MONITORING OF PRE-EXISTING BLOOD TRANSFUSIONS DURING INTERFACILITY TRANSPORTS

PURPOSE

To provide a mechanism for paramedics to be permitted to monitor pre-existing blood transfusions during interfacility transports.

AUTHORITY

Division 2.5, Health and Safety Code, Sections 1797.220

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

POLICY

A. Only those paramedics who have successfully completed training program(s) approved by the YEMSA Medical Director on pre-existing blood transfusions will be permitted to monitor them during interfacility transports.

B. Only those ALS ambulance providers approved by the YEMSA Medical Director will be permitted to provide the service of monitoring pre-existing blood transfusions during interfacility transports.

C. Paramedic monitoring of pre-existing blood transfusions during interfacility transports is limited to those circumstances when there are no RN staffed Critical Care Transport (CCT) units available and/or when air ambulance transport is not appropriate or available.

D. Patients who are candidates for paramedic transport will have pre-existing blood transfusions in peripheral or central IV lines. Prehospital personnel will not initiate blood transfusions.

PROCEDURE

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

B. The paramedic shall receive the transferring orders from the transferring physician prior to leaving the sending hospital, including a telephone number where the transferring physician can be reached during the patient transport. Transferring physicians must be aware of the general scope of practice of paramedics and the transport protocol parameters outlined in this policy. The written orders must include the transfusion rate.

C. Paramedic personnel must be knowledgeable in the operation of the specific Blood delivery/warming device(s).

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

E. Identify the patient and blood by checking the patient ID band against the blood label 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:

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 of NS. See shock protocol (M-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.

Allergic reaction: Characterized by appearance of hives and itching (urticaria or diffuse rash). See allergic reaction / anaphylaxis protocol (M-1)

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. See allergic reaction / anaphylaxis protocol (M-1).

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.

If a transfusion reaction occurs:

Stop the transfusion immediately.
Contact transferring physician and base / modified base hospital.
Consult appropriate treatment protocol.
Document any transfusion reactions.
Report to hospital immediately upon arrival.

H. The paramedic shall document on the patient care report (PCR) the total volume infused throughout the duration of the transport.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

All calls will be audited by the provider agency CQI process. Audits will assess compliance with physician orders and regional protocols, including base hospital contact in emergency situations. Reports will be sent to the YEMSA as requested.

CROSS REFERENCES

Paramedic interfacility transport optional skills: Transferring hospital requirements,

Paramedic interfacility transport optional skills: Service provider Requirements and

Paramedic interfacility transport optional skills: Application and approval process,

Allergic Reaction / Anaphylaxis,

Shock