Appendix E

Management of Screened Neonates Who Do Not Qualify for Cooling

Not all neonates who meet screening criteria will require or qualify for cooling therapy. However, they may still have significant risks factors that warrant special consideration. These risks may range from mild acidosis to multi-organ dysfunction. In addition, initial signs of neonatal encephalopathy may be subtle and neurologic symptoms may evolve over time. In some cases, passive cooling may already have been initiated. Patients without clinical evidence of perinatal brain injury should be rewarmed only after a thorough evaluation and consultation (phone/video) with a neonatologist at a regional cooling center. Levels of concern and need for observation or other interventions/therapies may be appropriate depending upon the clinical presentation.

1. **Maintain communication with regional cooling center**
    a. Discuss management and plan if significant clinical changes develop.

2. **If heat sources were removed/cooling was initiated, slowly begin rewarming**
    a. Document time of lowest temperature and source (e.g., axillary vs. rectal).
    b. Rewarm with target rate of approximately **0.5 °C /hour.** **Avoid overheating.**

3. **Monitor temperature periodically**
    a. **Target rectal/core temp = 36.5°C** (97.7°F) or **axillary/skin temp = 36.0°C** (96.8°F).
    b. Check temperature periodically (e.g., hourly for first 6 hours).

4. **Check glucose and electrolyte levels.**
    a. Fluctuations may be seen - check ***Glucose*** levels. **Avoid hypoglycemia**
    b. Consider maintaining higher normal target glucose levels (e.g., **>50mg/dl**)
    c. Consider checking ***Ca, K, Mg*** levels. Maintain within normal ranges.

5. **Obtain follow-up blood gases to confirm acidosis resolving**
    a. If acidosis persists, work-up other causes or discuss with neonatologist.

6. **Repeat neurologic examination** *(see appendix B)*
    a. Document initial neurologic exam.
    b. Repeat neurologic exam (e.g., after 1-3 hours) if clinically indicated.
    c. Document neurologic exam at time of discharge.

7. **If initial acidosis severe, consider delaying enteral feeds (NPO) until improved**
    a. Depends upon severity of clinical presentation. Discuss with neonatologist.
    b. May require initiation of maintenance IVF fluids.

8. **Avoid iatrogenic hyperventilation and hyperoxygenation**
    a. Normal **pCO2** levels **(35-45 mmHg) –** compensatory hyperventilation may be seen.
    b. Normal **PaO2** levels **(60-100mmHg)** and **oxygen saturations (<94-98%).**

9. **Consider ordering baseline labs:**
    a. CBC, platelets and Blood cultures.
    b. Start antibiotics if appropriate.