

SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 01/07/13
Supersedes: 08/01/08

Protocol: P-209

INTRAVENOUS INFUSION OF BLOOD/BLOOD PRODUCTS CCT PARAMEDICS

INFORMATION REQUIRED

- Treatment provided and transferring physicians orders are within the CCT-P Scope of Practice
- The intravenous infusion is regulated by an infusion pump familiar to the CCT-P
- Medication is in the correct concentration.

OBJECTIVE FINDINGS

- General appearance
- Vital signs
- Cardiac rhythm

CCT- P Treatment

- Identify the patient and the blood by checking the patient ID band against the blood/blood product label and the blood/blood product order for patient name, blood type, unit identifying number and expiration date. The blood or blood product must be hung and the infusion initiated by a RN or MD prior to the CCT-P accepting the patient for transfer.
- Patients shall be placed and maintained on cardiac and pulse oximetry monitors during transport.
- A non-invasive or manual blood pressure monitor device that will record blood pressure readings and a means of measuring temperature will be utilized every fifteen (15) minutes to monitor for signs of adverse effects.
- Signed transfer orders from the transferring physician must be obtained prior to transport. Transfer orders must provide for maintaining the blood/blood products infusion during transport.
- If medication administration is interrupted (infiltration, accidental disconnection, malfunctioning pump, etc.) the CCT-P may restart the IV line as delineated in the transfer orders.
- The following parameters shall apply to all patients with pre-existing blood/blood products infusions:
 - Infusion will be through filtered infusion tubing compatible with the CCT-P mechanical infusion device.
 - Regulation of the infusion rate will occur within the parameters as defined by the transferring physician. No other flow adjustments may be made by the CCT-P other than to discontinue the infusion in the event of complications.

SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 01/07/13
Supersedes: 08/01/08

Protocol: P-209

Transferring or Base Hospital Physician Contact Criteria

- If pump failure occurs and cannot be corrected, the CCT-P is to discontinue the blood/blood products infusion and notify the transferring physician or the base hospital physician if the transferring physician is not available.
- In cases of suspected transfusion reactions, the blood/blood products infusion will be discontinued and notification made to both the transferring and Base Hospital Physician.

PRECAUTIONS AND COMMENTS

- This procedure shall only be performed by paramedics with CCT-P (Critical Care Transport-Paramedic) training and designation.
- CCT-Ps may not initiate infusions of blood or blood products.

Adverse Reactions

- **Hemolytic Reactions:** Hemolytic reactions are the most life threatening. Clinical manifestations may vary considerably and include: fever, headache, chest or back pain, pain at the infusion site, hypotension, nausea, generalized bleeding or oozing from a surgical site or shock. The most common cause is from ABO incompatibility due to clerical error or transfusion to the wrong person. Chances of survival are dose dependent; therefore it is important to STOP the transfusion immediately if a hemolytic reaction is suspected. Administer fluid challenge of NS.
- **Febrile Non-Hemolytic Reaction:** Chills and fever (rise from baseline temperature of 1 degree C or 1.8 degree F).
- **Allergic Reaction:** Characterized by appearance of hives and itching (urticaria or diffuse rash). See P-005 Allergic Reaction Protocol after discontinuing the infusion.
- **Anaphylaxis:** May occur after administration of only a few mls of a plasma containing component. Symptoms include coughing, bronchospasm, respiratory distress, vascular instability, nausea, abdominal cramps, vomiting, diarrhea, shock and loss of consciousness. See P-005 Allergic Reaction Protocol after discontinuing the infusion.
- **Volume Overload:** Characterized by dyspnea, headache, peripheral edema, coughing, frothy sputum or other signs of congestive heart failure occurring during or soon after transfusion. Restrict fluids.