PURPOSE: To describe the proper utilization of the Regitine (phentolamine) Protocol by the Registered Nurse (RN) in an effort to prevent tissue extravasation associated with the infiltration of alpha-adrenergic agents.

EXCEPTIONS: 1. Not needed for Dobutamine.  
2. NICU

DEFINITION: Alpha-adrenergics agents—Often given to support blood pressure and cardiac output. These pharmaceuticals cause vasoconstriction of the vascular bed up to the point of causing localized tissue ischemia. Effects are significantly dose related. Examples: Dopamine, Levophed (norepinephrine), Neo-Synephrine (phenylephrine), Epinephrine.

Regitine (phentolamine)—An alpha-antagonist. This agent is used to counteract the vasoconstriction caused by the alpha-adrenergics, resulting in improved localized tissue perfusion.

KNOWLEDGE BASE: Upon immediate recognition of an infiltration by an alpha-adrenergic agent, the RN will initiate the Regitine Protocol as outlined below and notify the physician. (This intervention should be completed at least within 12 hours of discovery.)

EQUIPMENT: Assemble the following equipment:
1. One 12 ml syringe
2. Several 27 gauge, ½ inch needles or 25 gauge, 5/8 inch needles
3. Regitine 5mg vial
4. 10 ml vial normal saline
5. Alcohol swabs
6. Red arm band

PROCEDURE: IDENTIFICATION:

1. Identify the infiltration of the Levophed, Epinephrine, or dopamine infusion. **Begin treatment upon recognition.**

   a. Signs and symptoms may include:
   1) Swelling beyond the catheter tip or proximal to the infusion site.
   2) Alteration in the localized skin temperature
(cold or warm.)

3) Alternation in localized skin color (pale, reddened, or mottled.)

4) Localized area tender or firm to the touch.

b. **Stop the intravenous infusion, but leave the IV catheter in place.**

c. Obtain the Regitine from the Pharmacy, if not available in the Pyxis.


2. **ADMINISTRATION:**

   a. Dilute 5 mg of Regitine with 10 ml Normal Saline and draw up in the 12 ml syringe.

   b. Disconnect the IV tubing from the hub of the catheter and inject 1 ml of the Regitine solution. Discontinue the catheter.

   c. Using multiple injection sites throughout the infiltrated area, inject the Regitine solution (approximately 0.5 ml per site subcutaneously, with a half inch between the sites.) Use a new sterile hypodermic needle for each injection of the site. **NOTE: It may not be necessary to use all the prepared Regitine solution. The amount of the Regitine solution used will vary with the size of the area of infiltrated tissue.**

   d. Place a red armband on the involved extremity.

   e. Obtain an order for a consultation with an Infectious Disease physician if wound care is needed.

**DOCUMENTATION:**

1. **Occurrence Report**—Complete an occurrence report.

2. **Nursing Reassessment Flowsheet**—Document the infiltration site, appearance, procedure initiated, and physician notification. Document the appearance of the involved extremity each shift thereafter.

**REFERENCE:**

Package insert for Regitine (phentolamine)


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