

Many chemotherapeutic agents are **vesicants** (sclerosing agents) that can cause severe cellular damage if even minute amounts of the drug infiltrate surrounding tissue. Only nurses experienced with chemotherapeutic agents should administer vesicants ([Fig. 25-1](#)). Guidelines are available and must be followed meticulously to prevent tissue damage to patients.

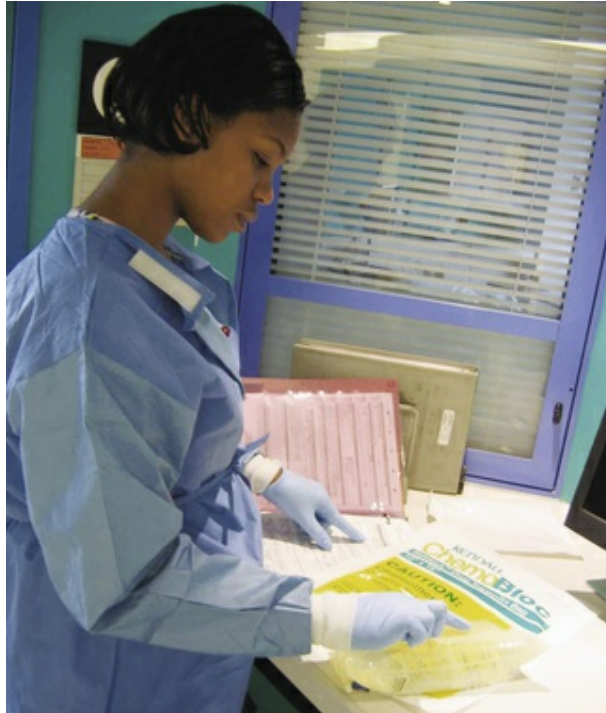


FIG 25-1 Nurses caring for children with cancer require expertise in the safe administration of chemotherapy.

In addition to extravasation, a potentially fatal complication is anaphylaxis, especially from L-asparaginase, bleomycin, cisplatin, and etoposide (VP-16). Hypersensitivity reactions to these chemotherapeutic agents are characterized by urticaria, angioedema, flushing, rashes, difficulty breathing, hypotension, and nausea or vomiting. Nursing responsibilities include prevention, recognition, and preparation for serious reactions. If a reaction is suspected, the nurse discontinues the drug, flushes and maintains the IV line with saline, and monitors the child's vital signs and subsequent responses.