

**KEY TERMS**

Ampule	Intradermal (ID)	Subcutaneous (SC)
Calibrated	Intramuscular (IM)	Topical
Emboli	Lumen	Thrombus
Gauge	Parenteral	Vial
Infiltration	Phlebitis	

## ■ PARENTERAL MEDICATIONS

**Parenteral** medications include all medications that are not ingested or introduced into the gastrointestinal system. They include topical, ophthalmic, otic, vaginal, nasal, inhaled, and injectable (intradermal [ID], intramuscular [IM], subcutaneous [SC], and intravenous [IV]) medications. The reasons for choosing a particular route, the forms of medication that can be administered parenterally, and the correct procedure for each parenteral route are discussed. When giving any medication, you must wash your hands, observe the seven “rights” of medication administration (right patient, right drug, right dose, right time, right route, right documentation, and right technique), compare the order with the container three times, and document the administration of the drug. The patient needs to know what the procedure entails before you administer the medication. Safely administering medications requires strict adherence to the protocols listed in this chapter or in your facility’s procedure manual.

## ■ TOPICAL MEDICATIONS AND ADMINISTRATION

**Topical** medications are applied directly to the skin as a patch, ointment, cream, lotion, or gel and are absorbed transdermally (through the skin). Topical medications are sometimes used if patients have difficulty swallowing or cannot take oral medications because of severe nausea. In addition, many conditions of the skin are treated by directly applying medication to the affected areas. Some medications are applied topically to achieve a systemic effect by maintaining continuous release of therapeutic doses of the drug.

### Semisolid Preparations

Topical drugs come in several types of preparations. Semisolid preparations include creams, ointments, gels, and plasters and are applied to the surface of the skin. Ointments are petroleum based and work to keep the medication in contact with the skin. For this reason, before additional doses are applied, the remaining ointment should be wiped away to avoid cumulative effects of medication (overdose). Common ointments include antibiotic ointments such as Bactroban placed on a wound and hydrocortisone used for itchy skin patches.

Creams are medications in a water base that absorb into the skin and disappear. Kwell (lindane) is a prescription cream used for the treatment of lice and scabies. Another cream is Oxy 10 Balance medicated cream, used on existing blemishes.

Gels are semisolid suspensions. This means that particles of drug are suspended in a thickened water base. An example is MetroGel for acne.

Plasters are medicated preparations that adhere to the skin with materials such as paper, linen, mole-skin, or plastic. Examples include salicylic acid plaster, which is used for warts, and bandages that are saturated with antibiotics. These plasters are used to hold the medication directly against the lesion or wound to be treated. Other plasters are used to administer pain medication for arthritis or diabetic neuropathy and must be placed on healthy, intact skin only. Examples of these types of plasters are capsaicin plaster and 5% lidocaine medicated plaster.

Most of the previously mentioned medicated preparations contain significant doses of medication, and care must be taken when they are combined with oral medications so that overdosage does not occur. In addition, ingredients must be checked carefully to avoid exposing patients to allergens.