**Massage Protocol**

**Why Do Massage?**

* Studies have shown that positive touch accounts for <5% of touch in NICU
* Massage is one type of touch that offers positive touch and parent-infant bonding
* Studies have shown that infant massage:
  + 1. Decreases pain response
    2. Improves digestion
    3. Improves weight gain
    4. Improves neurological development
    5. Decreases stress behaviors and secretion of stress hormones
    6. Improves muscle tone
    7. Increases alert periods
    8. Improves sleep-wake cycles
    9. Enhances feeding outcomes
    10. Enhances infant-parent bonding
    11. Improves Immune function
    12. Decreases length of stay
  + Additional aspects of massage well researched and supported include:
    1. Parent provided massage has shown improved benefits compared to healthcare providers
    2. Moderate pressure is proven to be more beneficial compared to light pressure strokes
    3. Using oil as a lubricant with all massage
  + Time and frequency are still not fully understood – more research is required in these areas

**When Infant is Ready for Massage:**

* 32 weeks or older
* Ability to be approximately 10 minutes in an alert behavioral state
* Demonstrates more tolerance to handling
* Can eat (breastfeed or bottle) and look around at the same time
* Medically stable: intact skin; no sepsis (infections); normal abdomen; no stimulated events (apnea, bradycardia in last 24 hours)

**How to Evaluate Infant’s Readiness:**

* Temperature 97.7 to 99.5 degrees Fahrenheit
* Recent status – last 8 hours of behavior without significant changes
* Establish warm area for massage
* Warmed oil or lotion

**Massage Procedure:**

* Assess infant for readiness – quiet alert behavioral state; no sleeping infants
* Gather oil, turn on warming light – use warmed, additive free oil (no dye, no perfume, no preservatives, no baby or mineral oil or petrolatum products); options for use include sesame, safflower, grape seed, apricot kernel
* Assess infant’s temperature
* Dim overhead lighting
* Massage in a variety of positions – in bassinette, radiant warmer, or when securely held on parent’s lap
* Massage infant’s legs, abdomen, arms, scalp, back, chest (avoid the lead monitors on chest) as infant tolerates; avoid infant’s face
* Use firm, slow, smooth strokes (avoid fluttery or ticklish strokes)
* Flow gently from one area to another – use a smooth gentle rhythm, massage each area for 1 minute (or as infant tolerates), use 12-16 strokes per minute
* Use your hands to contain your infant if becoming disorganized (flailing/flinging arms, stiffening legs, fussing/crying)
* Attempt to massage for 15 minutes
* Monitor infant before, during and after massage for any signs of stress or overstimulation
* Stop massage if infant is distressed

Information Sources: References from Creative Therapy Consultants Massage Literature Review for 2020 Neonatal Re-certification available upon request; Neonatal Nursing Education Brief: Infant Massage in the NICU by Seattle Children’s, July 2019-July 2021.