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## Chemotherapy Safety

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- A hazardous drug that causes teratogenicity has which of the following characteristics?
  - The ability to cause cancer in animal models, humans, or both
  - The ability to cause a change or mutation in the genetic material
  - The ability to cause defects in fetal development or fetal malformation
  - The ability to cause fertility impairment and adverse reproductive outcomes
- A plastic face shield should be worn when administering
  - Oral hydroxyurea.
  - IV cyclophosphamide.
  - Intramuscular methotrexate.
  - Bladder instillation of Bacillus Calmette Gue'rin (BCG).
- A small amount of chemotherapy splashes on a nurse's skin. What should be the nurse's immediate action?
  - Wash the affected area with soap and water.
  - Go to the emergency room or employee health.
  - Wash the affected area with a 10% bleach solution.
  - No action is necessary because the exposure was minimal.
- Which of the following practices results in the greatest risk of releasing a hazardous drug into the environment when priming IV tubing?
  - Using a dry-spike extension and back-flow technique
  - Using a closed system with a connector attached to the bag before the drug is added
  - Connecting the tubing to a patient when it is primed with a solution containing a hazardous drug
  - Spiking an IV bag and priming the tubing before adding a hazardous drug while in a biologic safety cabinet
- A small spill is defined as
  - Less than 5 ml or 5 g.
  - Less than 15 ml or 15 g.
  - Less than 25 ml or 25 g.
  - Greater than 150 ml inside a biologic safety cabinet.
- Which one of the following classes of biologic agents must be handled according to Occupational Safety and Health Administration guidelines for cytotoxic agents?
  - Interferons
  - Interleukins
  - Monoclonal antibodies
  - Hematopoietic growth factors
- A patient who completed an infusion of chemotherapy 24 hours ago is incontinent of urine at home. What is the appropriate way for the family to handle contaminated linens?
  - No special precautions are necessary because the chemotherapy was completed 24 hours ago.
  - Place linens into the washer separately and wash twice with regular detergent and hot water.
  - Place linens into the washer with regular household laundry and wash with regular detergent and hot water.
  - Place all contaminated linens separately in a leak-proof bag and dispose of them in the commercial trash.
- Education and orientation of nurses related to chemotherapy administration should include
  - Hands-on experience in the work setting with a mentor.
  - A test to assess knowledge of chemotherapy administration.
  - A chemotherapy course based on Oncology Nursing Society (ONS) guidelines six months after orientation.
  - A chemotherapy course based on the ONS guidelines and hands-on clinical practicum with an evaluation.
- When a nurse is administering chemotherapy, it splashes into one eye. What should the nurse's first action be?
  - Go to occupational health.
  - Go to the emergency room.
  - Notify the manager or supervisor.
  - Wash the eye with water for 15 minutes.
- The nurse's competency related to chemotherapy administration should be evaluated at least
  - Yearly.
  - Every two years.
  - Every two months.
  - After completion of orientation.
- What information does a pregnant nurse need to know regarding chemotherapy administration?
  - Chemotherapy administration during the first trimester represents a risk only to the fetus.
  - Nurses can administer chemotherapy throughout pregnancy without risk of harm to the fetus from exposure.
  - Nurses can administer chemotherapy during the last two trimesters of pregnancy without risk of harm to the fetus from exposure.
  - Chemotherapy administration any time during pregnancy or breastfeeding is a potential exposure risk and should be avoided.

### Answers

**Question 1:** The correct answer is choice c, the ability to cause defects in fetal development or fetal malformation. Patients receiving chemotherapy and people with occupational exposure to chemotherapy are at risk for this toxicity (Polovich, 2003). Choice a, the ability to cause cancer in animal models, humans, or both, is incorrect. This is the definition of carcinogenicity. Choice b, the ability to cause a change or mutation in the genetic material, is incorrect. This is the

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