

Normal Newborn Infant

- Know APGAR scoring
- Identify infant immediately
- Provide warmth
- Protect from infection
- Complete a physical

Airway

- Patent airway – primary focus after delivery
- Failure to breathe within 1 min. after birth indicator for resuscitation
- Signs of respiratory distress are indicated by the rate and character of respirations, cyanosis, sternal retractions (**Report immediately**)

- Factors that contribute to respiratory distress.
- Maternal medical complications such as diabetes, hypertension and by meconium stained amniotic fluid.
- Review use of a bulb syringe pg 63.

Circulatory

- When the umbilical cord is cut it not only establishes pulmonary circulation but systemic circulation. Until now the fetus' blood bypassed the lungs.
- The umbilical cord should be examined for 2 arteries and 1 vein. A single artery is often indicative of a genitourinary anomaly.
- Cord care is cleaning daily with alcohol.

Eye Care

- Mandatory prophylactic against gonococcal-ophthalmia neonatorum which can cause blindness
- Drugs used are 1% silver nitrate
- **erythromycin 0.5%** or Garamycin is used most often because it is also effective against chlamydia

- The Vitamin K (aquamephyton) is given to promote blood clotting and prevent hemorrhage. The Vitamin K deficiency is because the neonate's intestinal flora is sterile and therefore unable to synthesize vitamin K.
- PKU.

Physical Development

- Norms: weight 5 ½ to 10 lbs. With 7.5 as the average
- Length 18" to 23" with 19" to 21" as the average
- Head circumference 12" to 14"
- Chest circumference 12" to 13"

- Vital signs: counted for 1 full minute
- Respirations 30 to 60 per min breathing is diaphragmatic
- Pulse 120 to 140
- BP 65/41

Head & Skull

- **Fontanelles: small spaces at juncture of head bones**
- As the head emerges from the birth canal the head conforms called **molding**. The head may be elongated for a few days. Another condition that can alter the shape of the newborn's head is **caput succedaneum**.

- Occasionally a hematoma protrudes from beneath the scalp. The **cephalohematoma** takes 2- 4 weeks to disappear.
- Sutures are the narrow bands of connective tissue.
- The anterior fontanelle<> closes @ 12-18 months. The posterior fontanelle ^ closes @ 1 ½ -3 months.

Nervous System

- A full term baby is born with reflexes we take for granted that is normal such as.
- Blinking, sneezing, gagging, sucking and grasping.

A sudden jarring causes extension and adduction of the extremities and spreading of the fingers with the fingers curved like a "C" is called the Moro reflex.
The tonic neck reflex resembles a fencer.

Sensory System

- Vision: The neonate can see shapes and patterns. They often cross their eyes because of poor eye muscle coordination and the color becomes fixed between the 3rd and 6th month.
- Hearing: is tested in the nursery with follow up as deemed necessary.

- Sleep: an newborn sleeps approx. 15-20 hours.
- Should be placed on side or back to sleep to prevent SIDS.
- Circulation of the fetus differs from the newborn in the most of the blood by-passes the lungs.
- Some of the blood goes from Rt. to Lt. atrium through an opening called the foramen ovale.

- Some goes from the pulmonary artery to the thoracic aorta by way of the ductus arteriosus. These openings should close after birth when the baby takes his first breath of oxygen.
- If they do not close soon after birth this is called an organic murmur.

- The majority of these are functional they tend to come and go and tend not to be serious, however should be reported to the physician.
- The pulse rate may increase with crying but if it goes above 160 or below 120 is should be reported.

- Another sign of system immaturity is **ACROCYANOSIS** or peripheral blueness of the hands and feet. Because heat perception is poor the nurse must be careful when applying any form of external heat.(If this appears it is considered normal just add warmth of a blanket.
- The initial temperature is taken rectally to determine if the rectum is patent.

Muscle Control

- Is developed from Head to Foot and from the Center to the Periphery which is CEPHLACAUDAL and PROXIMODISTAL.
- Renal blood flow is only about 1/3 that of the adult.
- The infant should void within the first 24-48 hours.

Circumcision

- Male genitalia are underdeveloped at birth. If the testes do not descend it is called cryptorchidism.
 - The penis is covered by foreskin or prepuce. This must be gently retracted at bath time daily to remove the smegma then returned all the way to normal position.
- Is the surgical removal of the foreskin. There is a lot of controversy over this procedure.
 - Religious verses cleanliness vs. reduced infection.
 - If he has hypo-spadias he should not be circumcised.

Skin

- Usually covered with fine hair called lanugo. Vernix caseosa is a cheese like substance that covers the skin. Milia white pinpoint pimples that disappear. Mongolian spots bluish spots from Mediterranean, African, Asian or Native American descent. Vascular nevus strawberry marks may arise up to 6 months and disappear by age 10

GI System

- Breast milk is most desirable complete food source for 1st 6 months. Iron Fortified formula is an acceptable alternative. Let the baby nurse every 2-3hours for 5 minutes on each side. Engorged breast away from nose.
- Solids are not recommended before 4-6 months largely because of the protrusion or sucking reflex and the immaturity of the GI tract. This reflex leaves @ 4months.

- Infant Rice cereal is usually the infants initial solid food.
- Finger foods are introduced at 8-9 months.
- Honey should be discouraged because it may be a source of infant botulism.
- Whole milk should NOT be given the first year!!!

- Fluoride supplements are needed for exclusively breast-fed infants and those infants age 2 weeks and older in area's where the local water is inadequately fluorinated.

- Meconium the first stool is dark, green and sticky. It lasts about 3 days.
- Stools from breast fed babies are yellow soft and pasty with very little smell.
- Stool from bottle fed babies are more solid and brown and if they are receiving iron it will be darker.

- Breast milk is more digestible, have greater immunity.
- Is contraindicated in HIV positive moms.
- Formula comes in ready to use cans, powder, concentrate and disposable bottles.
- Babies can tolerate cold formula.
- NEVER PROP BOTTLES hold infant for security and comfort.

- Feeding is not only for the nutrition.
- It teaches trust thru repeated touching, cuddling and by meeting the infant's need immediately.

Prevent Infection

- By proper hand-washing
- S/S of infection ^temp ^100, refusal to eat, rash, diarrhea, discharge from nose or eyes vomiting lethargy

Bonding

- Cuddle
- Talking
- Eye contact

Spiritual Care

- In an emergency the nurse may need to baptize the infant.

Discharge Teaching

- Feeding
- Bathing
- Diaper change
- Temperature
- Safety
- Follow-up
- Prevention of cradle cap
- Growth and development

Milestones

- Moro reflex at birth
- Stranger anxiety begin @ 6 months is strong @ 8 months
- Social smile @ 2 months
- Rolls from front to back @ 5 months
- Develops pincer grasp @ 9 months

Play

- Play is the work of children:
- From age 1 month to 1 year play is basically solitary (non-interactive)
- Age appropriate toys:
- 1-3 months: mobile, mirror, musicbox, stuffed animal, rattle
- 4-6 months: squeeze toys, busy box play gym.

- 7-9 months: cloth-textured toys, splashing bath toys, large blocks and balls
- 10-12 months: durable books with large pictures, nesting cups, push-pull toys