

CARE OF NORMAL NEWBORNS



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NORMAL NEWBORN

- Birth weight 2500 or more
- Gestation 37 weeks or more
- Body weight between 10th to 90th centile
- One minute Apgar score is 7 or more
- Infant did not need any active resuscitation
- Infant did not suffer from any significant postnatal illness requiring admission in NICU
- Mother did not suffer from any serious complications

MOTHERS ROLE IN CARE OF HER BABY

❖ BREASTFEEDING

- Started within half an hour after birth.
- No prelacteal feeds.
- Colostrum (1st three day milk) must never be discarded.
- Act of sucking is best stimulus for milk production.
- Exclusive breastfeeding till 6 month of life.
- Child should be on demand feeding.
- Most babies are satisfied with feeds taken at every 2-3 hours.
- Adequate feeding means : baby sleeps well after a feed for at least 2 hours, gains weight regularly on average of 30 gms per day , voids urine six or more times in a day.
- Night feeds are important.

❖ MAINTENANCE OF BODY TEMPERATURE

- The body temperature in newborns is usually unstable and are vulnerable to develop hypothermia in winter.
- Bath should be delayed till next day.
- Should be kept dried and adequately clothed.
- The baby should be nursed in close proximity to the mother.
- In winter, the linen and clothes should be pre-warmed.
- Provided with a cap, socks and mittens.
- Mother should be trained to assess the temperature of body by touch alone.

❖ **BODY MASSAGE**

- Oil massage should be postponed till 3-4 weeks of life and the body weight is more than 3 kg.
- It improves circulation and tone of muscles , gives comfort, strengthens infant maternal bonding and provides additional energy to baby.
- It improves weight gain , reduce stress and improves immunological function.
- It reduces transepidermal water loss and improves thermo-regulation.
- Use non-irritating vegetable oil like olive oil, sunflower, coconut and sesame oil.
- Avoid mustard and mineral oil.
- Massage before giving bath.

- In winter massage is best done by placing the baby in front of a closed window through which sunrays are peeping in the room (provide vit D).
- Should be done by gentle pressure and smooth rhythmical movement from above downward.
- The massage is followed by kinesthetic stimulation by performing alternate flexion and extension movements of major joints of upper and lower limbs.
- Best performed after one hour of feed.
- Duration of massage is 15-20 minutes.

❖ SKIN CARE AND BABY BATH

- The baby must be cleaned off blood, mucus and meconium before presented to mother.
- Skin pH is 7 at the time of birth and becomes 5.5 at 3 months.
- The baby should be bathed or sponged next morning using unmedicated soap and clean lukewarm water.
- In case of epidermal Staph. infection , use chlorhexidine gluconate lotion or medicated soap.
- Take clean , warm water in a plastic basin.
- Avoid dip baths till the cord has fallen.
- No vigorous attempts should be made to rub off the vernix caseosa.
- Talcum powder should be applied over axillae and groins taking care that it is not sprinkled over the eyes and nostrils.

❖ CARE OF UMBILICAL STUMP

- Must use sterile instruments to cut and clamp the cord to prevent tetanus neonatorum.
- The cord must be inspected after 2 to 4 hours of birth for bleeding.
- Ligation by rubber band or disposable clip.
- The cord normally falls after 5 to 10 days .
- Delayed falling of the cord is suggestive of immunodeficiency state and sepsis.

❖ CARE OF THE EYES

- At birth both the eyes should be clean with separate swabs.
- Sterile water or normal saline may be used for this.
- Swipe to clean eyes should be gentle and from inner to outer canthus.
- Routine cleaning of eyes on a daily basis is not recommended.
- If the eyes are sticky, 10% solution of sulphacetamide should be instilled in eyes every 2-4 hours.
- Applying kajal in the eyes is not recommended.

❖ **DRESSES FOR THE BABY**

- Clothes should be loose, soft and of cotton.
- Open from front or back.
- Avoid use of large buttons.
- Nappies should be of thick, soft and of absorbent material.
- Woollen clothes should not be stored with moth balls because of development of severe jaundice in baby who is deficient in G-6-PD enzyme in the RBC.

COMMON NEONATAL PROBLEMS

❖ VOMITING

- Normal babies may vomit on first day due to irritation of stomach by swallowed amniotic fluid.
- Due to faulty techniques of feeding.
- In stenosis, intestinal obstructions, infections like UTI, meningitis, intracranial hemorrhage, birth asphyxia may cause vomiting.

treatment : Proper techniques of breast feeding in proper position.

- Avoid bottle feeding.
- Burp after each feed.
- Treat the cause if present.

❖ FAILURE TO PASS MECONIUM AND URINE

- Pass urine by 48 hours of age.
- If delayed look for obstructive uropathy and agenesis of kidney.
- Normal neonate voids after each feed (6- 12 times/day)
- Cry before passing urine due to discomfort of full bladder, quiet during passing urine and again crying after passed due to wet napkins.

- Passage of meconium within 24 hours.
- Black tarry stool during 2-3 days (meconium) followed by greenish stools (transitional stools) for next 1-2 days.

❖ **CONSTIPATION**

- Baby on cow's milk or formula feeds (due to hard casein curds).
- Managed by giving additional glucose water, extra sugar in milk.
- Laxatives should be avoided.
- Refractory constipation means-
Hirschsprung's disease,
anal stenosis and
Cretinism.

❖ **DIARRHOEA**

- Due to maternal intake of medicines such as ampicillin, tetracyclines, cephalosporins, laxatives and due to excessive consumption of foods with high organic acid content (oranges, chillies).
- Due to glucose water and honey.
- Infective diarrhoea in bottle –fed .
- Put on exclusive breastfeeding.
- Avoid bottle feeding & maintain hygiene.
- Wash nipple after each feed.
- Infective diarrhoea should be treated with systemic antibiotics and parenteral fluid.

❖ **PHYSIOLOGICAL JAUNDICE**

- Appears on day 2, reaches peak on 4-5th day and disappear by 10 -14 days.
- Not deep-palms and soles are not yellow
- Mild staining of trunk.

❖ HICCUPS, SNEEZING AND YAWNING

- Physiological body responses.
- Signs of healthy baby.
- Hiccups by spasmodic contraction of diaphragm, just after feed due to irritation of diaphragm by distended stomach.
- Sneezing due to irritation of nostrils by secretions.
- Yawning is common before and after sleep .

❖ DEHYDRATION FEVER

- In summer when environmental temperature above 39 degree.
- 2nd or 3rd day of life.
- Due to inadequate intake of breast milk and poor heat dissipation mechanism.
- Transient
- Disappears after 24-48 hrs.
- No role of antipyretics.
- Hydrotherapy
- Adequate feeding
- Cool ventilated room.

❖ SUPERFICIAL INFECTIONS

- Superficial infections such as skin pustules, conjunctivitis, umbilical sepsis and thrush are common in newborn especially during summer.
- Exposing the baby nude during bathing, should be utilized to screen the baby for superficial infections.

❖ EXCESSIVE CRY

- Due to hunger or discomfort.
- May be due to full bladder before passing urine, painful evacuation of hard stool or soiling by urine and stools.
- Otitis media (intractable, continuous, uninterrupted crying).
- Night crying with arching of back (gastroesophageal reflux).
- Insect bites, inflammatory painful conditions, cerebral irritation.

Treatment:

- Frequently feed the baby.
- Check for urine and motion.
- Cover the baby from insects and treat the known cause.

❖ EVENING COLIC

- Sudden bouts of unexplained crying spells in evening.
- After few days of birth.
- Sudden screaming with flexion of thighs and flushing or frowning of face occur at a precised time in the evening.
- Due to intestinal colic as evidenced by excessive gurgling or peristaltic sound on palpation and auscultation.
- Common in first born child of anxious parents.
- Equal in breastfed and formula- fed.
- Holding baby against skin, rocking, taking him for a drive , prone positioning may provide temporary relief.
- Antispasmodic drops 30 minutes before the anticipated time of colic provide some relief to most babies.
- Spontaneously resolves after 1 to 2 months.

EXCESSIVE SLEEP

- It is normal for some babies to keep their eyes closed most of the time during the first 48 hours.
- Due to sedation given to mother at time of labour.
- Some baby sleeps after a few suck.
- The baby should be kept arouse during feed by tickling on the soles and behind the ears.
- Lethargy and lack of interest in feeds in a baby, who was alert and active previously, is an important sign of serious systemic disease.

❖ **DUE TO TRANSPLACENTAL HORMONES**

Mastitis neonatorum: In term baby of both sexes , on day 3 or 4.

- last for days to weeks.
- Benign.
- due to progesterone and estrogen

Vaginal bleeding: withdrawal bleeding.

- 3rd to 5th day.
- mild bleeding for 2-4 days.
- due to fall in level of sex hormone.

Mucoid vaginal secretions: thin grayish-white glary-mucoid.

- gently cleaned at time of bathing.

❖ CAPUT SUCCEDANEUM

- Boggy diffuse edematous swelling of soft tissues of scalp over the presenting part.
- Subcutaneous, extraperiosteal fluid collection that is occasionally hemorrhagic.
- Has poorly defined margins and can extend over the midline and across suture lines.
- Present at birth.
- Usually resolves in few days.

❖ CEPHALHEMATOMA

- Sub -periosteal collection of blood.
- Due to rupture of the superficial veins between the skull and periosteum
- Not present at birth.
- Appear after few hours.
- May be associated with linear skull fracture.
- Does not cross suture line.

❖ SUBGALEAL HEMATOMA

- Following vacuum extraction.
- Hemorrhage under the aponeurosis of the scalp.
- Because the subgaleal or subaponeurotic space extends from the orbital ridge to nape of the neck laterally to the ears, the hemorrhage can spread across the entire calvarium.
- Associated with anemia ,shock, jaundice, infection.
- Mortality ranges from 12% to 14%.
- Vitamin K , pressure dressing , blood transfusion and Phototherapy are useful.

CRADLE CAP

- Seborrhoeic cap with crusting over the scalp.
- May lead to development of seborrhoeic dermatitis.
- Application of coconut oil or milk scum , over scalp at night followed by shampoo with savlon or cetrimide is usually followed by gradual resolution.

❖ **ASYMMETRIC HEAD SHAPE**

- Depending upon in-utero or postnatal position of head , the baby may develop odd shaped head.
- Occiput or one of the parietal areas may become flat and bald.
- If head size is normal , there is no cause for concern.
- Proper positioning of head with support of soft pillows, to ensure that the prominent part of head touches the cot, leads to gradual rounding of the head shape

CRANIOTABES

Softening of skull bones.

Suggestive of

PREMATURITY

HYDROCEPHALUS

CONGENITAL RICKETS

CONGENITAL SYPHILIS

OSTEOGENIC IMPERFECTA

❖ **SETTING SUN SIGN:**

- Transient and episodic in normal newborn.
- Persistent and constant in HYDROCEPHALUS & KERNICTERUS.

❖ **OBSTRUCTED NASOLACRIMAL DUCT**

- Presents as epiphora.
- Relieved by inward pressure from above downwards along lateral margins of nose.
- Massage is done for 15-20 times at a time, at least 3 times a day for 1-2 months

❖ **UMBILICAL GRANULOMA**

- Flesh like pale nodule at the base of umbilicus with persistent discharge.
- Managed by cauterization with **silver nitrate** or application of **common salt**.

❖ **SORE BUTTOCKS AND NAPKIN RASH**

- Due to:
nylon or water tight plastic napkin and delay in changing the napkin.
- Bottom should be cleaned gently with wet cotton and kept dry.
- Titanium dioxide and Zinc oxide can be used.

MINOR DEVELOPMENTAL PECULIARITIES

❖ TOXIC ERYTHEMA OR URTICARIA NEONATORUM

- On 2nd or 3rd day
- Erythematous rash with central pallor
- disappears spontaneously after 2-3 days.

❖ PEELING OF SKIN

- Post term and in some term baby
- Apply liquid paraffin or olive oil or glycerine.

❖ CUTIS MARMORATA

- Evanescent, lacy, reticulated , red or blue-marbled cutaneous vascular pattern over extremities in infant exposed to low temperature.
- disappear by increasing maturity.

❖ **HARLEQUIN COLOR CHANGE:**

- Suddenly becomes blanched and pale on one half of the body.
- For few minutes.

❖ **SUBCUTANEOUS FAT NECROSIS**

- As localized areas of induration without any inflammatory signs over the buttocks , back, cheeks or limb.

❖ **MILIA**

- Yellow -white spot on the nose .
- due to retention of sebum .
- spontaneous resolution.

❖ **ACNE NEONATORUM**

- Comedones over forehead , nose, and cheeks.
- Due to maternal androgen.
- Disappear spontaneously.

❖ **SALMON PATCHES**

- Capillary hemangioma.
- At nape of neck, upper eyelid, forehead, root of the nose.

❖ **MANGOLIAN BLUE SPOTS**

- Irregular blue patches of skin.
- over sacral and buttocks region.

❖ **SUBCONJUNCTIVAL HEMORRHAGE**

-At outer canthus.

❖ **EPSTEIN PEARLS**

-White spots on hard palate.

- Epithelial inclusion cysts.

❖ **BOHN NODULES**

-Keratin cysts

- Over alveolar ridge of gums.

❖ **SUCKING CALLOSITIES**

- Cornified plaque over centre of upper lip at birth.

❖ **CONGENITAL TEETH**

- One or more lower incisor before or soon after birth.
- Interfere with breast feeding.
- Risk of dislodgement with aspiration.
- Extracted if loose.

❖ **TONGUE TIE**

- Tongue cannot be protruded beyond the lip margins.
- Seldom interferes with sucking ;causes delay in the development of speech.

❖ **NON-RETRACTABLE PREPUCE**

- Normally non retractable in all male newborn.
- After 2 years of age mother should gently retract during bathing.

❖ CONGENITAL HYDROCELE

- At birth or during 1st week.
- Disappears spontaneously during first 3 months .

❖ HYMENAL TAGS

- Mucosal tag at margin of hymen.

❖ SACRAL DIMPLE

- Over sacrococcygeal region.

❖ PROMINENT XIPHISTERNUM

❖ BOWED LEG

- After 1st birthday ,bowing of leg is replaced by physiological knock knees.

❖ **UMBILICAL HERNIA**

- Manifest after the age of two weeks or later.
- May be associated with divarication of recti.
- More common in infants with hypotonia due to cretinism, rickets and Down syndrome.
- Spontaneously disappear by 6-12 months.
- When large or persists beyond 3 years, surgical closure is indicated.



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