TABLE 8-4  Guidelines for Applying Vaginal Antifungal Products

1. Start treatment at night before going to bed. Lying down will reduce leakage of the product from the vagina.
2. Wash the entire vaginal area with mild soap and water, and dry completely before applying the product.
3. Vaginal cream: (If prefilled applicators are being used, skip to step 4.) Un螺丝 the cap; place the cap upside down on the end of the tube. Push down firmly until the seal is broken. Attach the applicator to the tube by turning the applicator clockwise. Squeeze the tube from the bottom to force the cream into the applicator. Squeeze until the inside piece of the applicator is pushed out as far as possible and the applicator is completely filled with cream. Remove the applicator from the tube.
4. While standing with your feet slightly apart and your knees bent, as shown in drawing A, or while lying on your back with your knees bent, as shown in drawing B, gently insert the applicator into the vagina as far as it will go comfortably.
5. Push the inside piece of the applicator in and place the cream as far back in the vagina as possible. To deposit vaginal tablets/suppositories, insert the applicator into the vagina and press the plunger until it stops. Move the applicator from the vagina.
6. After use, recap the tube (if using cream). Then clean the applicator by pulling the two pieces apart and washing them with soap and warm water.
7. If needed, wear a sanitary pad to absorb leakage of the vaginal antifungal. Do not use a tampon to absorb leakage. To deposit vaginal tablets/suppositories, remove the wrapper and place the product into the end of the applicator barrel.
8. While standing with your knees bent, as shown in drawing A, or while lying on your back with your knees bent, as shown in drawing B, gently insert the applicator into the vagina as far as it will go comfortably.
9. Continue using the product for the length of time specified in the product instructions. Use the product every day without skipping any days, even during menstrual flow.

Alternative Therapies for Vaginitis

An alternative approach to treating VVC is the use of *Lactobacillus acidophilus* preparations. The rationale for use of these preparations is to reestablish normal vaginal flora and inhibit overgrowth of *Candida* organisms. Data on the effectiveness of this approach are limited; one recent study examining the usefulness of *Lactobacillus* administered orally, vaginally, and via both routes found that none of these regimens protected against the development of postantibiotic VVC.30 However, eating yogurt with live cultures (8 oz daily) may be of some benefit in preventing recurrent VVC.25,31,32

Home remedies such as vaginal douches of yogurt or vinegar have also been used to treat this condition but are generally not effective. However, use of a sodium bicarbonate sitz bath (1 teaspoon in 1 pint of water; 2-4 tablespoons in 2 inches of bath water; sit in the sitz bath or bathtub for 15 minutes as needed for symptom control) may provide prompt relief of vulvar irritation associated with a candidal vaginal infection before antifungal agents can provide benefit.21,33

Some women may prefer herbal products to manage VVC. Herbal products reported for the treatment of VVC include garlic (orally and vaginally) and tea tree oil (vaginal preparations).34,35 Garlic has both antibacterial and antifungal properties. The active ingredient is allicin, which is released when a clove of garlic is crushed. Garlic is typically administered as one crushed clove wrapped in unbleached gauze inserted vaginally at bedtime for 6 nights. Garlic may cause a burning sensation if significant irritation of the vaginal tissues is present because of the vaginitis; in this case using a whole uncut clove of garlic may be preferable. No serious side effects have been reported, although some women may experience an allergic reaction or chemical burns with prolonged intravaginal use.34 Tea tree oil also has antibacterial and antifungal properties and *Lactobacillus* organisms are more resistant to tea tree oil than organisms associated with BV. The typical dose is 1 to 2 drops of tea tree oil in a capsule filled with calendula oil, vegetable oil, or water. It is administered as 2 capsules inserted vaginally at bedtime for 6 nights. A 200 mg vaginal suppository containing tea tree oil is also available commercially. It is used nightly for 6 nights. The possibility of allergic dermatitis exists.

Other Therapies

Gentian violet (a dye) is an old treatment for VVC that is generally used today as therapy for resistant candidal infections. However, it is available on the nonprescription market and can be used as topical therapy; a tampon can be soaked in the dye and inserted into the vagina. The tampon is left in the vagina for several hours or overnight. Often a single application is adequate, but treated tampons can be used once or twice a day for up to 5 consecutive days. The major disadvantage of using gentian violet is that it can stain fabrics and skin.32

Another option for the treatment of VVC is boric acid. The regimen is boric acid 600 mg in a size 0 gelatin capsule inserted vaginally once or twice daily for 14 days. Boric acid

bacterial vaginosis and trichomoniasis have the potential for adverse pregnancy outcomes. Breast-feeding women can use any of the nonprescription vaginal antifungals.22

Patient Preferences  Selection of cream, tablet, or suppository formulations can be left to patient preference; some patients may prefer the convenience of prefilled applicators. Studies have found that women who have previously experienced VVC prefer shorter courses of therapy than do women who have not had a prior infection; physicians tend to prefer longer courses of therapy.1 If vulvar symptoms are significant, a cream preparation or the combination of a cream with vaginal suppositories or tablets is preferred.