Recurrent Vulvovaginal Candidiasis: Can the yeast be beat?

Clinical Question: What is the most effective management for women with recurrent vulvovaginal candidiasis (four or more episodes within one year)?

Bottom Line: Prophylaxis with six months of azole therapy (like fluconazole) will result in relapse in 9-19% of women compared to 50-64% on placebo (one fewer woman would relapse for every 2-4 treated). Efficacy, however, declines after therapy cessation and clinical cure remains elusive. Limited evidence suggests women may prefer episodic over maintenance therapy.

Evidence:
- Two double blind, Randomized Controlled Trials (RCTs) of 373\(^1\) and 64 women\(^2\) with symptoms and culture confirmed recurrent vulvovaginitis, compared fluconazole 150 mg PO weekly for six months (after initial fluconazole 150 mg PO every 72 hours for 3 days) versus placebo:
  - Significant difference in clinical relapse rate:
    - Following six months treatment: \(^1,2\) 9-19% versus 50-64%, Number Needed to Treat (NNT)=2-4.
    - 12 month follow-up: \(^1\) 57% versus 78%, NNT=5.
    - Smaller study: No significant difference.
    - No increase in resistance.\(^1,2\)
  - Adverse events:
    - “Mild” elevation of liver enzymes in one patient, did not require discontinuation.\(^1\)
  - Limitations: Analysis only included compliant women.\(^1\)
- Two RCTs examined monthly itraconazole 400 mg PO (114 women)\(^3\) or clotrimazole 500 mg vaginal suppository (62 women)\(^4\) versus placebo for six months:
  - Significant difference in clinical relapse rate: 30-36% versus 64-79%, NNT=3-4.
  - No longer significant at 12 month follow-up.\(^3,4\)
- One observational study, 136 women, individualized decreasing dose (200 mg fluconazole three times/week, weekly x 2 months, biweekly x 4 months, then monthly x 6 months) based on clinical symptoms:\(^5\)
  - Clinical relapse during 12 months treatment: 30%.
18 month follow-up: 45%.

**Context:**
- Studies of alternative therapies such as probiotics or homeopathy, are poor quality, and/or with mixed results.\textsuperscript{6-8}
- Limited evidence suggests no significant difference between different azoles in *Candida albicans* acute or recurrent vulvovaginitis.\textsuperscript{9,10}
- *Candida albicans* is responsible for 90% of vulvovaginal candidiasis; followed by *Candida glabrata*, which is azole-resistant.\textsuperscript{11}
- One small trial (54 participants) demonstrated that treating male partner with antifungals does not reduce relapse rate.\textsuperscript{12}
- A randomized cross-over trial of 23 women reported 74% versus 14% prefer to treat each episode empirically versus maintenance therapy.\textsuperscript{13}

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**Disclosure:**
Authors have no conflicts of interest to declare.

**References:**