

**INTRAVENOUS ALBUMIN ADMINISTRATION**

**Section:** Nursing

**Compliance:** ACHC Infusion Pharmacy

**ACHC Standards:**

**Policy ID:** NUR222

**Effective:** 1/1/21

**Reviewed:** 5/1/21

**Revised:**

**Approved by, Title and Date Approved:** Kathleen Patrick, President 1/1/21, 5/1/21

**I. POLICY**

Albumin is a natural plasma protein pooled from human blood and blood-related products. It is available in 5% and 25% concentrations and contains 130-160 mEq's of sodium per liter. Albumin plays an important role in regulating plasma volume and tissue fluid balance. The administration of Albumin causes fluid to be pulled from the interstitial space into the intravascular space. The 5% solution is isotonic. The 25% solution is hypertonic.

Albumin is indicated for expansion of plasma volume and maintenance of cardiac output in situations associated with fluid volume deficit including shock, hemorrhage, and burns. It is used for temporary replacement of Albumin in diseases associated with low levels of plasma proteins such as nephrotic syndrome or end stage liver disease. Albumin is contraindicated in patients with severe anemia, cardiac failure, or known hypersensitivity. Increased circulating volume may result in fluid overload and lead to complications such as hypotension, tachycardia or altered respirations. Other adverse effects include fever, nausea, vomiting, anemia, and allergic reactions.

**II. PROCEDURES**

1. Albumin is not considered for first dose in the home. The first dose must be administered in the clinic setting with subsequent doses in the home, if requested.
2. Physician's orders will include:
  - a. Dose/Concentration
  - b. Hourly rate of delivery
  - c. Frequency of administration
  - d. Anaphylaxis kit
3. The decision to permit a patient or caregiver to administer Albumin without a nurse present in the home will be made on an individual basis under the following circumstances:
  - a. A second person must be present during administration
  - b. The home must have an available telephone.
  - c. The caregiver will be taught emergency measures in the event of an allergic response

4. Usual dose and administration:
  - a. 200-300 ml of 25% albumin. Dosage varies with patient's condition and response.
  - b. Usual daily dose is 50 to 75 grams for adult and 25 grams for children.
5. Standing Orders / Treatment protocol for anaphylaxis will be instituted unless otherwise ordered by physician. See policy NUR012.

**PROCEDURE:**

1. Supplies:
  - a. Syringes of normal saline or D5W as per brand protocol.
  - b. Syringe of heparin (10u/ml-100u/ml)
  - c. Alcohol swabs
  - d. Prescribed Albumin IV
  - e. IV pole
  - f. Infusion pump (if indicated) \*Albumin may be administered via gravity/dial-a-flow method
  - g. IV administration set. \*Change with every dose.
  - h. IV start kit (if administering via peripheral access)
  - i. Anaphylaxis Kit
2. Obtain baseline vital signs (when administered by nurse)
3. Wash hands
4. Don gloves
5. Establish venous access prior to preparation of drug, as applicable
6. Prepare product. Do not agitate solution.

**NOTE:** Solution should appear a clear amber color. Do not use cloudy, sediment-filled solutions. Use solution promptly.
7. Begin infusion at prescribed rate.
8. Obtain TPR and BP (when administered by nurse):
  - a. 15 minutes after infusion has been started
  - b. Every 30-60 minutes thereafter during infusion based on RN evaluation of the patient's response to infusion.
  - c. 15 minutes following completion of infusion
  - d. Caregiver may be taught vital sign monitoring
9. In case of mild adverse reaction:
  - a. Stop infusion until symptoms subside
  - b. Resume infusion at slower rate
10. If reaction continues or increases:
  - a. Stop infusion
  - b. Administer emergency meds
  - c. Notify physician immediately. Patient may be transferred to Emergency room or appropriate medical setting if necessary.

11. When infusion is complete, discontinue infusion and flush IV catheter with saline/heparin as directed.

**NOTE:** Administration set (tubing) is to be changed with every dose.

12. Document procedure and patient response