

# Neonatal Seizure Management Guideline

## Seizure Evaluation

### Clinical Seizure-Like Activity

- 1) If not in NICU, consult Neonatology, consider Telehealth
- 2) **Begin evaluation for seizure etiology**
- 3) Continuous video EEG (cVEEG) as soon as possible; aEEG can be performed concurrently
- 4) Consult Neonatal Neurology

Clearly clinical seizures that are recurrent or seizures on EEG

Unsure if seizures

**Load PHENobarbital**  
20 mg/kg IV x 1 STAT  
Check PHENobarbital level 1 hour after load (goal level 20-40 mcg/mL)  
**Follow Neonatal Seizure Treatment Guideline**

If no seizures after 24 hours of monitoring, d/c EEG/aEEG

NO seizure medication, and continue to monitor with EEG/aEEG

### Evaluation for Seizure Etiology

- 1) Check glucose, Ca++, Mg, Na
- 2) Make sure vitamin K has been given intramuscularly
- 3) Infection: consider LP, TORCH titers and cultures
- 4) Encephalopathy: if no birth history for HIE, consider LP, evaluation for inborn errors of metabolism
- 5) Family history of seizures?
- 6) Request placental pathology
- 7) Brain MRI without contrast after seizures terminated or at 24-72 hours if seizures persist
- 8) Neonatal Neurology consultation