Society, 2011).*

Treatment of infiltration or extravasation varies according to the type of vesicant. Guidelines are available outlining the sequence of interventions and specific treatment of infiltration or extravasation with antidotes.

Nursing Alert

When infiltration or extravasation is observed (signs include erythema, pain, edema, blanching, streaking on the skin along the vein, and darkened area at the insertion site), immediately stop the infusion, elevate the extremity, notify the practitioner, and initiate the ordered treatment as soon as possible. Remove the IV line when it is no longer needed (e.g., after infusing an antidote).

Phlebitis, or inflammation of the vessel wall, may also develop in children who require IV therapy. Lamagna and MacPhee (2004) describe three types of phlebitis: mechanical (caused by rapid infusion rate, manipulation of the IV), chemical (caused by medications), and bacterial (caused by staphylococcal organisms). The initial sign of phlebitis is erythema (redness) at the insertion site. Pain may or may not be present.

PIV catheters are the most commonly used intravascular device. Heavy cutaneous colonization of the insertion site is the single most important predictor of catheter-related infection with all types of short-term, percutaneously inserted catheters. Phlebitis, largely a mechanical rather than infectious process, remains the most important complication associated with the use of peripheral venous catheters.*

Nursing Alert

The most effective ways to prevent infection of an IV site are to cleanse hands between each patient, wear gloves when inserting a catheter, and closely inspect the insertion site and physical condition of the dressing. Proper education of the patient and family regarding signs and symptoms of an infected site can help prevent infections from going unnoticed.