To ensure that at risk infants are screened at appropriate times.

Preterm infants, especially those less than 32 weeks gestation, are at risk for germinal matrix hemorrhage, intraventricular hemorrhage and ischemic white matter injuries. More mature preterm infants who are monochorionic twins, SGA, and or have experienced events such as chorioamnionitis, fetal distress, acidosis, difficult delivery, and hypotension are also at risk for the ischemic white matter injury and later developmental delay. If these ultrasound abnormalities are detected early, follow-up and early intervention can be planned appropriately. Serial ultrasounds may be necessary to detect some brain lesions such as white matter lesions which may not be evident until 4 weeks after the ischemic event.

These are general screening guidelines. Further ultrasounds are done as needed clinically.

GROUP A -- INFANTS ≥ 32 weeks to 34+6 weeks
One cranial ultrasound at 36 weeks corrected age OR pre-discharge, whichever occurs first, IF:
1. “sick” eg. fetal distress, acidosis, difficult delivery, intubated surfactant, hypotension.
2. “antenatal risk factors” eg. chorioamnionitis, PPROM > hours, monochorionic twins, SGA <5 percentile.

GROUP B – INFANTS 35 weeks to 36+6 weeks
Consider screening cranial ultrasounds for infants who are “sick” or with “antenatal risk factors” if the patient was cared for in the NICU or ICN

GROUP C – INFANTS ≥ 28 weeks to 31+6 weeks
Screening cranial ultrasounds at:
1. 2 to 5 days IF “sick” and/or “antenatal risk factors”.
2. Two weeks of age
3. 36 weeks post-menstrual age OR Pre-discharge, whichever occurs first
4. One week after any “new” sick event such as sepsis, hypotension, NEC, etc.

GROUP D – INFANTS <28 weeks
Screening cranial ultrasounds at:
1. 2 to 5 days
2. Two weeks
3. Six weeks
4. 36 weeks post-menstrual age or pre-discharge, whichever occurs first.
5. One week after any “new” sick event such as sepsis, hypotension, NEC, etc

Applicability
All Covenant Health staff

Related Documents
Adapted with permission from Stollery Children’s Practice Guidelines and Recommendations Manual: http://insite.albertahealthservices.ca/12025.asp
Cranial Ultrasound Screen – October, 2006

Two patient identification

References

Revisions
Screening Cranial Ultrasound, August 2002
Reviewed May 2015

Signing

Original Signed 12 June 15
GAIL CAMERON
SENIOR DIRECTOR, OPERATIONS
MATERNAL, NEONATAL & CHILD HEALTH PROGRAMS
COVENANT HEALTH
GREY NUNS & MISERICORDIA HOSPITALS

DATE

DR. SANTIAGO ENSENAT
MEDICAL DIRECTOR
NEONATAL PROGRAM
COVENANT HEALTH
GREY NUNS HOSPITAL

DATE

Original Signed 14 May 15
DR. Sharif Shaik
MEDICAL DIRECTOR
NEONATAL PROGRAM
COVENANT HEALTH
MISERICORDIA HOSPITAL

DATE