EL DORADO COUNTY EMS AGENCY
FIELD PROCEDURES

821

(on file)
EMS Agency Medical Director

Effective: 2/21/2025

SPECIAL CATEGORY TRANSPORT (SCT): BLOOD TRANSFUSIONS

PURPOSE:

To provide parameters for paramedic monitoring of blood transfusions during SCTs

AUTHORITY:

- California Health and Safety Code, Division 2.5
- California Code of Regulations, Title 22, Chapter 4, Article 2

POLICY:

1. Only Provider Agencies approved by the El Dorado County EMS Agency may be authorized to provide SCT services.
2. Only specifically trained Paramedics employed by an approved SCT Provider may utilize SCT Optional Skills.
3. Training program and educational materials for SCT Optional Skills must be approved by the El Dorado County EMS Agency Medical Director, pursuant to **Administrative Policy 1106**.
4. When already initiated by the referring facility and connected to a patient via peripheral or central line, Paramedics may maintain pre-existing blood transfusions.
5. Paramedics will not initiate blood transfusions.
6. Pursuant to **Administrative Policy 1107**, transfusions will be initiated by the referring facility no fewer than fifteen (15) minutes prior to arrival of the SCT crew.
    a. Transfusions started upon the arrival of transport will be delayed a minimum of 15 minutes to observe for any transfusion reactions.

PROCEDURES:

1. All patients will be maintained on a cardiac monitor, pulse oximeter, and a non-invasive blood pressure monitor.
2. Written transfer orders from the transferring physician shall be obtained prior to transport. These orders will be attached to the electronic Patient Care Report (ePCR). These orders shall include:
    a. Orders for maintaining and adjusting blood transfusion rate during transport.
    b. Telephone number where the transferring physician can be reached during transport.
3. SCT Paramedics must be knowledgeable in the operation of the specific blood delivery/warming device.

4. Regulation of the transfusion rate will be within the parameters defined by the transferring physician.
5. Verify the patient and blood with the sending RN by checking the patient ID band against the blood label(s) and blood order for name, blood type and unit identifying number.
6. Vital signs will be monitored and documented at least every 15 minutes and immediately if there is any change in patient status or change in transfusion rate. Cardiac Monitor and pulse oximetry shall be monitored continuously during the transport.
7. Monitor the patient for any signs and symptoms of a transfusion reaction.
8. The paramedic shall document on the ePCR the total volume infused throughout the duration of the transport.

REACTIONS

1. Monitor temperature for adverse effects.
2. The following are the most common types of transfusion reactions that may occur:
   a. Hemolytic reactions: Hemolytic reactions are the most life-threatening. Clinical manifestations may vary considerably: fever, headache, chest or back pain, pain at infusion site, hypotension, nausea, generalized bleeding or oozing from surgical site, shock. The most common cause is from ABO incompatibility due to a clerical error or transfusion to the wrong patient. Chances of survival are dose dependent therefore it is important to stop the transfusion immediately if a hemolytic reaction is suspected. Give a fluid challenge.
   b. Febrile non-hemolytic reaction: Chills and fever (rise from baseline temperature of 1°C or 1.8°F). Document and report to hospital on arrival.
   c. Anaphylaxis: May occur after administration of only a few mL's of a plasma containing component. Symptoms include coughing, bronchospasm, respiratory distress, vascular instability, nausea, abdominal cramps, vomiting, diarrhea, shock, and loss of consciousness.
   d. 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 fluid.

3. If a suspected transfusion reaction occurs:
   a. Stop the transfusion immediately.
   b. Contact the transferring hospital physician.
   c. Initiate the appropriate treatment protocol.
   d. Document any suspected transfusion reactions.

Reference: 1106, 1107

e. Report to hospital staff immediately upon arrival.

f. File an EMS Event Report as soon as possible with the EMS Agency