Vaginal Thrush and Its Management in Pregnancy

Pages with reference to book, From 15 To 16

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Abstract

The frequency of vaginal thrush was determined in an unselected group of patients attending the antenatal clinic. Diagnosis was based on phase-contrast microscopy and culture. One hundred and two patients were initially included but only 98 completed this study. Thrush infection was detected in 25 (25%) patients. All 25 patients underwent treatment with one vaginal ovule containing 400mg ketoconazole on each of three successive evenings. Thrush attack was eliminated in 23(92%) cases. In view of the virtual absence of clinical symptoms, the recommendation to undertake general screening for thrush in pregnancy is discussed. The efficacy of treatment with ketoconazole ovules was studied and the results of treatment were reviewed after 4 and 8 weeks. Recurrence or re-infection has to be considered in pregnancy so that thrush treatment should sensibly be undertaken in the third trimester unless subjective symptoms indicate the need for earlier therapy (JPMA 45:15, 1995).

Introduction

Approximately 30% of pregnant and 15% of non-pregnant women harbor candida in their vagina[1,3]. The condition gives rise to intense burning, itching and vaginal discharge. Antimycotics such as clotrimazole, ketoconazole are highly effective in the treatment of candidal vulvovaginitis[4,5]. This study evaluates the usefulness of subjective symptoms phase contrast microscopy and culture in the diagnosis and short term ketoconazole vaginal ovules therapy in the management of vulvo-vaginal candidiasis in pregnant women.

Patients and Methods

One hundred and two pregnant women in their second trimester, attending the antenatal clinic, were included in this study. Four were excluded due to deviation from the protocol (change of doctor, bleeding, intercurrent hospitalization, antibiotic treatment). They were examined three times at intervals of four weeks. Symptom of vaginal discharge, Pruritus and dysuna were recorded and they were examined forcolpitis and vaginitis. A specimen of vaginal secretion was obtained for phase contrast microscopy and culture. Patients of candidiasis with or without symptoms were given one vaginal ovule containing 400 mg ketoconazole on three successive evenings. The effect of treatment was checked on next visit 4 weeks later with phase contrast microscopy and culture. Side effects of drug were determined by questioning. pruritus and none of the patients had dysuna. Two patients had mild vulval erythema. Both fresh preparation of vaginal secretion and culture were positive in29 and culture alone in 10 patients. In one case phase contrast microscopy showed pseudomycelia despite a negative culture. Thus phase contrast microscopy provided a detection rate of 65%. All 25 patients were treated with ketaconazole vaginal ovules (3x400 mg). Twenty-three (92%) patients responded to treatment but in two cases thrush persisted when examined 4 weeks after treatment. They were given another course of therapy and were negative when examined after another 4 weeks. Of 23 patients who initially responded to treatment, 4 had reinfection in the second follow-up examination. They also had a second course of treatment. One patient had severe smarting on insertion offirst ketaconazole ovule which did not recurwith subsequent insertions and the patient completed the course of treatment.

Results

Twenty-five (25%) of 98 pregnant women had vaginal thrush. On clinical evaluation 3 patients complained of heavy' vaginal discharge; 1 had severe pruritus and none of the patients had dysuria. Two patients had mild vulval crvthema.

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Discussion

Vaginal colonization of Candida Albicans is more frequent in pregnant than in non-pregnant women[1-3]. High levels of oestmgen during pregnancy result in anabundance of glycogen in the vaginal mucosa providing an ample supply of utilizable sugars for the fungal growth. Vaginal yeast infection continuously increases throughout pregnancy and upto the time of delivery. Following delivery, the regression ofvaginal epithelium and the disappearance of glycogen remove the factors enhancing the fungal growth. These changes are reflected in a rapid disappearance of candida from the post partum vagina[6]. Thrush infection was detected in 25% of pregnant women dunnganobservationpenodof 12 weeks inthe second trimester. Diagnostic yield of phase contrast microscopy of fresh preparation of vaginal fluid was 65% and the remaining were diagnosed on culture. Fungal culture was also positive in half of the women with symptoms and negative microscopy. Fungal culture is therefore essential for diagnosis[7]. The investigators' experience in phase contrast microscopy plays a role. In one study this method detected fungal infection in 93% 01 symptomatic and M% of asymptomatic pregnant women[8]. Since clinical symptoms gave very little indication of the existence of thrush colonization in our group, general screening in pregnancy may be considered. Some investigators advocated that all pregnant women should undergo routine candida culture of a vaginal specimen about 4 weeks before term inorderto allow treatmentwellbeforethe onsetof labour in positive cases. This could considerably reduce the incidence of thrush infection in the newborn since children of mothers with thrush are contaminated with candida 5-6 times more often than in other children[9]. As the diagnostic effort involved in such a screening programme is quite considerable, the Maternity Guidelines of Germany were amended as follows in December 1985. Vaginal thrush prophylaxis (single administration of an antimycotic) should be undertaken in the final maternity care examination before delivery. This corresponds to general prophylaxis without prior diagnosis, which has, as expected, come under heavy criticism by the medical profession. Thus, Schnell et al9 called this prophylaxis medically erroneous and professionally incorrect. They advocate general microscopic/culture screening between the 32nd and 34th weeks of pregnancy or from the 26th week in risk pregnancies and threatened premature labour. Others recommend an individual approach whereby each clinic should on the basis of the incidence of perinatal thrush, make its own decisionas to whetherthe effort and costs of a screening programme is justified in its catchment area. A reduction of yeast infection in the newbomby 60% (by 75% in the case of Candida albicans canbe achieved withaconsistent care programme[10,11]. As demonstrated in our

prospective study, the primary therapeutic result with 3x400 mg ketoconazole vaginal ovules is vezy good, with elimination of thrush infection in over 90% of cases when re-examined. As side effects are low so good compliance in pregnant women can be expected. Since the reinfection rate was high in our patients, prophylaxis should be undertaken 4-6 weeks before delivery, as has been proposed by some investigators[6,11,12]. Treatment at an earlier stage of pregnancy should only be given in the presence of subjective symptoms.

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