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Journal Article: Oral fluconazole 150 mg single dose versus intra-vaginal clotrimazole treatment of acute vulvovaginal candidiasis

Vulvovaginal candidiasis (VVC) is a very common infection affecting many women and happens at least once in their lifetime, with a large number experiencing multiple recurrent episodes. First-line treatment options include both oral antifungal therapy (i.e.fluconazole) and topical intravaginal azoles (such as miconazole or clotrimazole). The goal of treatment is treating symptoms, eliminating infection, and prevention of recurrence.

A prospective randomized-controlled study comparing oral fluconazole 150 mg single dose to intravaginal topical clotrimazole therapy for 7 days found that both treatment options are very effective. Clinical cure rates at one week were very similar between groups, with approximately 84-85% of patients improving from both treatments. Mycologic cure rates were also comparable, though slightly higher in the oral fluconazole group. However, at 1 month follow up, patients treated with oral fluconazole had significantly lower recurrence (1.4%) compared to those treated with intravaginal clotrimazole (24.3%). This suggests that while both therapies are effective for initial treatment, but oral therapy may provide more sustained resolution in some patients.

However, overall evidence, including meta-analyses referenced in the study, supports that there is no major difference in clinical effectiveness between oral and topical antifungal therapies for uncomplicated VVC. Both options achieve high cure rates and are considered appropriate first-line treatments. The main differences lie in convenience, patient preference, and tolerability rather than efficacy. Oral therapy is often preferred due to ease of use and shorter duration, while topical therapy avoids systemic exposure and may be preferred in certain populations.

My patient is a 24-year-old female presenting with vaginal irritation, pruritus, and intermittent dysuria, with a history of recurrent yeast infections. Her physical exam and laboratory findings were negative for urinary tract infection and sexually transmitted infections, supporting a diagnosis of acute vulvovaginal candidiasis. Given her mild symptoms, stable presentation, and no significant comorbidities, initiating topical miconazole (Monistat 7) is an appropriate and evidence-based first-line treatment. Based on the literature, this treatment is expected to provide similar clinical improvement compared to oral fluconazole. However, her history of recurrent infections is an important consideration. Evidence suggesting lower recurrence rates with oral fluconazole may be clinically relevant for her, particularly if she experiences frequent or persistent symptoms. In such cases, oral therapy could be considered as an alternative or next step.

Overall, the evidence supports that both oral and topical antifungal therapies are effective first-line treatments for uncomplicated vulvovaginal candidiasis, with similar clinical cure rates. While oral fluconazole may offer advantages in convenience and potentially lower recurrence rates, these benefits must be balanced against patient preference, symptom severity, and clinical context. In patients like mine, who present with mild symptoms and no complications, topical therapy is an appropriate initial approach, especially because of her preference. However, in those with recurrent or persistent symptoms, oral therapy may provide added benefit. Ultimately, management should be individualized, incorporating both evidence-based medicine and patient-centered decision-making to optimize outcomes.

Citation: Sekhavat, L., Tabatabaii, A., & Tezerjani, F. Z. (2011). Oral fluconazole 150 mg single dose versus intra-vaginal clotrimazole treatment of acute vulvovaginal candidiasis. Journal of infection and public health, 4(4), 195–199. https://doi.org/10.1016/j.jiph.2011.05.006