Review: oral and intravaginal agents are equally effective for treatment of uncomplicated vulvovaginal candidiasis


QUESTION: Are oral and intravaginal antifungal agents equally effective, safe, and cost effective for uncomplicated vulvovaginal candidiasis?

Data sources
Randomised controlled trials (RCTs) published in any language were identified by searching the Cochrane Controlled Trials Register (CENTRAL/CCTR), the Cochrane Collaboration Sexually Transmitted Disease Group Specialised Register of Controlled Trials, EMBASE/Excerpta Medica (1980 to January 2000), and Medline (January 1985 to May 2000). Reference lists of each trial were reviewed, and UK manufacturers of antifungal agents were contacted.

Study selection
Trials were selected if they included women ≥ 16 years of age with mycologically confirmed acute vulvovaginal candidiasis (< 4 episodes in 12 mo) and compared ≥ 1 oral antifungal agent with an intravaginal antifungal agent. Trials were excluded if they included only participants who were HIV positive, immunocompromised, pregnant, breast feeding, or diabetic.

Main results
17 RCTs reporting 19 comparisons were included in the analysis. The trials assessed 2 oral agents (fluconazole and itraconazole) and 4 intravaginal agents ( clotrimazole, econazole, miconazole, and terconazole).

The findings of the systematic review by Watson et al support the general view of treatment for uncomplicated vulvovaginal candidiasis. The review did not identify any studies that compared single oral doses of antifungal agents with multidose oral antifungals, leaving this issue unexplored. Similarly, single topical applications were not compared with multidose topical applications. Efficacy—the cure rate under ideal clinical conditions—may differ from effectiveness—the cure rate in the real world (eg, forgotten applications and misapplications). The authors did not assess whether the efficacy and effectiveness of the 2 types of treatment.

Conclusions
Oral and intravaginal agents are equally effective in the treatment of uncomplicated vulvovaginal candidiasis. Insufficient data exist on adverse effects and cost effectiveness of the 2 types of treatment.

Commentary
The findings of the systematic review by Watson et al support the general view of treatment for uncomplicated vulvovaginal candidiasis. The review did not identify any studies that compared single oral doses of antifungal agents with multidose oral antifungals, leaving this issue unexplored. Similarly, single topical applications were not compared with multidose topical applications. Efficacy—the cure rate under ideal clinical conditions—may differ from effectiveness—the cure rate in the real world (eg, forgotten applications and misapplications). The authors did not assess whether the efficacy and effectiveness of the antifungal agents measured in industry sponsored trials differed from those measured in non-industry sponsored trials.

Most vaginal discharges are caused by one of 3 organisms: a fungus (Candida), a protozoan (Trichomonas), and a combination of anaerobic and aerobic bacteria. Conditions caused by these organisms occur at different frequencies dependent on the population. In a middle-class US population, bacterial vaginosis occurs 50% of the time, and candidiasis and trichomoniasis each occur 25% of the time.1

Concurrent partner treatment does not improve a woman’s cure rate,2,3 but, in the approximately 5% of women with recurrent infection,4,5 partner treatment to eradicate the intestinal reservoir of Candida has proved efficacious.6

The 17 RCTs were done in Europe (n=9), the USA (n=5), Japan (n=1), Thailand (n=1), and Africa (n=1). The use of antifungal agents for vulvovaginal candidiasis varies by cultural habits, effectiveness, cost effectiveness, safety, and preferences characteristic of the given population.

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