



Managing Extravasations

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1. Symptoms of a vesicant chemotherapy extravasation injury arise
 - a. Immediately upon extravasation.
 - b. Several days after extravasation.
 - c. Within six hours of extravasation.
 - d. Either upon extravasation or within several days following extravasation.
2. Which of the following is an accurate statement about the signs and symptoms of an anthracycline extravasation?
 - a. Patients usually experience an immediate stinging or burning pain.
 - b. Pain is a delayed symptom with an onset two to four weeks following anthracycline extravasation.
 - c. If the patient reports pain during anthracycline administration but no swelling or redness exists at the IV site, an extravasation can be ruled out.
 - d. If swelling or redness occurs at the IV site during anthracycline administration but the patient denies pain, an extravasation can be ruled out.
3. Which of the following vesicants has the greatest potential of causing extensive, prolonged tissue damage if it extravasates?
 - a. Paclitaxel
 - b. Vinblastine
 - c. Doxorubicin
 - d. Liposomal doxorubicin (Doxil®, doxorubicin HCl liposome, Ben Venue Laboratories, Inc., Bedford, OH)
4. The rationale for applying ice packs to anthracycline extravasation tissue injuries is that topical cooling
 - a. Inactivates the anthracycline in the tissue.
 - b. Neutralizes free radicals that are released by the tissue.
 - c. Slows diffusion of the anthracycline into the tissues in the surrounding area.
 - d. Increases uptake of the anthracycline into the cells of the surrounding tissue.
5. The rationale for applying warm packs to tissue injuries caused by extravasation of plant alkaloids is that topical heating
 - a. Localizes the vesicant in the tissue.
 - b. Reduces inflammation in the tissue.
 - c. Neutralizes free radicals that are released by the tissue.
 - d. Dilutes the concentration of the extravasated vesicant in the tissue.
6. The most commonly recommended pharmacologic treatment for plant alkaloid extravasation is
 - a. IV infusion of dexrazoxane.
 - b. Subcutaneous injection of hyaluronidase.
 - c. Topical application of dimethyl sulfoxide (DMSO).
 - d. Subcutaneous injection of sodium thiosulfate solution.
7. Which of the following is an accurate statement about vesicant extravasations from central venous ports implanted in the anterior chest area?
 - a. Extravasations can be detected promptly in patients with deeply implanted portal bodies.
 - b. Surgical intervention, including mastectomy and placement of a skin flap, may be required.
 - c. Most extravasations from central venous ports are caused by erosion of the superior vena cava (SVC).
 - d. A reliable indicator of vesicant extravasation is a wet dressing overlying the implanted port.
8. Which of the following administrative actions should be conducted soon after an occurrence of a vesicant extravasation?
 - a. Revise extravasation documentation forms.
 - b. Update vesicant chemotherapy administration policies and procedures.
 - c. Identify factors that may have contributed to the occurrence of the extravasation.
 - d. Review the employment file of the nurse administering the vesicant to determine whether disciplinary action is indicated.
9. An extensive extravasation injury in which of the following locations most likely will require placement of a skin graft?
 - a. Mid forearm
 - b. Antecubital fossa
 - c. Anterior chest wall
 - d. Dorsum of the hand
10. Which of the following statements about extravasation management is evidence based?
 - a. The most important approach to extravasation management is prevention.
 - b. Findings from studies of rodents with extravasation injuries can be applied to humans.
 - c. Extensive extravasation tissue injuries eventually heal on their own with no intervention.
 - d. Surgical intervention is estimated to be required for 90% of patients with extravasation injuries.

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Digital Object Identifier: 10.1188/05.CJON.472-475