

APPROVED: SIGNATURE ON FILE IN EMS OFFICE
 Executive Director
SIGNATURE ON FILE IN EMS OFFICE
 Medical Director

EFFECTIVE DATE 12/1/2006
 SUPERSEDES:
 REVISED:
 REVIEW DATE: 12/2011
 PAGE: 1 of 1

PEDIATRIC CYCLIC ANTIDEPRESSANT

- I. AUTHORITY: Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9
- II. PURPOSE: To serve as the treatment standard for EMT-Is and EMT-Ps in treating patients.
- III. PROTOCOL:

Cyclic antidepressant toxicity has a high fatality rate, even in patients who are awake and alert at the scene. The severity of an overdose can be easily underestimated.

A cyclic antidepressant overdose is characterized by a rapid deterioration in mental status, rapid onset of apnea, fever, dilated pupils, flushed skin, and dry mucous membranes. These are usually associated with respiratory depression and tachycardia. Widened QRS complexes and associated ventricular arrhythmias are generally signs of a life-threatening ingestion.

Types of cyclic drugs include: amitriptyline (elavil, eftrafon, triavil, limbitrol), amoxapine (asendin), desipramine (norpramin), doxepin (sinequan), imipramine (tofranil), maprotiline (ludiomil), nortriptyline (aventyl, pamelor), trimipramine (surmontil), and protriptyline (vivactyl).

STANDING ORDERS

ABC's	
SECURE AIRWAY	As appropriate. Confirm tube placement, if intubated, with end-tidal CO2 detector and esophageal detector device. Monitor intubated patients with continuous waveform capnography if available.
OXYGEN	NOTE: Intubation and hyperventilation is the treatment of choice.
MONITOR	Note any tachycardia. Measure and record QRS duration.
ASSESS	For any signs of severe cyclic antidepressant intoxication: GCS less than 15, HR above Broselow Tape target or Systolic BP below Broselow Tape target, QRS greater than 0.08 second, greater than 6 PVCs/minute or seizures.
IV/IO ACCESS	TKO with microdrip tubing and volume control chamber. If abnormal tachycardia or low systolic BP per Broselow Tape, give 20 ml/kg bolus.
SODIUM BICARBONATE	1 mEq/kg slow IV/IO for any of the above signs of cyclic antidepressant intoxication. May repeat 0.5 mEq/kg slow IV push every 5 minutes as needed.

CONSIDER

MIDAZOLAM	If seizing: 0.1 mg/kg IV/IO (maximum dose: 5 mg). If unable to establish IV after one attempt, give 0.2 mg/kg IM (maximum dose: 5 mg). May repeat once in 10 minutes if seizures continue. Most cyclic overdose seizures are short-lived and do not require the administration of midazolam.
-----------	--

BASE PHYSICIAN ORDERS

ACTIVATED CHARCOAL	1 gm/kg PO if patient is alert, protecting his/her airway, and has not ingested CNS depressant (maximum dose 50 gm)
EPINEPHRINE	0.01 mg/kg of 1:10,000 IV/IO. Maximum dose 0.1 mg (1.0 ml) if low systolic BP. May repeat every 1-2 minutes to Broselow Tape systolic BP target.