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# The Use of Monoclonal Antibodies in Oncology

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- In general, the administration of monoclonal antibodies in the oncology setting should be given via IV using
  - Bolus push.
  - Slow infusion.
  - Free-flowing drip.
  - Patient-controlled administration.
- Mrs. Hoffman has been receiving alemtuzumab (Campath®, Berlex Inc., Richmond, CA) 30 mg three times per week for eight weeks. Recently, she required a three-week break from her therapy because of severe thrombocytopenia. Now that she is ready to resume treatment, at what dose should she be resumed?
  - 3 mg
  - 10 mg
  - 30 mg
  - 90 mg
- Prophylactic administration of antibiotics and antiviral agents and monitoring of T-cell counts are recommended for patients receiving therapy using
  - Rituximab (Rituxan®, Genentech Inc., South San Francisco, CA).
  - Trastuzumab.
  - Alemtuzumab.
  - Gemtuzumab ozogamicin (Mylotarg®, Wyeth Pharmaceuticals, Philadelphia, PA).
- The advent of which of the following technologies led to the initial production of monoclonal antibodies?
  - Fusion
  - Genomic
  - Polyclonic
  - Hybridoma
- During administration of the initial dose of rituximab, the patient starts to complain of feeling cold and subsequently begins to shiver and shake. The appropriate action to take is to
  - Administer one ampule of sodium bicarbonate.
  - Cover the patient with a blanket and offer a warm beverage.
  - Stop the infusion of rituximab and administer normal saline.
  - Place emergency medication or equipment by the patient's infusion chair.
- The patient being cared for has just completed a monoclonal antibody infusion that has been combined with a cytotoxic agent. The nurse should take which of the following precautions to dispose of the IV administration equipment used?
  - Dispose of the IV bag and tubing in a trash can.
  - Handle the IV bag and tubing per institutional hazardous waste disposal policy.
  - No specific precautions are necessary when removing equipment.
  - Wear gloves when removing the IV bag and disconnecting the IV tubing from the patient.
- A patient will be receiving ibritumomab tiuxetan (Zevalin™, IDEC Pharmaceuticals, San Diego, CA). Education regarding postinfusion care will include instructing patients and caregivers to
  - Use only disposable dinnerware.
  - Wash their hands thoroughly after using a toilet.
  - Live in separate households for six weeks.
  - Laundry patients' clothing twice using a strong bleach detergent.
- Rituximab is an example of which type of monoclonal antibody?
  - Human
  - Murine
  - Chimeric
  - Humanized
- The most common adverse effect of cetuximab (Erbix™, ImClone Systems, Inc., New York, NY, and Bristol-Myers Squibb, Princeton, NJ) is
  - Myalgia.
  - Acne-like rash.
  - Cardiac toxicity.
  - Thrombocytopenia.
- Nursing management of the most common adverse effect associated with cetuximab includes
  - Using topical ointments and avoiding overexposure to the sun.
  - Monitoring for bleeding and instituting bleeding precautions.
  - Educating patients concerning a low-salt diet and monitoring daily weight.
  - Providing for an exercise regimen and possible physical therapy referral.
- Mrs. Jones reports shortness of breath with exertion and slight, pitting ankle edema. Last week, she received trastuzumab (Herceptin®, Genentech Inc.). Her symptoms have become progressively worse over the past week. The most recent chemistry profile was completed last week, and all results were within normal limits. A complete blood cell count today reveals white blood cell count of 4.6/mm<sup>3</sup>, hemoglobin 10.9 g/dl, hematocrit 32.8%, and platelet count of 350,000/mm<sup>3</sup>. Mrs. Jones now is scheduled for a weekly trastuzumab infusion. The most appropriate nursing action would be to
  - Reschedule treatment for next week.
  - Administer the trastuzumab as ordered.
  - Explain to the patient that her symptoms are a result of anemia.
  - Notify the physician about the patient's signs and symptoms before proceeding with the infusion.

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