Medications – Immune Globulin Intravenous (IGIV) Administration

SECTION: 16.12
Strength of Evidence Level: 3

PURPOSE:
To provide accurate and safe administration of Immune Globulin Intravenous (IGIV) in the home setting.

CONSIDERATIONS:
1. Prior to instituting therapy, describe the care required by the caregiver in the absence of the nurse. Confirm presence of responsible caregivers in the home to attend the patient.
2. Physician’s orders must include amount and type of drug, rate of infusion and route.
3. IGIV may be used in primary immunodeficiency states, secondary immunodeficiency related to immunosuppressive therapy or conditions in which impaired antibody formation has occurred.
4. This drug is contraindicated in patients with selective IgA deficiency, which possess antibody to IgA. It is also contraindicated in patients who have had a severe, systemic reaction during the administration of IGIV.
5. The patient is at risk of developing inflammatory reactions with rapid infusion of IGIV. The reaction may result in rise in temperature, chills, nausea and vomiting. These reactions are rare, but may lead to shock. Nurse/patient/caregiver must never rush the infusion of IGIV.
6. Vital signs, including blood pressure, should be monitored throughout the administration of IGIV.
7. Do not dilute IGIV with IV drugs. Give IGIV through a separate infusion line. No other medications or fluids should be mixed with the IGIV preparation.
8. Adverse reactions are rare but generally become apparent 30 minutes to 1 hour after beginning the infusion. Reactions consist of facial flushing, feelings of chest tightness, chills, fever, dizziness, nausea, diaphoresis and hypotension. If the above occurs, stop infusion and notify physician.
9. Before beginning the infusion, be sure solution is clear and at about room temperature. All parenteral products must be inspected visually for particles and discoloration.
10. Use vented infusion line only.
11. Emergency equipment (epinephrine and an ambu bag) must be readily available should anaphylaxis occur.
12. If symptoms of shock or respiratory distress occur during or following medication administration, stop the infusion and start normal saline infusion. (See Anaphylactic Shock for treatment guidelines.)
13. Use at least 2 patient identifiers prior to administering medication.
14. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections. Staff should emphasize to all patients the importance of contacting a clinical staff member for assistance when there is an identified need to disconnect or reconnect devices.

EQUIPMENT:
- Gloves
- Infusion set
- Medication
- Syringes, needles, or needle less adaptors
- Tape
- Alcohol prep pads
- Venipuncture equipment (if needed, angiocatheters, catheter adaptor plugs, tourniquet, antimicrobial wipes and transparent adhesive dressing)
- Normal saline (1000 mL IV solution and for flushing IV tubing)
- Heparin flush (100 units/mL, or as prescribed)
- Emergency equipment: Epinephrine Hydrochloride 1:1000, TB syringe and needle, Ambu Bag
- Puncture-proof container
- Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Identify patient and explain procedure and purpose.
3. Assess venous access. If no central line, start peripheral IV according to Administration of Intravenous Therapy in the Home or Peripheral Intravenous Infusion: Insertion and Maintenance of Heparin Lock or Catheter Injection Port, if IV is to remain in place.
4. If necessary, prepare powdered form of IGIV according to manufacturer’s guidelines. DO NOT shake. Excessive shaking will cause foaming.
5. Set rate to infuse as ordered by physician. Usually, the initial infusion is set to a flow rate of 0.01-0.02 mL/kg/minute for 30 minutes, then increase slowly to 0.04 mL/kg/minute for the remainder of the infusion.
6. Observe site frequently for redness, swelling or pain.
7. Monitor vital signs every fifteen minutes during first hour of infusion. If there are no changes, monitor vital signs every 30 minutes for remainder of infusion. If symptoms of shock or respiratory distress occur, stop infusion and start normal saline infusion. (See Anaphylactic Shock.)
8. After infusion is complete, flush venous access with 5 mL normal saline and heparin flush (appropriate for type of access or remove peripheral IV according to Intravenous Therapy Administration).
9. Discard soiled supplies in appropriate containers.
AFTER CARE:

1. Review patient/caregiver teaching on signs/symptoms of reaction and emergency steps to take.

2. Document in patient's record:
   a. Medication administered, dose, time, rate and route.
   b. Type and appearance of venous access site.
   c. Vital signs before, during and after infusion.
   d. Patient's response to procedure, side effects, and management.
   e. Instructions given to patient/caregiver.
   f. Communication with the physician, as needed.