Medical Control Guideline: MONITORING TRANSFUSION OF BLOOD PRODUCTS

PRINCIPLES:

1. Patients in hemorrhagic shock may need to be transferred to a tertiary care or trauma center with blood/blood product transfusions in process as part of emergency resuscitation.

2. Blood products include packed red blood cells (PRBCs), whole blood, fresh frozen plasma (FFP), platelets, cryoprecipitate, and prothrombin complex concentrates.

3. The Los Angeles County EMS Agency does not authorize EMS personnel to start, hang or otherwise initiate the infusion of blood products unless they are participants in the Development and Rapid Operationalization of Prehospital Blood Transfusion (LA-DROP) Pilot program.

4. Destination of the patient for which paramedics transport while monitoring blood product transfusions is determined by current Los Angeles County EMS Agency destination policy (*Ref. No. 502* Patient Destination).

5. Transfusion reactions are defined as follows:
    a. Allergic reaction: hives or itching only, without signs of anaphylaxis.
    b. Anaphylaxis: allergic reaction with angioedema, wheezing, respiratory distress, vascular instability, vomiting, diarrhea and/or shock. Rash may or may not be present.
    c. Hemolytic transfusion reaction: life threatening reaction that may present with fever, headache, back pain, nausea, hypotension and pain at the infusion site.
    d. Volume overload: may develop pulmonary edema and respiratory distress.

GUIDELINES:

1. Before accepting responsibility for the patient, confirm with a nurse or physician from the transferring facility, that the name on the patient's armband and blood bank number on blood transfusion forms the same as the name and blood bank number on the unit(s) of blood product which is (are) infusing. For uncrossmatched blood products (which will not have a patient name), confirm the uncrossmatched blood product transfusion is for the patient being transferred. A patient identification band must be present prior to transfer.

2. Document in the ePCR the physician order for the blood product(s) to be infused, which shall include the following:

    a. Type of blood product being infused
    b. Rate of the transfusion
    c. Name of the transferring/ordering physician

3. Monitor all patients continuously during transport with a cardiac monitor and a noninvasive blood pressure monitor as per *MCG 1308*.

4. In patients with suspected transfusion reactions (including hemolytic reactions, allergic reactions, anaphylactic reactions, and volume overload):

    a. Stop the blood product transfusion
    b. Disconnect the IV tubing and flush the port
    c. Initiate care per applicable Treatment Protocol(s)
    d. Provide the remaining blood product and tubing to the receiving hospital

5. Document volume of blood product transfused, any suspected transfusion reaction on the ePCR and communicate any reaction and interventions taken to receiving emergency department staff.

6. All cases for which this MCG is implemented will be audited by the EMS provider agency and reports sent to the Los Angeles County EMS Agency as requested.

7. The receiving emergency department staff will be responsible to communicate transfusion related adverse events to the transferring facility emergency department staff.