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POLICY MEMORANDUM 6801

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REVIEWED/APPROVED BY:

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SUBJECT: PARAMEDIC MONITORING OF BLOOD TRANSFUSIONS DURING INTERFACILITY TRANSFERS (IFT)

AUTHORITY: Health and Safety Code, Division 2.5, Sections 1797.220

California Code of Regulations, Title 22, Chapter 4, Article 1, Section 100145

I. PURPOSE:

A. To provide parameters for paramedic monitoring of blood transfusions during IFTs.

II. PARAMEDIC IFT OPTIONAL SKILLS

A. Only the Solano County ALS Exclusive Operating Area (EOA) Provider may be authorized to utilize Paramedic IFT optional skills.

B. Only appropriately trained Paramedics employed by the ALS EOA Provider may utilize Paramedic IFT optional skills.

C. Patients will have pre-existing blood transfusions started at least 15 minutes prior to arrival at the transferring facility in peripheral or central IV lines. Prehospital personnel will not initiate blood transfusions.

1. If the transfusion is started upon the arrival of transport, the transport will be delayed for 15 minutes to observe for any transfusion reactions.

III. BLOOD TRANSFUSION PROCEDURES

A. All patients will be maintained on a cardiac monitor and a non-invasive blood pressure monitor.

B. 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:

1. Orders for maintaining and adjusting blood transfusion rate during transport.

2. Telephone number where the transferring physician can be reached during transport.

C. Paramedic personnel must be knowledgeable in the operation of the specific blood delivery/warming device.

D. Regulation of the transfusion rate will be within the parameters defined by the transferring physician.

E. 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.

F. Vital signs will be monitored and documented every 15 minutes and immediately if there is any change in patient status or change in transfusion rate.

G. Monitor the patient for any signs and symptoms of a transfusion reaction. Monitor temperature for adverse effects if transport time exceeds 15 minutes. The following are the most common types of transfusion reactions that may occur:

1. 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.

2. 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.

3. Allergic reaction: Characterized by appearance of hives and itching.

4. 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.

5. 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.

H. If a suspected transfusion reaction occurs:

1. Interrupt the transfusion immediately.
2. Contact the transferring hospital physician.
3. Consult appropriate treatment protocol.
4. Document any suspected transfusion reactions.
5. Report to hospital staff immediately upon arrival.

I. The paramedic shall document on the ePCR the total volume infused throughout the duration of the transport.