

CARE OF THE NEWBORN

Proper antenatal check-up in modern times and delivery by trained personnel in hospital has ensured that normal healthy babies are born in most of the cases. A normal child weighs between 2.5 kg to 3.5 kg and any child below 2.5 kg is considered low birth weight and needs special care. A normal baby loses weight for first few days after birth. This is due to fluid loss. However, he soon starts gaining weight and by 2 weeks he regains his birth weight. Henceforth, he gains about 20 grams per day or roughly 600gms per month. When the child is born, he is covered with a white cheesy material, which should be removed gently with a wet cloth. Do not be vigorous while doing this. This material called vernix protects the child from infection and temperature fluctuations just after birth.

You may notice certain things in a newborn baby which may concern you. They are:

1. **Swelling on the scalp** – This is due to accumulation of fluid or blood in the scalp. This may be due to pressure or injury to the baby's head during birth through vaginal passage. They need no treatment. Swelling due to fluid accumulation (caput succedaneum) subsides within a few days and swelling due to blood accumulation (cephalhematoma) may take several weeks to subside.
2. **Soft spots on the head:** There are 2 soft spots felt on the head. They are openings in the skull bones to allow the brain to grow and are called fontanelles. The fontanelle in front closes or hardens by 1 ½ years and fontanelle behind the head closes by 2 months. A throbbing sensation may be normally felt on the fontanelle. Local application of oil on these spots does not help its closure.
3. **Yellow tinge in the eyes:** This is due to physiological jaundice developing in all infants and has been discussed later. Almost all cases resolve spontaneously.
4. **Curved legs:** A newborn baby may have certain amount bowing or curvature of both legs which straightens when child begins to run around by 3 years. No treatment is needed.
5. **Flat nose:** At birth the nasal bones are not well developed and the nose seems flat. As the child grows the nose gets sharper.
6. **White patches on tongue:** It's normal and does not need cleansing. However, if the patch seems like thick curd adhering to baby's tongue and other parts of the mouth, it may be oral thrush and needs local application of antifungal agents. Oral thrush may be a cause for food refusal and excessive crying.
7. **Large breast or swollen female genitals and scrotum:** This is due to the effect of maternal hormones and recedes spontaneously, as the hormonal effect wanes.
8. **White or bloody vaginal discharge:** This is due to the waning effect of maternal hormone (estrogen) and needs no treatment. Proper cleansing of the local area with a clean cloth and lukewarm water is all that is needed.
9. **Skin tags protruding from the vaginal opening:** They are called hymen tags and present in 3 to 13% of normal female newborns. They need no treatment and resolve spontaneously.
10. **Bulge on the umbilicus:** This is umbilical hernia and can be reduced by pressure. It resolves spontaneously by 3 years. Strapping and taping coins over the swelling are ineffective.
11. **Breathing rapidly:** A newborn baby breathes at a much faster rate of 40-60 per minute compared to adults (15-20 per minute) as they have smaller lung volume and higher metabolic rate. Sometimes there are periods during which it may stop breathing for a few seconds and then start breathing again on its own. This phenomenon is termed periodic breathing and it tends to occur during sleep, which is a normal pattern. However, rapid breathing associated with

other signs like grunting, flaring of nostrils, chest retraction restlessness or blue skin needs urgent attention.

12. **Sudden jerk or startle:** A normal new born may startle suddenly or his jaws may vibrate or legs may jitter for a few seconds. This is normal unless it persists or there is upward rolling of the eyes or lethargy in a child.
13. **Vomiting:** Almost all infants may bring up some curdly milk following a feed. This is called possetting and is quite normal. Almost all babies posset, some more than the other in early months To minimize possetting
 - ✓ Burp the child.
 - ✓ Keep the baby upright for 15 minutes after feed.
 - ✓ Put her down with her head end raised and preferably on her right side.
 - ✓ Give smaller and more frequent feeds. Breast feed for short duration but frequently.

If the child gains weight and is happy, nothing is to be done. Excessive vomiting or loss of weight in a baby needs medical attention.

Care of the eyes:

Routine cleaning of the eyes is not recommended. However if the eyes become sticky and red with pus discharge (indicating an infection) from the eyes then they should be cleaned with a sterile cotton swab soaked in normal saline or sterile water. A few drops of breast milk can be instilled in the eyes. It has anti-infective properties. Some babies can develop persistent epiphora (watering) due to blockage of the tube connecting the eye to the nose by some epithelial debris. Massage the inner side of the eyes at least 6-8 times a day. Do not apply kajal or surma to the baby's eyes. They may cause allergy or block the duct leading to watering eyes.

Care of ears and nose:

Dirt and secretion easily obstruct an already narrow nasal passage of an infant. A few drops of normal saline water in each nostril may clean up the passage without any side effects.

To prepare normal saline just dissolve half teaspoon of common salt in half cup of water and boil. Store in a clean bottle.

Ears need no cleaning except the outer side. Do not instil oil inside the ear.

Long or sharp nails can be filed.

A few skin concerns in newborns:

Red rashes: It appears on 2nd or 3rd day after birth and called erythema neonatorum or toxic erythema. The rash usually starts from face and slowly spreads down. It disappears spontaneously after 3-5 days without any specific treatment.

Milia: These are present practically in all babies. They appear as pinpoint yellow-white spots on the nose or the face and occur due to collection of secretion in the skin glands. They require no treatment and disappear spontaneously within the next few weeks.

Mongolian spots: Frequently blue-green skin patches are seen over baby's back and buttocks resembling ink stain. They are congenital birthmarks exclusively involving the skin. These Mongolian spots require no treatment as they normally disappear by the age of 3-5 years and almost always by puberty.

Pink grey patches at the nape of the neck: They are called salmon patches seen in 30 to 50% babies. They represent small blood capillaries visible through the skin, commonly seen on the nape of the neck (stork bite) on forehead or eye lids. Needs no treatment and disappears spontaneously.

Straw berry like elevated red spot: It is a strawberry haemangioma and is also a type of birthmark. They may be absent at birth and develop after several weeks. They grow rapidly for first few years of life and then regress and disappear after 5 to 8 years leaving a small discoloured spot.

Large purple patches on baby's face: This is also a birthmark called a port wine stain seen in 0.3% of newborns. They are usually seen as large flat patches of purple or dark red skin with well defined borders. They may need specialized treatment later in life, mainly for cosmetic reason.

Moles: These are pigmented naevi and occur as either black or brown moles. Most have no clinical significance and require no treatment. Some may need surgical removal.

Sucking callosities: It appears on baby's upper lip as a button like plaques over the centre of the upper lips. It is due to breast feeding and needs no treatment.

White spots inside upper part of the mouth: These are called Epstein's pearls and are normally seen in babies and require no treatment. Similar lesion may be seen on the prepuce.

JAUNDICE IN NEW BORN

From 2nd day of birth all normal infants develop physiological jaundice. His eyes become yellow, due to excess accumulation of a yellow pigment in blood called bilirubin. Jaundice in newborn is due to excessive breakdown of foetal red blood cells and immaturity of liver to cope up with bilirubin produced from the red blood cells. The pigment accumulates in the blood causing jaundice. This physiological jaundice progressively increases for first 3 to 4 days and then decreases and eventually disappears by the 7th to 10th day. If the child cries and feeds well, there is no need for alarm. This jaundice is not like the one you see in adults. In adults the jaundice is due to viral infection of the liver.

The physiological jaundice may be severe or prolonged in preterm or sick children and in a hypothyroid child. In case where the skin has turned yellow your baby may require blood test for serum bilirubin. If this exceeds certain level, your doctor may decide to keep him under a blue light to reduce the serum bilirubin level. This is called phototherapy, which is a harmless procedure.

PREVENTING INFECTION:

During the first 3 months of life an infant is vulnerable to infection. Following may help to prevent infection:

- ✓ Early breast feeding and giving no other feeds (Most important)
- ✓ Thorough hand washing with soap and water before handling the child. (Most effective)
- ✓ You must change your outdoor clothes before touching the child.
- ✓ The child's bed should be clean.
- ✓ Regular bathing in clean water.
- ✓ It is better to avoid kissing the child before he is three months old.
- ✓ A person suffering from cough and cold should avoid contact with the child.
- ✓ The mother suffering from cough and cold should use face mask while breast feeding her child.
- ✓ The infant's clothes and linens should be regularly washed and dried under strong sunlight.
- ✓ The room in which the infant stays should be well ventilated.
- ✓ Pets should be kept away.

INFANT'S NAVEL

At birth a stump of about 2 inches is kept at the navel and the rest of the umbilical cord is cut off. This stump shrinks gradually and falls within 10 days. The base of the stump should be cleaned regularly with rectified spirit or after-shave lotion. This prevents infection. Hot fomentation is not necessary. Unless the stump falls the child should be carefully bathed so that the stump does not get wet.

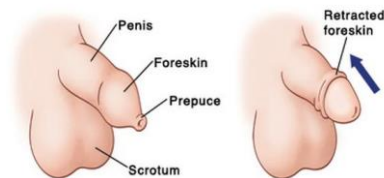
Many infants have a swelling on their navel which on pressing reduces producing a typical gurgling sensation. This is umbilical hernia, which swells on straining or crying. This does not cause any discomfort to the child and spontaneously subsides within 3 years. An irreducible umbilical hernia in a very irritable child needs medical attention. It might be an obstructed hernia, which needs emergency operation. A small shiny pinkish bead like mass may be observed on the umbilicus. This is an umbilical granuloma. Put a pinch of common salt on the lesion for 10 minutes and remove it with gauze soaked in warm water for 3 consecutive days. This will dry up the mass. It's not a painful procedure and has no side effects.

BREASTS:

Usually after birth the infant's breasts are swollen. This swelling is due to the effect of maternal hormones and subsides when its effect wanes after birth. Unnecessary squeezing may invite infection.

In female child a white discharge may be noticed at the vaginal opening. Just clean it with wet cloth. At times a little vaginal bleeding is observed. This is also due to waning effect of maternal hormones on the child's uterus (withdrawal bleeding). The effect of maternal hormone in male child may cause enlargement of the testis and scrotum, which may look proportionately big.

PHIMOSIS:



The tip of the child's penis is covered with a skin called prepuce and cannot be fully retracted like adults. At 3 years this skin can gradually be retracted to expose the tip and by 5 to 6 years it can fully retract. If this skin covering the tip cannot be retracted at all the condition is called phimosis. This possibility of a phimosis is a cause of concern for many mothers. If the child passes urine smoothly wait for 3 years. You can stretch the skin gently during bath. If you observe that during urination the tip of the penis swells like a balloon and urine stream is narrow or coming out in drops, it may need a doctor's consultation. In such case your child may need a small operation for phimosis. Obstruction of urinary flow by phimosis may cause urinary tract infection. Urinary tract infection is an important cause or recurrent fever in children, which may damage the kidneys. The operation is an office procedure and the child can return home on the same day.

URINATION:

During first 2 days, your baby may pass urine only once or twice, but after the 3rd day when adequate breast feeding is established, she should pass urine around 5-8 times in 24 hours. This is a sign of

adequate milk intake. If the baby is not passing enough urine, please check with your doctor as this may be a sign of dehydration or other illness.

BOWEL HABIT:

Usually a child after birth passes stool within 24 hours and urine within 48 hours. Initially the stool is sticky green, which gradually changes its colour to yellow. The stool is soft in a breast-fed baby. A tin-fed baby is usually constipated. It's natural for a child to evacuate following every feed. There is nothing abnormal about it. Even 10 to 12 stools a day are normal and should not be considered as diarrhoea. Many children may not pass stool daily. They may evacuate at 5 to 6 days interval which is also quite normal. Do not worry if the stool is soft and the child is cheerful. If the stool is unusually watery or mucoid or contains blood or is very hard, consult your doctor. It is normal for an infant to strain or cry a little during defecation or urination.

OIL MASSAGE:

The massage is more important than the oil itself. This massage increases the circulation in the muscle and helps its development. Coconut oil is good enough. Avoid oil during summer and monsoon. A powder massage is also good enough. Oil makes the skin sticky and may cause rashes. Apply oil in winter. It keeps the skin soft. There is no need to apply oil on head. A natural oil secretion from scalp keeps the hair black and healthy.

It is wrong notion that applying liberal amount of oil on the scalp helps to harden the soft spots called fontanel. These fontanels close in their own time.

Apply oil sparsely. Massage gently taking care that the child doesn't get hurt by your bangles or get scratched. Overenthusiastic massage may sprain his limbs. This massage and bathing develop a strong bond between the mother and the child. So do not leave the job to your maid. At times let his father do it under your care.

SOAP:

No special soap is needed for the baby's bath. In fact lukewarm water is preferable. However a mild moisturising soap may sometimes be used. Most newborns do not need a lotion after a bath. To prevent rashes the best way is to keep the baby's skin folds dry at all times. However if you choose to use a lotion, make sure it suits your baby's skin.

BATHING YOUR CHILD:

Bathing is usually started, once the umbilical stump falls off in 1-2 weeks. Babies weighing less than 2 kg should be gently sponged till he is more than 2 kgs. It's better to bath with clean water so that the child does not catch infection if he swallows water or enters his ear or nostril. Use a mild soap. Take care to clean the skin folds. Apply shampoo weekly. Initially bathe him 2 to 3 minutes and immediately wrap him in a towel. As the child grows older and enjoys water, increase the bathing time. You may bathe him twice daily during summer. It comforts the child and he becomes less cranky. In winter give the baby a bath every alternate day. Never leave the child unattended in water; he may drown himself in a tub or fall head first in a bucket of water. Be careful about hot water. He may scald himself if you leave him unattended.

POWDER:

Body powder has no role except its aroma. Powder does not cure prickly heat. In fact powder may block the sweat gland openings and aggravate the condition. To treat prickly heat keep the child cool and dry, use light cotton clothes and apply calamine lotion. Prickly heat subsides as weather becomes cool and pleasant.

Highlights of care of a newborn are:

- A vigorously crying baby is a delight to its mother and its health care providers.
- Soon after birth the baby should be placed on its mother's chest and abdomen for a skin to skin contact.
- The umbilical cord should preferably be cut 1-2 minutes after birth.
- High standard of hygiene should be maintained. Washing hands with soap and water, clean clothes and linens and avoiding contact with infected individuals will prevent infection.
- Breast milk is best for the baby.
- Initiate breastfeeding soon after birth within 1 hour.
- Breast milk is the first vaccination for the child.
- Keep the umbilical cord dry and clean.
- Most breast fed babies pass frequent semi formed watery stool which is normal.
- Many newborn babies develop jaundice on the 2nd or 3rd day. It spontaneously settles in most babies. Some of them may require investigations and treatment by phototherapy.
- Jaundice appearing on the 1st day or present over the soles and palms need immediate medical attention.
- Many babies have rashes which needs no treatment.
- All babies should be vaccinated according to the immunization schedule.