

Boric Acid for Vaginal Yeast Infections

WHAT CONDITIONS CAN BORIC ACID TREAT?

Dilute concentrations of boric acid can be used topically for acne, minor cuts, minor burns, eye infections, ear infections, and yeast infections (vaginal, male pubic jock-itch, athlete's foot). Boric acid should never be taken internally (by mouth).

HOW DOES BORIC ACID WORK?

Boric acid is a weak acid with both antiseptic and antifungal properties. At this time, the mode of boric acid's action is unknown. Studies suggest that the mode of action is not specific to its acidic properties.

VAGINAL YEAST INFECTIONS

Yeast is a type of fungus that normally lives in the vagina in small numbers. A yeast infection is when there are too many yeast cells growing in the vagina.

Risk factors for vaginal yeast infections:

- Pregnancy (boric acid therapy not recommended)
- Diabetes
- Oral contraceptives
- Steroids
- Antibiotics
- Menopause (declining estrogen levels thin the vaginal walls)

A yeast infection causes itching or soreness in the vagina and sometimes causes pain or burning during urination or sex. Some women also have a thick, clumpy, white discharge that has no odor and looks a little like cottage cheese.

It is possible that a yeast infection could be confused with another type of infection and for this reason it is important to consult with your physician prior to self-treatment.

TREATMENT OF VAGINAL YEAST INFECTIONS

Most cases of vaginal yeast infections are successfully treated with topical **-azole** antifungal creams such as butaconazole, clotrimazole, miconazole, and tioconazole. Oral prescription fluconazole (Diflucan) is also used.

Diabetic women with recurrent vaginal yeast infections have a higher prevalence of yeast called *Candida glabrata*. Interestingly, boric acid is significantly more effective than fluconazole (Diflucan) against *Candida glabrata*. For this reason, boric acid may become a frontline therapy for diabetic patients with recurrent vaginal yeast infections.

WHY USE BORIC ACID FOR VAGINAL YEAST INFECTIONS?

Boric acid is a natural treatment for recurrent and resistant yeast infections. In one study of 92 women with chronic yeast infections that had failed to respond to treatment with over-the-counter or prescription antifungal medicines, 98% of the women successfully treated their infections with boric acid.

In another study, diabetic women with *Candida glabrata* vaginal yeast infections showed a higher cure with boric acid vaginal suppositories compared to oral fluconazole (Diflucan).

EXAMPLES OF COMPOUNDS

Boric Acid 600 mg

- Vaginal Capsules
- Vaginal Suppositories

Vaginal Gel 3.3%

Boric Acid 600 mg/Metformin 25 mg

DURATION OF TREATMENT

Doses of boric acid used to treat vaginal yeast infections usually range from 600 mg once daily for 7 days to twice daily for 14 days. This may be followed with once weekly treatments to prevent reoccurrence.

SAFETY

Boric acid is toxin and should never be taken internally (by mouth) or placed on cuts or open wounds. It should not be used for a prolonged period of time or in amounts greater than what's recommended. It should not be used by pregnant women or applied to the skin of infants or children. Side effects of the suppositories may include vaginal burning and irritation.

REFERENCES

WebMD Web site. Available at: <http://women.webmd.com/tc/vaginal-yeast-infections-topic-overview>. Accessed March 24, 2009.

De Seta F, Schmidt M, Vu B, Essmann M, Larsen B. "Antifungal mechanisms supporting boric acid therapy of *Candida* vaginitis." *J Antimicrob Chemother.* 2009;63:325-36.

Jovanovic R, Congema E, Nguyen HT. "Antifungal agents vs. boric acid for treating chronic mycotic vulvovaginitis." *J Reprod Med.* 1991;36:593-7.

Debarti R, Ravinder G, Banerjee U, et al. "Prevalence of *Candida glabrata* and its response to boric acid vaginal suppositories in comparison with oral fluconazole in patients with diabetes and vulvovaginal candidiasis." *DiabCare.* 2007;30:312-317.