ASSESSMENT OF NEW BORN

Once the baby has been delivered and respiration has been established, mother's chief concern will be, "is my baby all right?" This question generally has a double significance implying concern not only for her baby's immediate survival but also her anxiety about the possible abnormalities which might affect his future well being.

So the midwives and doctors must examine the baby immediately to exclude these abnormalities.

OBJECTIVES

- To provide an assessment of infant's state of development of well being.
- To detect any deviation from normal.
- To assess the progress of the child.

PLACE OF EXAMINATION

- Warm, draught free, adequate light and enough space are essential.

INDICATIONS

- *First examination:* a detailed one in labour room within 2 hours of birth.
- *Second examination:* before discharge.
- *Third examination:* after 6-8 weeks of neonatal life.

INITIAL ASSESSMENT OF NEWBORN

1. IDENTIFICATION

- Check and identify the sex of the infant, and verify the records with the correct name, sex and registration number.
- APGAR Scoring

2. GESTATIONALAGE

- ***Full term:*** 37 to 42 weeks or 259 to 294 days.
- ***Par term:*** After 28 weeks - Before 37 weeks.
- ***Post term:*** After 42 weeks.

3. PHYSICAL MEASUREMENTS

• Length

- Crown-Heel (Head of feet) length with infant supine position/upside down/ with the knees nslightly pressed down to obtain maximum leg extension. (47 cms, to 51 cms)

• Head circumference

- 33.5 cms. to 35.0 cm.

• Weight

- 2 kg to 3.9 kg. Indian babies average range: 2.7 kg to 3.1 kg.

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• Posture and movements

- Supine position with partial flexion of the arms and legs and head commonly turned a little to one side.
- Hip joints are partially abducted.
- Movement is most evident in face and limbs.
- Unusual movement or lack of movements and asymmetry should be noted and reported.

4. SKIN

a. Vernix caseosa

- A greasy substance which is secreted by the fetal subentaneous glands and which disappears within a few days.

b. Lanugo

- Fine hairs can be detected most obvious in dark haired babies.

c. Peeling of skin

- Takes place a few days after birth and most marked on the hands and feet.

d Hair

- Much of the hairs present at birth may fall off during the first few weeks of life.

e. Colour of the skin

- Skin colour changes rapidly with changes in blood flow through the skin capillaries which is not uniform.
- Vaso dilatations causing
  - Redness.
  - Slowing of circulation.
  - Peripheral Cyanosis.
- Cyanosis or bluish discolouration of skin indicates poor peripheral circulation.
- The distributions of cyanosis should be noted whether it is present all over the body or only
- present in the periphery.

Sacrococcygeal dimple or Anal dimple:

- Indicates occult spinal bifida.

5. HEAD

• Size and shape

- -Assessed by inspections and palpations.

• Measurement

- Measurement of occiput front diameter (head circumference) will reduce by 3rd moulding subsides.

• Caput

- Bruising and oedema of the scalp over the presenting part of the skull will be present for 2-3 days afterbirth.

• Cephalhaematoma

- -Collection of blood below the peviostering of the cranial bones rarely present.

• Fontanelle

- TwODr more sutures join to form fontanelle.
- -Anterior and post fontanelle lies at either end of the sagittal suture.

• Moulding

- Overlapping of the edges skull bones.

6. EARS

- General pattern of development of both the ears and their positions.
- Presence of any accessory auricles.

7. FACE

- Facial expression is a useful guide to assess infant's general health

8. EYES

- One difficult to examine.
- Tears are rarely seen.
- Discharge shows infection.
- Sub conjunctiva haemorrhage disappeared without treatment.
- Congenital cataract.

9. *NOSE*

- Patency of both the nasal airways.
- Cotton buds are put in the nostril to clean and check for patency.

10. MOUTH

- Sucking blisters on the lips can be normal and occur in breast fed babies.

Tongue

- Tongue tie.
- See for any airway obstruction.

Palate

- Hard and soft palate. Observe for completion.

11. NECK

- Neck of newborn is short and di fficult to examine.
- Abnormal movements to be noted.

12. CHEST

- Size and shape.
- Symmetry.
- Respiratory movements: Rate = 40/mt (above 60 abnormal) [counted by abdominal movements].
- Breast and nipples: Enlarged breast may be present in both male and female babies which regress spontaneously.
- Heart rate: Difficult to localise by palpation. Apex beat can be felt lateral to the mild clavicular line, the 3rd or 4th intercostal space on the left side. Rate 120/mt-l 40/mt
- Blood pressure: 80-85 mm of Hg.
  50-55

13. ABDOMEN

- Any distensions
- The umbilical cord

  No vessels

  2 Arteries

  IVein

  Bleeding within 24 hrs.
- Separation of cord takes place between 5th-1 Oth day.

Liver

- Normally palpable in the epigastrium.

Spleen

- May be slightly palpable on occasion.

Bowel sounds

- Sounds are audible.
- Maeconium may be passed soon after birth,

Urine

- Small amount of urine (60 ml / 24 hrs is O.K.) of low specific gravity is passed and may occasionally stain the napkin.

14. GEN ITALIA

In male:

- -The testes are in the sacrotum and should be palpable.

In female:

- Labia minora and clitoris covered by babia majora.

15. LIMBS

- Lengths of both the legs.
- Digits: The ringers and toes to be examined for any congenital deformity, (webbing)
- Palms and creases.

16. HIP JOINTS

- Range of movement of each joint to exclude any fracture or dislocations of the joint.

17. HACK

- Inspection and palpation is made carefully running a finger down the spines of the vertebral bodies.

18. NEUROLOGICAL EXAMINATION

- is done to exclude any neurological defect.
- all the reflexes should be checked.
    - Grasping reflex.
    - Moro's.
    - Rooting.
    - Traction.
    - Tone neck reflex.
    - Glabellar.

Nursing DIAGNOSIS

Some example of nursing diagnosis for the newborn are given below:

- Ineffective airway clearance related to:
  - airway obstruction with mucus and amniotic fluid.
- Ineffective thermoregulation related to:
  - environmental factors.
  - amniotic fluid moisture.
- Altered health maintenance related to:
  - congenital disorders.

PLANNING

Goals for the infant during the recovery period include:

- Airway remains clear.
- Temperature remains within normal limits.
- Potential injury is avoided.
- The bonding process is facilitated.

IPLEMENTATION

- Initiation and maintenance of respiration.
- Care of airway; cord clamping, attachment and warmth.
- Eye prophylaxis.
- Measurement of length, weight and identification.
- Cuddling and embracing by the mother.
- Ensure exclusive breast feeding.

EVALUATION

Nurse evaluates the degree to which goals for care being met. If the evaluation shows that results fall short of achieving any goal, further assessment, planning and implementation are warranted.