Histoplasmosis capsulatum var. capsulatum infection in AIDS patients in a tuberculosis high endemic country

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Background: Histoplasmosis is an low endemic mycosis in some parts of South Africa. The final diagnosis of disseminated histoplasmosis (DH) requires pathology and microbiology. Diagnosis and effective treatment is often delayed in resource-constrained settings, because clinical features could be confused with disseminated tuberculosis, and specialized services are limited. To our knowledge, this is the first reported case series of HIV infected patients with DH in Africa.

Methods: We report retrospective descriptive data on a series of HIV and DH co-infected patients attending an academic hospital between September 2003 and December 2008 in the Western Cape region.

Clinical and laboratory characteristics of all diagnosed DH were analysed with the statistical package SPSS 15.0.

Results: During the study period, 11 cases of DH were diagnosed: the majority of cases occurred in men (82%).

All DH patients presented with skin lesions in addition to other symptoms of which 6 had fever (55%), 9 had constitutional symptoms (weakness, night sweats and weight loss) (82%), 6 had epistaxis (55%), 5 had respiratory symptoms (45%), and 4 had gastrointestinal complaints (36%).

The mean CD4 lymphocyte count was 43 cells/μl (IQR: 4-107). The mean CRP level was 166 mg/dl (IQR: 27-306), the LDH was 887 U/l (IQR: 158-3220). Pancytopenia was diagnosed in 3 patients.

Diagnosis was made in all patients by positive histopathology results (100%); only 3 patients had a microbiologically confirmed culture result (27%). The mean time-interval between first symptoms and treatment was 148 days (IQR: 80-305).

Three patients developed paradoxical IRIS features (27%) and three patients unmasking DH after initiation of antiretroviral treatment (ART) (27%). One patient died of DH (9%), due to delayed diagnosis and treatment, after two days of intravenous amphotericin.

Conclusion: In a tuberculosis high endemic region, where many AIDS patients with a very low CD4 count are seen in antiretroviral clinics, the follow-up of patients is complex, mostly due to TB related infections.

A high index of suspicion for DH is necessary to detect specific clinical characteristics on time. Patients who present with constitutional symptoms and skin lesions should be checked for DH through pathology and/or microbiology. A presenting epistaxis, and a relative high CRP should increase the likelihood of the diagnosis of DH.

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30.013

Breakthrough *Rhizopus* spp. in an immunocompromised patient receiving caspofungin. Case Report and review

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Background: Invasive zygomycosis is a rare opportunistic fungal disease, with high morbidity and mortality rates that affects predominantly immunosuppressed patients. An increase incidence is observed with the widespread use of newer antifungal drugs, such as voriconazol and caspofungin. We report a case of breakthrough invasive zygomycosis in a stem cell transplant recipient on sequential voricona-