



# Administering Vesicants

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1. A vesicant is defined as an agent that has the potential to cause
  - a. Blistering, severe tissue injury, or tissue necrosis.
  - b. A palpable cord along a vein.
  - c. Immediate streaking along a vein.
  - d. Aching and tightness along a vein.
2. Which of the following are vesicants in the “ABVD” chemotherapy protocol? More than one response may be correct.
  - a. Doxorubicin
  - b. Bleomycin
  - c. Vinblastine
  - d. Dacarbazine
3. Paclitaxel is classified as
  - a. An irritant.
  - b. A vesicant.
  - c. An antidote.
  - d. A nonvesicant.
4. Which of the following is the best site for administering a vesicant via a peripheral IV catheter?
  - a. Antecubital fossa
  - b. Ventral wrist area
  - c. Dorsum of the hand
  - d. Lower to mid forearm
5. Which of the following venous access devices cannot be used to administer continuous vesicant chemotherapy?
  - a. Implanted port
  - b. Midline catheter
  - c. Tunneled central venous catheter
  - d. Peripherally inserted central catheter
6. Which of the following is an acceptable form of local anesthesia prior to inserting a peripheral IV catheter for vesicant administration?
  - a. Ice pack
  - b. Intradermal lidocaine
  - c. LMX4® (4% liposomal lidocaine, Ferndale Laboratories, Inc., Ferndale, MI)
  - d. Lidoderm® (lidocaine 5% adhesive patch, Endo Pharmaceuticals, Inc., Chadds Ford, PA)
7. Mrs. Black is scheduled to receive her second course of epirubicin and docetaxel following a left lumpectomy and axillary node dissection. She has a bandage covering her right antecubital fossa and states that the phlebotomist had difficulty drawing blood from that area two hours ago. Veins on both of Mrs. Black’s hands and arms are visible without applying a tourniquet. The most appropriate nursing action is to
  - a. Postpone the chemotherapy for 24 hours.
  - b. Insert the IV catheter into a dorsal or metacarpal vein on the patient’s left hand.
  - c. Insert the IV catheter into a median or accessory cephalic vein in the patient’s left forearm.
  - d. Insert the IV catheter into a vein in the patient’s lower right arm or hand if the prior venipuncture site is not bleeding.
8. Mrs. George is scheduled for a central venous port insertion prior to beginning a chemotherapy regimen that includes two vesicants. Which of the following statements made by Mrs. George indicates the need for further patient teaching?
  - a. “Having a port eliminates the risk of an extravasation injury.”
  - b. “The port must be in the right place before it can be used for chemotherapy.”
  - c. “A problem with the port or needle can occur during chemotherapy, even though there may be no pain.”
  - d. “The port needle will be removed if it turns out that it is too short to be secure, and a longer needle will be inserted as a safety precaution.”
9. Mr. Wright is seated in the treatment room, waiting to receive vesicant chemotherapy. His implanted port flushes easily but does not have a blood return. The nurse’s next action is to
  - a. Proceed with chemotherapy.
  - b. Remove the noncoring needle and insert a new one.
  - c. Place the patient in a supine position and attempt to aspirate blood from the implanted port.
  - d. Contact the physician or advanced practice nurse for an order for a venogram (dye study).
10. When a vesicant is administered via IV bolus (push), how often should a blood return be verified?
  - a. Once, prior to vesicant administration
  - b. Before and after vesicant administration
  - c. Every 2–5 ml during vesicant administration
  - d. Every 10 ml during vesicant administration

## Answers

**Question 1:** The correct answer is a, blistering, severe tissue injury, or tissue necrosis. This definition of a vesicant is used in the Oncology Nursing Society (ONS) *Chemotherapy and Biotherapy Guidelines and Recommendations for Practice* (Polovich, White, & Kelleher, 2005) and based on a definition from *Mosby’s Medical, Nursing, and Allied Health Dictionary* (Anderson, 2002). Choice b, a palpable cord along a vein, is a clinical sign associated with thrombophlebitis and

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