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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/mm³, hemoglobin 10.9 g/dl, hematocrit 32.8%, and platelet count of 350,000/mm³. 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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