

Health Assessment of the Newborn

Concept: The newborn requires through skilled observation to ensure a satisfactory adjustment to extra uterine life. Physical assessment of newborn after delivery can be divided into-

- Initial assessment by using APGAR score
- Transitional assessment
- Gestational age assessment
- Behavioral assessment
- Systemic physical assessment

Definition of health assessment: Health assessment is a plan of care that identifies the specific needs of the client & how those will be addressed by the healthcare system

A. Initial assessment by using APGAR scoring system:

The APGA score is taken at 1 minute & again at 5 minutes after birth. It requires immediate & careful observation of the heart rate, respiration, muscle tone, reflex response & color of the infant.

APGAR scoring system: by using APGAR scoring system we can assess newborn after birth

	Clinical feature /criteria	Score - 0	Score – 1	Score - 2
A =	Appearance	Blue / pale	Body pink, limb blue	Pink all over
P =	Pulse/ heart rate	Nil/ absent	Slow (below 100) or < 100/minute	More than 100
G =	Grimace/ reflex response	Nil/ absent	Grimace/ feeble cry	Cry / sneezing
A=	Activity & muscle	Flaccid	Some flexion limb	Active movement
R=	Respiration	Nil	Slow, irregular	Good & spontaneous
	Total score = 10	0 – 3	4 – 6	7 – 10

a. Diagnostic utility:

- 7 – 10: Mild or no respiratory depression
- 4 – 6: Moderate respiratory depression
- 0 – 3: Severe respiratory depression

b. Prognostic utility:

- 7 – 10: Prognosis is very good
- 4 – 6: Prognosis is moderate
- 0 – 3: Prognosis is in grave condition

c. Therapeutic utility:

- 7 – 10: No measure is required
- 4 – 6: Oxygenation with umbo bag & mask
- 0 – 3: Endotracheal intubation & intermitted positive pressure ventilation

Q. Write down the physical assessment of a newborn?

Q. Mention the top to toe physical examination of a newborn

Q. How will you assess the newborn after birth?

Q. Explain the physical examination of newborn after birth

Examination of a newborn baby:

1. **Overall impression:** Face, trunk, limbs & activity to gain a general impression.
2. **Skin colour:** The baby is pink & assessment of the degree of any jaundice.
3. **Measurement:**
 - Birth weight
 - Occipito- frontal circumference (OFC)
 - Length (if possible)
4. **Head:** Look & feel the fontanel's, suture & check for any trauma e.g. cephalhaematoma, caput succedaneum, superficial injuries etc.
5. **Eyes:** Look discharge, inflammation, cataract
6. **Mouth:** Look for cleft lip or palate.
7. **Upper limbs:** Check for evidence of brachial palsy & extra digits.
8. **Chest:** Check breathing pattern.
9. **Heart:** Listen to the heart for murmurs
10. **Abdomen:** Any distension, palpation of liver, spleen & kidneys. Any other mass
11. **Umbilicus:** Cleanliness. Any sign of infection (redness, discharge, bad smell)
12. **Genitalia:** Normal male or female. If female, small amount of mucus discharge with a few spots of blood may be seen. This is normal if male observe usually both testes in scrotal sac & scrotum is normal
13. **Anus:** Presence, patency & correct position.
14. **Femoral pulses:** Feel
15. **Spine:** Look & feel normal.
16. **Neurology:** is the baby heaving normally? Check moro & sucking reflexes. If any abnormality found, refer the baby to paediatrician or health care facility.

Q. Briefly discuss about assessment of gestational age.

Assessment of gestational age:

- The main assessment of gestational age can be carried out using approximate estimates of fetal development.
- It is important to assess whether the baby is average for gestational age (AGA), small for gestational age (SGA), & large for gestational age (LGA)
- Assessment of gestational age should be performed carefully, because neonates of particular gestational age have particular & special problems. Therefore the early detection of problems & maturity of the neonates is usual guide for approximate management & better prognosis of neonate.

Q. Briefly discuss about the behavioral assessment.

Behavioral assessment:

- At first the baby doesn't distinguish night from day & spend day & night sleeping, waking, crying, feeding & sleeping again throughout the 24 hrs, but sleeping most of the time.
- By this time is 4 or 5 weeks old he is usually sleeping longer at night & more wakeful in the day time; up to this time & he usually requires night feed.
- The baby will develop an organized pattern of sleep by the age of 16 weeks.