

**PCCN Clinical Practice Guideline: Status Epilepticus**  
**CONSENSUS DRAFT (July 11, 2006)**

Primary Author: Dr. Sonny Dhanani

**Preamble**

- ❖ Definition: on-going or recurrent clinical or sub-clinical seizure activity for more than 30 minutes
- ❖ Status Epilepticus is a life threatening condition where prolonged seizures >30 minutes can cause neuronal death and may result in serious neurological sequelae
- ❖ Applicable in children >1 month of age
- ❖ Treatment of seizure should start if no spontaneous resolution after 5 minutes or if evidence of cardio-respiratory compromise

**References**

Appleton R, et al. Drug management for acute tonic-clonic convulsions including convulsive status epilepticus in children. *Cochrane Database Asyst Rev* 2002; (4): CD001905.

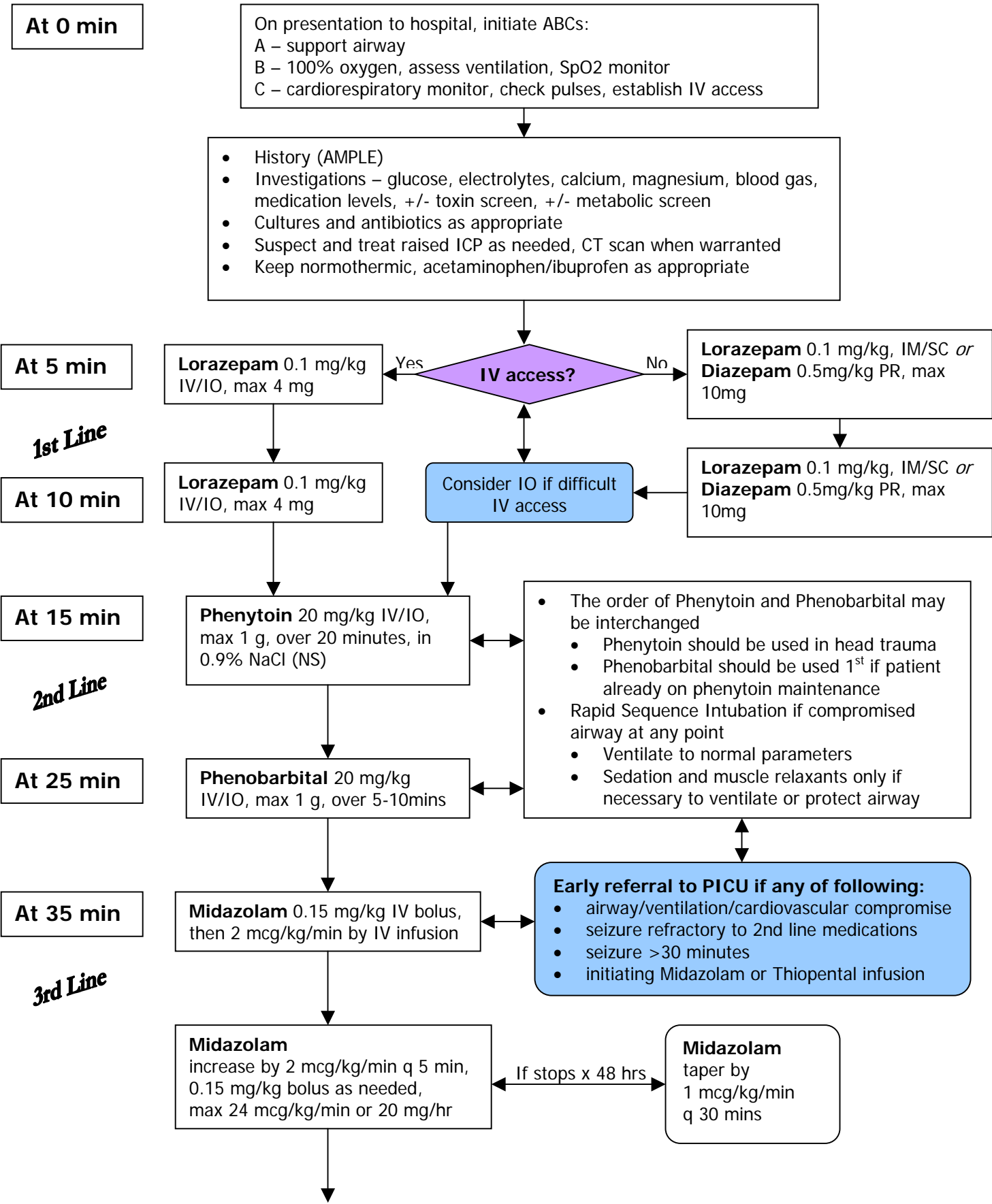
Bleck TP. Management approaches to prolonged seizures and status epilepticus. *Epilepsia* 1999; 40 (Suppl ) S59-63.

Igartua J, et al. Midazolam coma for refractory status epilepticus in children. *Crit Care Med* 1999; 27: 1982-1985.

Lowenstein DH, et al. Status epilepticus. *N Engl J Med* 1998; 338: 972.

The Status Epilepticus Working Party. The treatment of convulsive status epilepticus in children. *Arch Dis Child* 2000; 83: 415-419.

Walker MC. Status epilepticus in the intensive care unit. *J Neurol* 2003; 250(4): 401-406.



**At 90 min**

**Thiopental** 4 mg/kg IV bolus,  
then 1 mg/kg/hr IV infusion  
Discontinue Midazolam Infusion

**Thiopental**  
increase by 1 mg/kg/hr q 30 min,  
2 mg/kg bolus as needed,  
max 6 mg/kg/hr

If stops x 48 hrs

**Thiopental**  
taper by 25%  
q 12 hrs

Ongoing management:

- Appropriate monitoring – continuous BP monitoring, consider arterial and central venous lines
- Neurology consult essential with refractory cases
- Continuous EEG monitoring, therapy based on electrographic suppression of seizure activity
- Can discontinue Midazolam and Phenobarbital maintenance once Thiopental started
- Monitor for cardiovascular compromise with midazolam/thiopental infusion. Consider vasoconstrictor support.
- If difficulty weaning Thiopental, then restart Midazolam infusion during wean
- Consider Pyridoxine 100mg IV if under 18 months old
- Maintain therapeutic drug levels
- Continue baseline antiepileptics when possible