

Subject: Scope of Practice/Procedure - ALS
Sodium Bicarbonate

Associated Policies:

- I. Class
 - A. Alkalizing agent, buffer.
- II. Indications
 - A. Prolonged cardiac arrest setting.
 - B. Known pre-existing hyperkalemia.
 - C. Known or suspected diabetic ketoacidosis.
 - D. Tricyclic antidepressant overdose.
 - E. Phenobarbital overdose.
 - F. Consider use in traumatic crush type chest injuries.
- III. Therapeutic Effects
 - A. Acts as a buffer but has several undesirable physiologic effects.
 - B. Can reduce hyperkalemia secondary to acid base shifts.
- IV. Contraindications
 - A. Absolute:
 - 1. Metabolic or respiratory alkalosis.
 - 2. History prolonged vomiting.
 - B. Relative:
 - 1. Congestive heart failure.
- V. Adverse Effects
 - A. Alkalosis.
- VI. Administration and Dosage
 - A. Adult: 1 mEq/kg IV, may repeat 0.5 mEq/kg every 10 minutes.
 - B. Pediatric: 1 mEq/kg, IV or IO, may repeat 0.5 mEq/kg, every 10 minutes.
 - C. Neonate: (< 5 kg) 4.2% 1 mEq/kg, IV or IO (Dilute 1 to 1 with IV solution) and give over 1 to 2 minutes.
- VII. Special Information
 - A. Not recommended for routine use in cardiac arrest setting. Use only after intubation and adequate CPR with continuing arrest.
 - B. Use with caution in patients who cannot tolerate a salt load.
 - C. Can cause intracerebral hemorrhage especially in the pediatric patient.
 - D. Precipitates if mixed with other medications.

Approved: 

Approved as to Form: 