The value of treating the male partner in vaginal candidiasis

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ABSTRACT

Objective: To determine whether treatment of the sexual partners of women with vulvo-vaginal candidiasis with oral Ketoconazole can affect the cure and recurrence rate of candida vaginitis.

Methods: A total number of 144 women with vaginal candidiasis were treated with Ketoconazole 400 mg daily for 7 days, and half the male partners were treated with Ketoconazole 400 mg daily for 7 days. All women had physical follow-up examination, and mycological cultures were obtained at one week and four weeks after the start of treatment. The incidence of predisposing factors or of a recurrence history did not differ between treatment groups. Chi-square test was used to determine the significance of difference between the two groups with or without simultaneous treatment of the male partners.

Results: In the control group (untreated partners) 53 of 72 patients were cured after one week, with a cure rate of 74%, compared to 57 of 72 patients (treated partners) with a cure rate of 79%. The recurrence rate in the control group (untreated partners) 4 weeks after the start of treatment was 28 of 53 (53%), compared to 35 of 57 (61%) in the (untreated partners) group. No significant statistical difference was found in the cure and recurrence rates for both groups.

Conclusion: Simultaneous treatment of the male partners with Ketoconazole did not influence either cure rate or recurrence rate in women with vaginal candidiasis.

Keywords: Candidiasis, ketoconazole, male, value.

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Yeast infections are one of the most common infection occurring in women. Although they are rarely dangerous, they can be very bothersome and uncomfortable. The current definition of cure is the absence of detectable yeasts in the vagina after treatment. Recurrence is defined as reappearance of yeasts in the vagina of a patient, who was cured, and may be either relapse, due to re-growth of a previously undetected residual population of yeasts, or re-infection, where the vagina is re-inoculated from some extravaginal source.[1]

Many studies reported that sexual intercourse is a risk factor for development and recurrence of vaginal candidiasis.[2,3] David et al[4] reported that the penile colonization rate of candida was 16%, 37% of patients with penile colonization were symptomatic, and 27% had balanitis.

They reported that candidal balanitis was more common in those who had vaginal intercourse than those who had anal intercourse, and itching and burning sensation after sexual intercourse were the most common symptoms associated with penile colonization. According to Spinillo et al[5] the rate of penile coronal sulcus was 16% and seminal fluid colonization of candida species was 15%.

Methods. This study was carried out in Prince Hashem Ben Al-Hussein Hospital between January 1998 to June 1999. In this study 144 non-pregnant women with clinical and positive culture of vaginal candidiasis were treated with ketoconazol 400 mg daily for 7 days. Their male partners were asymptomatic except of 5 male partners who had

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symptoms suggestive of infection such as penile itching and burning sensations. The males in the treated group were randomly selected to receive ketoconazol 400 mg daily for 7 days, because the objective was to evaluate treatment of male partners on cure and recurrence rate of vaginal candidiasis, and that is the reason why we choose both control and study groups of male partners without infection. We blindly treated males in the study group without treating the control group so as to achieve the objective of the study.

Two groups of women with vaginal candidiasis were investigated to evaluate effect of treating the male partners on cure and recurrence rate of vaginal candidiasis, the first was the control group (untreated partners n=72) and the second was the study group (treated partners n=72).

All women had physical follow-up examination, and mycological cultures for candida were obtained at one and four week after start of treatment. Both studied groups were matched for their age and parity, (Table 1) and for the presence of any factor that predispose to vaginal candidiasis (Table 2). All patients were interviewed and had astable sexual relationship with only one sexual partner, their general health was good, and the patients had no apparent gynecological disease. None of those selected for mycological investigation had history of taking antibiotics during the previous 2 months. The number of women who proved negative of candida culture one week after the start of treatment divided by the total number of treated women was considered to be the cure rate. The recurrence rate was defined as the number of cured women who proved positive again 4 weeks later divided by the number of the cured patients at the first follow-up examination.

Chi-square test was used to determine the significance of difference between the two groups with or without simultaneous treatment of the male partners.

Results. Age and parity distribution of both studied group was similar (Table 1). Both studied groups had similar frequency of predisposing factors to vaginal candidiasis such as diabetes, hormonal or intrauterine contraception, previous antibiotic therapy and a history of recurrence. (Table 2). Thirty-two of the 72 women who were partners of the treated men and 37 of the 72 women who were partners of the untreated men had a history of recurrence.

In the control group (untreated partners) 53 of 72 patients were cured one week after the start of treatment, compared to 57 of 72 patients of the study group (treated partners). The cure rates for the control group was 74% and study group was 79%. (Table 3). The recurrence rate for the control and study groups 4 weeks after the start of treatment were 28/52 (53%) and 35/57(61%). (Table 3). No significant statistical difference (x^2 test) was found between the two groups in cure and recurrence rate.

Discussion. Many studies reported that the penile colonization rate of candida was 15%.[4,5] Thirty-seven percent of the patients with penile colonization were symptomatic and 27% had balanitis.[4]

Itching or burning sensation after sex were the most common symptoms associated with penile colonization with candida and were present in more than one-third.[4]

According to Spinillo A[5] et al the recurrence rate after treatment in the couples in which the man harbored yeast (oral cavity, penile coronal sulcus,

Table 1 - Age and parity in study and control groups.

Variable	Untreated partners (control group) (n=72)	Treated partners (study group) (n=72)
Age	30 (5)	30 (4.8)
Parity	5 (2)	5 (2)

Table 2 - Predisposing factors for vaginal candidiasis in control and study groups.

Variable	Untreated partners (control group) (n=72)	Treated partners (study group) (n=72)
Diabetes mellitus	5	4
Intrauterine contraception device	6	6
Oral contraceptive pill	7	5

Table 3 - Cure and recurrence rates in women with and without treatment of the male partner.

Variable	Untreated partners (n=72)	Treated partners (n=72)	Significance X2	P value
Cure rate	53 (73%)	57 (79%)	0.615	>0.50
Recurrence rate	28/53 (53%)	35/57 (61%)	0.822	>0.50
Significance=P<0.05				

seminal fluid) was lower (16% vs. 45%) than that recorded in the couples without sexual partner involvement, and identification and treated of the male sexual partner's candida colonization seems important in the prevention of recurrent vulvovaginitis.

An other study revealed that treatment of the male partners,[6] with a brief course of Ketoconazole, is not of value in reducing the incidence of relapse in women with recurrent vaginal candidiasis .

Bisschop MP[7] reported that adequate treatment of vaginal candidiasis depends predominantly on adequate treatment of the women, and treatment of the sexual partner proved not to have influenced the therapeutic effect.

Our study supports the idea that simultaneous treatment of the symptom-free male partner does not influence either cure rate or recurrence rate in the women.

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