HACKETTSTOWN REGIONAL MEDICAL CENTER

Originator: Beth Van meter, RNC
Revised by: D. Vander Wiele RN, MSN, MPA, CNAA
P. Swanson, RN, MSN

NEWBORN
(Scope)

TITLE: NEWBORN ADMISSION ASSESSMENT AND TRANSITIONAL CARE PROCEDURE

PURPOSE: To define nursing responsibilities and care of the newborn in the newborn admission process and throughout the newborn's transitional stabilization period.

SUPPORTIVE DATA:
1. See 8620.026b "Care of the Newborn Family Unit in the Transitional Time Period.
2. The newborns admission assessment starts at birth and is part of ongoing assessment and care process that continues throughout the hospital stay into follow up care post discharge home.
3. A comprehensive physical assessment of all newborns admitted to the Childbirth Family Center will include an evaluation of all systems using inspection, auscultation and palpation and will be completed by the perinatal RN within two hours of birth.
4. During the transitional period following birth, care for the newborn is integrated with care for the mother, i.e., one perinatal RN may simultaneously be caring for both.
5. Prior to birth, the perinatal RN is responsible for an assessment of risk factors in order to plan care appropriately for newborns.
6. The admission assessment and admission transitional care procedures provide educational opportunities for the newborn's parents and family members present.

EQUIPMENT LIST:
1. Pre-warmed radiant warmer and baby blanket.
2. Electronic thermometer, both rectal and oral/axillary probes, prober covers and lubricant.
3. Neonatal stethoscope.
4. Disposable measuring tape.
5. Electronic scale and scale paper.
6. Newborn admission medications per admission orders.
7. Initial admission bath items: basin, newborn bath soap, disposable washcloths, warm water, comb, blankets and clothing.

CONTENT PROCEDURE

I. Initial Assessment: Complete between 15-30 minutes of age. This may take place during maternal-newborn bonding while newborn is on mother's abdomen.
   A. Respiratory system assessment to be completed includes.
      1. Respiratory rate counted for one full minute.
         a. All newborns have a periodic breathing pattern due to respiratory and CNS immaturity.
         b. Brief pauses in breathing are normal.
         c. Breathing pauses greater than 20 seconds in duration, especially if associated with color changes and/or bradycardia, are periods of apnea and will be reported to the newborn's primary health care provider.
         d. A respiratory rate greater than or equal to 60 breaths per minute is tachypnea. Persistent tachypnea will be reported to the newborn's primary health care provider.

2. Observe newborn's chest movement as the rate is counted.
   a. Assessment includes noting any effort the newborn uses in breathing, such as, grunting, retractions, nasal flaring.
   b. Note symmetry of chest movement.
   c. Abnormal findings will be reported to the newborn's primary health care provider.
3. Complete the respiratory assessment by auscultating the newborn's chest with the newborn stethoscope.
   a. The newborn should be in a quiet state.
   b. Initially, moist breath sounds may be present as fluid is cleared from the lungs after birth.
   c. Auscultate breath sounds throughout the chest in an orderly fashion from top to bottom, comparing side to side for equality and clarity.

B. Assessment of cardiovascular status:
1. Assess color of skin and mucous membranes.
   a. Acrocyanosis, bluish discoloration of the hands and feet is a normal finding and may last up to ten days of life.
      (1) reassure parents, teach normal find
   b. Central cyanosis, is not a normal finding.
   c. Skin color reflects general newborn health and is best observed when the newborn is quiet.
2. Auscultate heart rate and rhythm, including presence of normal heart sounds, using a neonatal stethoscope for one full minute.
   a. Determine heart rate by counting for one full minute.
      (1) Newborn normal apical rate is 120 – 160 beats per minute.
      (2) Heart rate may decrease to 80 – 110 beats per minute if newborn is in deep sleep.
   b. Auscultate beginning at the point of maximal impulse, locate lateral to the mid clavicular line, at the third or fourth inter costal space.
      (1) A shift in the PMI could indicate a pneumothorax, especially in the presence of respiratory effort and tachypnea.
      (2) A shift could also indicate a diaphragmatic hernia.

C. Assess thermo regulation status:
1. Newborn's initial temperature assessment and any temperatures assessed while the newborn is under a radiant warmer will be done via rectal method.
   a. Accurate reading of newborn's core temperature
   b. Assess patency of the anus.
   c. Axillary method does not reflect core temperature under the radiant warmer.

2. Maintain thermoneutral environment until newborn maintains a core temperature of 37°C.
   a. This may be achieved either through skin to skin contact on mother or by placing the newborn under a radiant warmer with skin probe in place.
   b. If no skin to skin contact with mother fails to maintain or increase newborn's core temperature to 37°C, then the newborn will be placed under a radiant warmer with skin probe in place to monitor skin temperature.
      (1) Rectal temperatures will be obtained at regular intervals so that newborn will be removed from radiant warmer as soon as core temperature reaches 37°C.
      (2) This ideally will take place in mother's room where she can observe and bond with newborn.

II. Complete the newborn's physical assessment: All systems must be assessed, but not necessarily in the order as follows. Each perinatal RN will develop an organizational style that is most efficient for work/thought processes.

A. Skin/Integumentary System: This is assessed visually noting color, texture, turnover, birth marks, rashes, meconium staining and any trauma, bruising, petechiae, puncture wounds, forceps marks, etc.

B. The newborn's general appearance is evaluated as follows:
   1. Head and face is evaluated for symmetry, presence of molding, caput and bruising.
      a. Evaluate eyes for position, presence of drainage or subconjunctival hemorrhage. Edematous eyelids are normal.
      b. Evaluate ears for position, presence of skin tags, or sinus on or around the ears.
      c. Evaluate the mouth, palate and mucous membranes for color and integrity, i.e., presence of cleft.

C. Neurological System is evaluated by observation of the newborn reflexes, cry and movement. Fontanels are assessed by palpation.
   1. Fontanels anterior and posterior: note if open, closed, full (bulging), depressed, overridden by molding.
   2. Note movement of extremities for symmetry, tremors posturing.
   3. Cry is assessed by pitch: note, whether cry is lusty/normal, weak or if unable to assess.
   4. Note presence of the following reflexes: moro, rooting and sucking.

D. Musculo Skeletal System
   1. Assess extremities for symmetry, range of motion and presence of extra or missing digits. Also assess for presence of simian creases.
   2. Clavicles are palpated for crepitus, which may indicate presence of a fracture.
   3. The newborn's back is inspected for complete closure of the vertebral column; presence of dimple or tuft of hair at base and for masses.

E. Genitourinary System is evaluated for the presence of normal male or female genitalia.
   1. Male genitalia is assessed for location of the urethral meatus. The scrotum is palpated for presence of testes. Edema of scrotum is normal; extreme edema may indicate presence of hydrocele.
   2. Function of the urinary system is documented with first void.

F. Gastrointestinal System is evaluated by auscultation, observation and palpation.
   1. Observe for shape and symmetry of abdomen.
   2. Auscultate for presence of bowel sounds.
   3. Palpate for consistency (soft vs. distended).
   4. As noted previously, rectal temperature allows assessment of anal patency.

III. Additional assessment opportunities are provided through completion of all newborn admission procedures as noted below:
A. Newborn-maternal identification procedure.
B. Admission bath procedure (Do not bathe until core temperature is maintained at 37 (C).
C. Admission measurements: weight, length, and circumference of head and chest.
D. Administration of admission medications.
E. Note newborns response to adverse stimuli, and stressors inherent in completion of the above procedures.

IV. Documentation
A. Cerner Initial Assessment Newborn and Ongoing Assessment Newborn
B. Notify newborn’s primary health care provider as indicated.
C. Parent teaching – see below. (May be documented in Mother’s or Infant’s assessment forms under patient teaching.

V. Teaching
A. Discuss and instruct newborn’s family and parents regarding normal newborn characteristics and behaviors.
B. Instruct family and parents present the procedures to be completed and rationale/purpose for them.
C. Document above as detained in IV. # C.

BIBLIOGRAPHY:

AWHONN’S Perinatal Nursing: Ed Simpson, R.R. and Creehan, P. A.: Part V: The Newborn: Chapters 14 and 15, pages 494 – 541 Lippincott-Raven, NY 2001