

a base of polyethylene glycol, although in some formulas, cocoa butter is employed. The suppositories are prepared by adding the progesterone to a melt of the base and molding. Some representative formulas are as follows:

Rx

Progesterone, micronized	qs	qs	qs
Polyethylene glycol 400	60%	–	–
Polyethylene glycol 8000	40%	–	–
Polyethylene glycol 1000	–	75%	–
Polyethylene glycol 3350	–	25%	–
Cocoa butter	–	–	100%

The amount of progesterone per suppository usually ranges from 25 to 600 mg. The suppositories are used in treating luteal phase defect, premenstrual syndrome, luteal phase spotting, and in preparation of the endometrium for implantation.

The pharmacist should share several helpful hints with a woman who is about to use a vaginal suppository. She should first be told to read the instructions with the product. Throughout the course of therapy, the suppository should be inserted high into the vagina with the provided applicator. The patient should not discontinue therapy when the symptoms abate. Furthermore, she should notify her physician if burning, irritation, or any signs of an allergic reaction occur. When vaginal inserts (i.e., compressed tablets) are prescribed, the pharmacist should instruct the woman to dip the tablet into water quickly before insertion. Because these dosage forms are usually administered at bedtime and can be somewhat messy if formulated into an oleaginous base, the pharmacist should suggest that the woman wear a sanitary napkin to protect her nightwear and bed linens.

VAGINAL INSERTS (TABLETS)

Vaginal inserts (tablets) are widely used today as they are easy to manufacture, more stable, and less messy. They are usually ovoid and are accompanied in their packaging with a plastic inserter, a device for easy placement

of the tablet within the vagina. They are prepared by tablet compression and are commonly formulated to contain lactose as the base or filler, a disintegrating agent such as starch, a dispersing agent such as polyvinylpyrrolidone, and a tablet lubricant such as magnesium stearate. They are intended to disintegrate within the vagina, releasing their medication. Examples are presented in Table 12.2.

Some vaginal inserts are capsules of gelatin-containing medication to be released intravaginally. Capsules may also be used rectally, especially to administer medication to children unwilling or unable to tolerate the drug orally. Capsule insertion into the rectum can be facilitated by first lightly wetting the capsule with water. Holes may be punched into these capsules prior to moistening and insertion to facilitate fluid movement into the capsule if desired. Drugs are absorbed from the rectum, but frequently at unpredictable rates and in varying amounts, as previously noted. Drugs that do not dissolve rapidly and that irritate mucous membranes should not be placed in direct contact with such membranes.

MEDICATION STICKS

Although cosmetics are viewed as preparations aimed at improving a person's appearance, many cosmetic preparations can serve as either medications or drug vehicle bases. Some formulations that have been introduced and improved for cosmetic use—powders, sticks, gels, solutions, suspensions, pastes, ointments, and oils—are widely used in the pharmaceutical sciences.

The medication stick, a fairly recent preparation, is used for both cosmetic and medical purposes. Examples include styp-tic pencils and lip balm sticks (Chapstick), which became available in the early 1940s. Today, medication sticks provide pharmacists, patients, and primary care providers with a unique, convenient, relatively stable, easy-to-prepare dosage form for the topical delivery of drugs. The use of this form will probably continue to grow.