

TREATMENT:

- A. Treat per Universal Patient Care.
- B. Obtain 12-lead ECG.
- C. If hyperkalemia is suspected based on history and physical/ECG findings:
 1. Administer **1 gram Calcium Chloride slow IV/IO over 5 – 10 minutes** in a proximal port, or **Calcium Gluconate 2 grams IV/IO over 5 – 10 minutes**. May repeat once after every 5 if inadequate effect or recurrent symptoms.
 2. If no change in rhythm following calcium administration and transport time is prolonged consider additional therapy:
 - a) **Sodium bicarbonate 50 mEq IV/IO**
 - b) **High dose Albuterol 10 mg by nebulizer**

NOTES & PRECAUTIONS:

- A. Treatment is going to be based on patient history. Renal failure may elevate blood potassium levels (hyperkalemia) causing bradycardia, hypotension, weakness, weak pulse and shallow respirations. Other patients who are predisposed to hyperkalemia are those who have muscular dystrophy, paraplegia/quadriplegia, crush injury, or patients who have sustained serious burns > 48 hours.
- B. If available, calcium gluconate is preferred in stable patients to reduce risk of infiltration-related tissue necrosis.
- C. ECG changes that may be present with hyperkalemia include
 1. Peaked T waves.
 2. Lowered P wave amplitude or no P waves.
 3. Prolonged P-R interval (> 0.20 seconds).
 4. Second degree AV blocks.
 5. Widened QRS complex.
- D. **DO NOT** mix Sodium Bicarbonate solutions with Calcium preparations. Slowly flush remaining Calcium Chloride from the catheter prior to administering Sodium Bicarbonate.

KEY CONSIDERATIONS:

Previous medical history, medications and allergies, trauma

PEDIATRIC PATIENTS:

Calcium chloride dosing is 20 mg/kg slow IV/IO over 5 – 10 minutes. Use a proximal port. Max dose 1 g. May repeat once in 5 minutes if inadequate effect or recurrent symptoms.

Calcium gluconate dosing is 60 mg/kg slow IV/IO over 5 – 10 minutes. Max dose 2 g. May repeat once in 5 minutes if inadequate effect or recurrent symptoms.