

## BWH – Department of Pediatric Newborn Medicine

### Suggested Indications to Consult Pediatric Neurology Service from BCH

- Neonatal Encephalopathy
- Suspected seizures
- CNS infection: acute CNS infection or in utero infection affecting CNS
- Unexplained apneas out of proportion to prematurity
- Grade III IVH and/or periventricular hemorrhagic infarction
- Post-hemorrhagic ventricular dilation (PHVD) or other hydrocephalus
- Intraparenchymal cerebral or cerebellar hemorrhage
- Perinatal stroke
- Sinus venous thrombosis, medullary venous thrombosis
- CNS arteriovenous malformations
- Macrocephaly >98<sup>th</sup> percentile (If parents have HC < 90<sup>th</sup> percentile )
- Microcephaly (If HC Z score < -3 or Z score -2 to -3 and both biological parents have normal head circumference, or if parents have a neurologic disorder)
- Suspected neurometabolic disorder
- Suspected neuromuscular disorder
- Abnormal neurological examination e.g., facial nerve palsy, focal weakness, abnormal reflexes, sustained clonus, tone abnormalities (hypotonia or hypertonia)
- Abnormal Brain MRIs with evidence of any of the following: \*\*\* (see below if patient was seen as fetal neurology consult)
  - Any focal or diffuse ischemic brain injury – focal infarction or other
  - Significant intracranial hemorrhage (not parturitional subdural)
  - White matter injury e.g., Cystic periventricular leukomalacia (c-PVL), Non-Cystic PVL (punctate white matter lesions, PWML), Diffuse white matter signal abnormality or significant white matter volume loss
  - Significant ventriculomegaly\*\*\* (see below if patient was seen as fetal neurology consult)
  - Cerebellar hypoplasia or dysgenesis\*\*\* (see below if patient was seen as fetal neurology consult)
  - Brain malformation e.g., heterotopia, polymicrogyria, simplified gyri, dysgenesis or agenesis of the corpus callosum, absent/partial septal leaflets\*\*\* (see below if patient was seen as fetal neurology consult)
  - Calcifications
  - Intraventricular septations/adhesions or large cysts
  - CNS tumor

**STAT consults are needed in presence of encephalopathy or seizures. Otherwise, a routine consult should be requested at working hours as soon as any of the above diagnoses is made. Postponing consults until close to time of discharge is highly discouraged.**

\*\*\*Newborns whose parents had Fetal Neurology Consult:

1. Some fetuses are anticipated to need NICU care with diagnostic testing, such as MRI or ultrasound, and neurology and other consultation such as interventional radiology or cardiology.
2. Some newborns have fetal brain findings that are not expected to require NICU level care. These patients are often asked to obtain outpatient brain MRI at BCH and then will be scheduled to see the neurologist soon after the MRI is obtained. The neurology residents or nurse practitioner should order the outpatient brain MRI and message the outpatient neurologist and scheduler to set up outpatient care. If one of these patients is unexpectedly admitted to the NICU, e.g., born preterm, the plan might need to be adapted and the neurology consult team might need to be involved.