

PROTOCOL FOR: Developmental Assessment and Care of the Infant

- POLICY:**
1. All infants will have ongoing assessments/evaluations of their responses to environmental demands and external stimuli.
 2. Assessments will be done prior to, during and after any intervention. Assessment will include baseline behavior, each infant's unique response to stimuli/caregiving, and ability to organize their physiologic and behavioral (motoric, state, self-regulatory and interactive) responses.
 3. Supportive measures to minimize discomfort and distress will be implemented before, during and after painful procedures. These include containment, swaddling, use of pacifier, "time out" and utilizing a second person as needed. The second person may be a parent or another nursery staff member.

DESIRED PATIENT

- OUTCOMES:**
1. The infant will experience limited autonomic responses when handled during care giving, technical procedures, during social interactions or when confronted with environmental demands.
 2. The infant will tolerate feedings exhibited by a decrease in residuals and regurgitation episodes.
 3. The infant will experience smooth transition between sleep and awake states.
 4. The infant will successfully utilize self regulatory behaviors to maintain sensory integration when confronted with environmental demands.
 5. The infant will console and/or reorganize appropriately with the use of individualized external supports.

**CLINICAL
ASSESSMENT AND**

- CARE:**
1. Assess infant for any alterations in physiologic/autonomic functioning related to stimuli including:
 - a. significant fluctuations in heart rate
 - b. significant fluctuations in respiratory rate
 - c. color changes or mottling
 - d. changes in oxygen saturations
 - e. inability to tolerate feedings as evidenced by residuals with gavage feeds or increase in regurgitation
 - f. presence of "time out" signals such as gagging, gasping, hiccoughing, sneezing, yawning or sighing
 2. Assess infant for alterations in motor responses including:
 - a. frantic or disorganized body movements; jitteriness; tremors or startles

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- b. changes in muscle tone to flaccid, limp or hypertonic
- c. hyperextension of the legs, arms, trunk
- d. presence of "time out" signals including:
 - 1) finger splays
 - 2) facial grimacing
 - 3) tongue extension
 - 4) placement of the infant's hand on face
 - 5) high guard arm positioning (salute)
 - 6) hand fisting
- 3. Assess infant for alterations in state functioning including:
 - a. limited ability to regulate state such as:
 - 1) inability of the infant to smoothly change behavior from state of arousal to a non-arousal state
 - 2) sudden, abrupt changes in state
 - 3) prolonged alert state
 - 4) difficulty achieving and/or maintaining quiet alert state from sleep
 - b. inability to habituate (maintain sleep state with repetitive stimuli)
 - c. inability to console even with intervention
 - d. staring, panicked or worried alertness
- 4. Assess infant's ability to utilize self-regulatory/consoling measures such as:
 - a. finger and fist sucking
 - b. hand to mouth maneuvers
 - c. leg bracing
 - d. hand clasping
 - e. holding/grasping objects
 - f. rooting
 - g. non-nutritive sucking

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5. Assess infant's ability to interact with their environment including:
 - a. ability to focus briefly on person or object
 - b. ability to attend/turn to sound
 - c. ability to follow picture/face
6. Assess for oral feeding readiness cues and response to oral feedings once introduced (see flowsheet).
7. Interventions will be introduced one at a time in order to assess and evaluate each infant's unique response.
8. Plan and carry out care activities in a manner which is best tolerated by the infant. Care may be clustered to allow long periods of rest between interventions or spread out to allow for recovery between each intervention.
9. Gently arouse the infant by speaking softly or gently touching prior to implementing procedures to avoid sudden disruptions in sleep or movement.
10. Maintain an environment conducive to developmental growth when possible including decreased noise, low lighting, covering isolette.
 - a. If infant is in open warmer or crib, consider use of noise reduction ear muffs. Evaluate skin integrity prior to use.
11. Provide gentle containment of the infant's extremities when turning or moving the infant to maintain flexed posture, but also provide opportunities to stretch as desired.
12. Position the infant utilizing boundaries to promote flexion, motor organization and self regulation.
13. Offer opportunities for non-nutritive sucking as tolerated with tube feedings or for comfort.
14. Collaborate with developmental specialist and family in assessing and creating individualized approach to infant caregiving activities.

**FACILITATING
PARENT
INTERACTION/
INVOLVEMENT:**

1. Assist parents in interpreting their infant's responses and support them in interacting with their infant appropriately. The brochure "Understanding My Signals" is available for parent/family education.
2. Incorporate parents in caregiving throughout the infant's hospital stay.
3. Encourage parents to assist in the development of the individualized care plan.

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4. Consider skin-to-skin contact between infant and his/her parents when stable (see Kangaroo Care protocol).
5. Encourage families to individualize/personalize bed space.

REPORTABLE

- CONDITIONS:**
1. Infants who are unable to be consoled with supportive comfort measures.
 2. Persistent stress behaviors and extreme physiologic and behavioral disorganization.

APPROVAL: Nursing Standards Committee

EFFECTIVE DATE: 10/93

REVISION DATES: 4/97, 10/00, 12/01, 5/08