MINNESOTA NEONATAL PHYSICIANS P.A.
www.mnneo.org

Revised 2/2016

Single Ventricle Pathway

Initial Encounter

- Level II Ultrasound
  - Growth documentation
  - Placental size and appearance
- Genetics
  - Karyotype for 22q- deletion testing
  - If multiple anomalies are present, order limited ARRAY testing.
    - NO ARRAY for isolated CHD
- Fetal Echo: Identify atrial septal restriction
- Parents/mother given information sheet, including info about fetal intervention
- Introduce Perinatal/Neonatal Navigators
- Tour Birth Center/Care Planning

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Perinatal Care Navigators

- Consults to be scheduled:
  1) Cardiologist 2) Neonatology 3) Cardiac Surgery 4) Genetic Counselor
- Tours of NICU and CVCC
- Mother/parents to be given opportunity to speak with families of other single ventricle patients.
  - Schedule by phoning (612) 813-8800.

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Subsequent Visits

*** Patients with restricted atrial septum or intact atrial septum should be explicitly identified as they are high-risk and have a different delivery pathway.**
*** Restricted or intact atrial septum patients to be flagged in NNP Perinatal Book.**

- Start Antenatal testing at about 30-32 weeks
  - Monitor fetal growth at least Q monthly
  - Monitor amniotic fluid volumes
  - Repeat fetal ECHO 6-8 weeks after initial diagnosis
  - Re-evaluate and repeat ECHO 4-6 weeks after 2nd ECHO
    - Fax updated information to designated NICU and NICU Office. NICU fax #: MSP (612) 813-6949, St. Paul (651) 220-7085. NICU office fax #: MSP (612) 813-5910, St. Paul (651) 220-7777
- Mother/parents offered repeat consultation (same cardiologist, surgeon, neonatologist)
- Transfer prenatal care to MPP by 32 weeks
- Mother to relocate to Twin Cities by 36 weeks
- If a c-section has been scheduled, notify the Cardiology Office and NICU

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Resuscitation Room

- Delivery at 40-41weeks (Ideal)
- Notify cardiologist and ECHO technologist when NICU team leaves for DR
- Keep SpO2 70-90% (Do not over-oxygenate)
- Intubation and PPV only for SpO2 <65, respiratory distress, or shock
- Start PGE1 @ 0.025mcg/kg/min
- Place UAC and UVC

Resuscitation Room for *Restricted or Intact Atrial Septum*

- Delivery by scheduled cesarean section at 38-39 weeks (ideal) for patients with restricted or intact atrial septum.
- Parents can refuse elective c/s after informed consent of potential for poor outcomes related to possible delay in treatment is obtained.
- Notify cardiologist and ECHO technologist when NICU team leaves for DR
- Planned intubation and PPV
- Keep SpO2 70-90% (Do not over-oxygenate)
- Start PGE1 @ 0.025 mcg/kg/min
- Place UAC and UVC
- Plan for transfer to cath lab or OR from DR

NICU Care

- Avoid mechanical ventilation for patients without restricted or intact atrial septum, if possible
- SpO2 70-90%
- PaO2 >30mmHg
- ABG at least 4x/day
- Keep pH > 7.35
- Lactate at least 3x/day
- Continue PGE1 infusion
- Peripheral arterial line if no UAC
- PICC line if no UVC
- NPO until surgery
- TPN
- Daily Hct/Hgb
- Keep Hct > 43%/Hgb > 14.5
- TRANSFER TO CVCC by 3 PM day preceding surgery
- CVCC doctor to call Neonatologist for handoff