

NORMAL NEWBORN ASSESSMENT & HOW IT AFFECTS THE BREASTFEEDING PROCESS

Kittie Frantz, RN, CPNP-PC

- I. Measurements and Overall Assessment
 - A. Head circumference, length & weight
 - B. Weight is more comfortable for baby on his tummy
 - C. Flexion control (baby curled up and bent)
 - D. Use measurements to encourage parents – a positive twist
 - E. Overall assessment – how does he handle his body in space?
 - F. Prone (on baby's tummy) his arms brace the table to move his head
 - G. He will move his head to the side to protect his airway
 - 1. Head righting & head lifting reflex
 - 2. Swaddled prone is dangerous as no arms free to protect the airway using this reflex
 - 3. Can he push down on the soft surface enough?
 - 4. Will the soft bedding cover his nose?
 - 5. Babies more comfortable on their tummy
 - 6. SIDS risk – too comfortable and too deeply asleep?
 - 7. He can be on his tummy if awake & should be
 - 8. If he doesn't move his head to the side?
 - a. Low muscle tone
 - b. Sick baby?

H. Left side more comfortable due to reflux

1. All newborns have reflux but not all are bothered by reflux
2. Baby's laid on thier right side, the milk seeps up the esophagus

I. Calm vs. Excitable

1. Normal babies can self calm bringing their hands into the center of their body.
2. Babies in drug withdrawal can't self-calm
3. Some non drug withdrawal babies can have trouble self-calming

J. Muscle tone

1. Too much tone – hypertonic
2. Less tone – hypotonic
3. How does the baby feel when you pick him up?

K. Head

1. Molding –overriding sutures (head bones slide under each other)
 - a. Round with no molding in cesarean delivery
 - b. Plagiocephaly (misshapen head)
 - c. Womb position, premie soft bones and on his side a lot, or the bones are fused incorrectly
 - d. Flat Occiput (back of head flattened) needs pressure on the opposite side.
 - e. Bone fuse totally by 18 months. If not smoothed by 6 months, he is put into a helmet to do this.

- f. Plagiocephaly often comes with torticollis (tight neck muscle)
 - g. Uncorrected torticollis in adult can cause back problems
 - h. What does this mean for breastfeeding? Refuse on breast or sore nipples on only one side.
 - i. www.orthoseek.com for torticollis exercises for parents or do tummy time whenever awake
 - j. Head range of motion not good to diagnose this as newborns have mom's estrogen on board and the head moves too easily.
2. Fontanel (soft spots on head) front, back and in between
- a. Not closing too fast?
 - b. Not getting wider?
3. Cephalohematoma (bulge on head from bleeding under skin) that does not cross the separate bones (the suture line)
- a. Bled under the bulge
 - b. Might be a cause of jaundice as his body gets rid of the blood
 - c. Needs to feed him a lot to flush the bilirubin
4. Caput Succedaneum is fluid under the skin
- a. Crosses the suture line
 - b. Gone by day two
5. Hair is telia (pre-hair) in newborn & will disintegrate

- a. Will grow in maybe in a different color
- b. Some cultures shave the head believing it will grow in stronger with more hair.

6. Face

- a. Suckle pads in cheeks (brown fat in cheeks) Premies don't have this and need help in suckling
- b. Forceps bruise makes the masseter muscle hurt so he may not want to open his mouth to breastfeed.
- c. Vacuum extraction makes his neck possibly hurt? Won't feed well if head moved a lot in positioning at the breast.
- d. Jaw shifts over in Plagiocephaly
- e. Normal receding chin (chin at rest in inward position) to accommodate the rotary jaw action of the suckle that changes by 6 months of age
- f. Pierre Robin syndrome: small jaw that can't move forward plus a cleft palate. See if you can pull the jaw forward to match the lips.

7. Eyes

- a. Red light reflex (light shines through eyeball & shows red)
Eyeball tumor, cataracts, or glaucoma will not show red
- b. Placement – Genetic disorders – Mouth corner draw line to pupil

- c. How tears are made and how to determine if eye infection
vs. Dacryostenosis (blocked tear duct)
 - i. Breast milk may wash the eye and kill any bacteria.
 - ii. Massaging the duct
- d. Blind? How to affect breastfeeding?
- e. Baby talks with his eyes. Is he in pain? Happy?
 - i. Eyes squinted
 - ii. Tight around mouth
 - iii. First communication

8. Ears

- a. Shape clue to kidney development? Genetic problem?
- b. Patent (open)
- c. Position – attachment lines up with eye corner or is a low set ear?
- d. Premie's ears are flat and not curled at the edge
- e. Hearing? How will this affect breastfeeding?

9. Nose

- a. Shape
- b. Patent (open) Close off one side to see if he flinches
- c. Newborns are nose breathers
- d. The job of mucous in the nose
- e. Baby may clear it on his own snorting before suction is needed. Sneezing is how he clears his nose.

- f. Saline in the nose to help him sneeze it out. Breast milk is the ideal for this.

10. Mouth

- a. Size difference – big mouth, small mouth
- b. Sucking pad center upper lip peels normally
- c. Natal teeth (tooth there at birth) – tongue over the teeth in breastfeeding so it won't hurt her
- d. Helping the mom worried about later teeth biting or the baby who bites: put him down, pull him close so he lets go
- e. Ranula (salivary gland cyst full of fluid)
- f. Palate (roof of mouth)
 - i. Shape – Cave shape means tongue had equal pressure on the palate
 - ii. Narrow palate can come from side lying for baby
 - iii. Vaulted (high) palate may mean a change in the CNS that changed the movement of the tongue.
 - iv. Clefts
 - a) Submucous cleft
 - b) St. Petersburg flat palate
 - c) narrow palate
 - d) cleft palate
- g. Tongue

- i. Does the epidural affect the CNS & the tongue?
(Brazelton evaluation) Accommodation vs shutting
down to noxious stimuli.
- ii. Thin, sleek, cupped, & steady
- iii. ? Thick, ? Quivers Low muscle tone?
- iv. Ankyloglossia (tongue tied) Normal insertion is
30% of under the tongue. More than that may
restrict the tongue movement.
 - a) Breastfeeding effected
 - b) Do finger sweep under the tongue to see if
there is an obstruction
 - c) Pushes out the later side teeth
 - d) 6% effect speech later
 - e) [www,tongue-tied.net](http://www.tongue-tied.net)
 - f) Reynauds phenomenon could be caused by
this trauma and blood to go deep in the
breast to nourish the nerve. (vasospasm)
 - g) Frenulum can stretch but to what amount of
pain for the mother if advised to wait for the
procedure.
- v. Mobius Syndrome (missing facial nerve & can't
smile) effects poor tongue movement.

- vi. Hemiplegia (one side of body weaker than other)
can affect one side of the tongue

11. Pharynx

- a. Gag reflex important for safety as he can control the flow
- b. Lesions (sores from suctioning)

L. Neck

- 1. Web neck – Turners Syndrome
- 2. Infection in folds of the neck
- 3. Torticollis (head tilts to one side due to tight muscle on that side)
- 4. Neck lack of fat on side with torticollis

M. Chest

- 1. Shape – Poland’s Syndrome (no chest muscles & withered left hand)
- 2. Nipple Line – draw a line up from the nipple and it should intersect with the center of the collar bone - clavicle)
- 3. Clavicle fractures are considered a normal birth injury
 - a. Crunches if played with the fingers at birth
 - b. Round marble sized callous at 2 weeks
 - c. Hurts baby to lay on it. Breast preference
- 4. Neonatal gynecomastia (breasts develop and make milk due to mom’s estrogen on board)
- 5. Neonatal breast abscess (infection in the baby’s breast)

6. Retractions (skin sinks in with breathing) indicates trouble breathing. Also may see nasal flaring. Call MD
7. Clear breath sounds and rate. Babies preserve their airway first
8. Heart sounds and rate. Significant heart defect may hamper feeds.
9. Infection in axilla (armpit) Needs cleaning to prevent it.

N. Abdomen (belly)

1. Shape is full and rounded
2. Organ size (liver, spleen, kidneys)
3. Stomach the size of a ping pong ball by day three.
4. Bowel sounds (digestive sounds) are a good thing. Baby doesn't feel this pressure for the 1st 2 weeks. After that he may stiffen his legs to prevent passing gas....pull his legs up & out !
5. Umbilicus (belly button) should be dry & non smelly
6. Omphalitis is a cord infection and is a pediatric emergency
7. Femoral pulses (pulses in groin) rules out aorta coarctation
8. Spine (back) all there
 - a. Hair over sacrum (lower back)
 - b. Pilonidal dimple closed (indentation in skin above anus)
 - c. In tact (closed)?

O. Genitalia (male/female sex organs)

1. Normal appearance
2. Girls have white matter in the folds called smegma. Do not remove
Wipe always downward to protect the urethra from bacteria

3. Premature girls have a prominent clitoris
4. Girls will have a white stringy vaginal packing that comes out and this is normal and is part of the unpacking the “backpack”
5. Girls may have a first period in the first week and it is a bloody discharge – due to estrogen from the mother
6. Too much bleeding from all openings in the baby could be hemorrhagic disease of the newborn & is a pediatric emergency. Vitamin K helps baby to clot...from mom’s skin &/or a vit K shot
7. Boys have this smegma under the foreskin as well
8. Plump boys pubic fat may hide the penis
9. Penis size is important for genetics evaluation
10. Both boy’s testicles should be down in the scrotum
11. Hernias (bulge in groin area) Usually repaired. Pain will cause baby not to breastfeed
12. Anus patent/imperforate (open or closed?) As stool builds up, he will not continue to feed.
13. Hirshbrungs is a dilated colon due to poor muscles there and stool will build up and the abdomen will get large.

P. Extremities (arms & legs)

1. Normal appearance – proportioned equally
2. Simian creases on hand palms & Down Syndrome
3. Hands are babies best friends and near the face and mouth normally. Swaddling imprisons the hands. File the nails rather than

clippers or gloves. Nails raking on the breast causes a milk let-down.

4. Look for hair wrapped around finger or toe causes pain and baby may not feed. Another why is he crying??
5. Fingers mid-thigh – Dwarfism if shorter than that
6. Legs fold up to womb position
7. Garment thread wrapped around baby's toes
8. Hips abduct (pushed to the table) 75-90 degrees evenly
9. Congenital hip displacement, Pavlik harness & breastfeeding

Q. Neurological - Breastfeeding is a cascade of reflexes!

1. Moro reflex (startle & arms fly out and hands cup)
2. ATNR (asymmetrical tonic neck) reflex or “fencing sign”
3. Head lag and head righting as baby is pulled to sit
4. Muscle tone is a CNS function & can affect breastfeeding
5. Perez sign (raises buttocks and pees)
6. Gallant sign (side stimulus causes the buttock to swing over toward the stimulus)
7. Landau sign (hold by trunk over your hand & his body makes square angles)
8. Doll's Eye reflex (sit him up and eyes open)
9. Palmer grasp/Toe grasp (press on ball of foot & toes curl)

10. Colson reports that mom laid back allows a free hand that plays with baby's feet which changes the suckle which releases another letdown. Very symbiotic.
11. Babinski (stroke up foot & toes spread)
12. Stepping/crawling reflex (feet touch & he steps helps him move up to the breast)
13. Rooting reflex (helps baby locate the nipple by cheek feel)
 - a. Upper Lip response slow
 - b. Lower Lip response greater
14. Suckling – under 4 months of age
 - a. Anticipatory Response (jaw drops-tongue drops & curls- head moves slightly back)
 - b. Inner Lip Stimulation to Cause Tongue Reach & Gather as jaw closes (Phasic bite)
 - c. Digital exam/stimulus:
 - i. Tongue moves forward over alveolar ridge.
 - ii. Jaw Moves Forward with Tongue & Posterior
Tongue muscle ripples up/backward
 - iii. Ardran & Kemp x-ray studies
 - iv. Fast flow can frighten baby and change the coordination
 - v. Reflux with a baby laid flat to feed can cause a baby to dislike a feed

- vi. Intestinal obstruction would cause a baby to stop feeding

15. Swallow

- a. Back of Tongue Down when Pharynx Sealed Off = Negative Pressure
- b. Suckle Swallow Once per Second
- c. Coordinated with Breathing
- d. Premature may breath hold as they can't coordinate the suckle, swallow and breathe. May happen with a feeding tube at the breast the first time or when the milk gushes in.
- e. Putting it all together: Suckles a lot with occasional swallows and lots of time to breathe, then more milk and more swallows fitting in the closer breathing, and finally a swallow every 1-3 suckles.
- f. Laid-back positioning and baby-led attachment puts this in the control of the baby and his reflexes.
- g. These are primitive reflexes that exist for the first 8 weeks.
- h. When baby does self-attachment, it is a bonding moment

R. Skin – the largest organ of the body

- 1. Jaundice (yellow pigment on skin due to excess bilirubin in blood)
 - a. Blood incompatibility, or infection can cause this also
 - b. Bilirubin in his system makes baby sleepy and a poor feeder. He needs to feed often to flush it

2. Cyanosis (bluish color of skin) a sign of not enough oxygen. See MD
3. Erythema toxicum neonatorum (“flea bite” looking rash all over) describe or parents think he is reacting to her milk
4. Infections –usually pustular that gets larger & larger. See MD
5. Viral rash is evenly spaced all over and often on palms & soles
6. Contact Dermatitis (irritation if skin touched by irritant)
7. Seborrhea (too much normal skin wax production “cradle cap”)
8. Neonatal Acne usually at 4 weeks of age & normal
9. Sebaceous Hyperplasia (normal glands under skin of nose)
10. Cutaneous monilia (yeast diaper rash)
11. Peeling normal & abnormal
12. Rubella is a disease and causes a blueberry muffin rash