

Index Medical College, Indore, M.P., India



Department of Pediatrics Student's Log Book Elective Module Block-2 Neonatology

Student's name: ASAWARI GARGE

Date of Admission / Joining: 04/04/23

Name of Preceptor: DR. SWATI PRASHANT

Name of Head of Department: DR. SWATI PRASHANT



04
Registrar

Student's Personal Details & General instructions

Student's name: ASAWARI GARGE

Date of Birth: 03/02/2000

Mobile no.: 9145935473

Blood Group A +ve

Father's Name VIJAY GARGE

Mobile No. 9425873373

Mother's Name VARSMA GARGE

Mobile No. 8821038939

Permanent address: H-9, G.A.D. COLONY, BARAPATHAR, SEONI
(M.P.)

Local guardian: -

Local address: - DEVI AHILYA GIRLS HOSTEL, INDEX MEDICAL
COLLEGE, INDORE (M.P.)

E-mail id: gargearawari33@gmail.com

University Enroll. No.: MU19U01040

General Instructions:

- (1) This logbook is a record of the academic/co-curricular activities of the designated student, who would be responsible for maintaining it.
- (2) The student is responsible for getting the entries in the logbook verified by the faculty in charge regularly.
- (3) Entries in the log book will reflect the activities undertaken in the department & have to be scrutinized by the Head of the department.
- (4) At least 75% attendance is mandatory for the completion of elective block.
- (5) Reporting time is 2 pm in the department after which attendance will not be given.

Asawari
Signature of Student:





04
Registrar
Malwanchal University
Indore (M.P.)

DEPARTMENT OF PEDIATRICS
Index Medical College

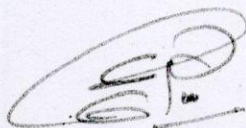
CERTIFICATE

This is to certify that Mr./Miss ASAWARI GARGE _____
 _____, has satisfactorily completed Electives Module
 Block-2, (title of the module: **Neonatology**)
 in the Department of Pediatrics, from 04/04/2023 to
 02/05/2023 at Index Medical College, Indore as per
 Regulation of Graduate Medical Education amendment
 2019.


Signature of Preceptor
Department of Pediatrics,
Index Medical College
Indore


Signature of HOD
Department of Pediatrics,
Index Medical College,
Indore

HOD, Department of Paediatrics
 Index Medical College,
 Hospital & Research Centre
 Khudel-Indore(M.P)


Signature of Dean
Index Medical College,
Indore




Registrar
 Malwanchal University
 Indore (M.P.)

Activity Log

Sr. No.	Specific Learning Objectives (SLO) completed	Date	Signature of Preceptor
1.	To learn history taking of newborns.	05/04/23	SP
2.	To learn skills of general & systemic examination and anthropometry of newborn	07/04/23	SP
3.	To assess signs & symptoms of sick newborn.	10/04/23	SP
4.	To counsel mother regarding general care, hygiene & feeding of baby.	11/04/23	SP
5.	To study Kangaroo mother care (KMC) & BFHI (Baby Friendly Hospital Initiative)	15/04/23	SP
6.	To learn & counsel about breast feeding advantages, contents & practices of breast feeding.	19/04/23	SP
7.	To identify different emergencies in newborn.	21/04/23	SP
8.	To learn steps of neonatal Resuscitation	24/04/23	SP
9.	Learning of insertion of feeding tube to check patency of oesophagus & anus.	26/04/23	SP
10.	Taking PNC rounds daily & attending deliveries	28/04/23	SP



SP
 Registrar
 Malwanchal University
 Indore (M.P.)

NEWBORN HISTORY AND EXAMINATION

HISTORY :-

- General :- Mother's name, age, parity, last menstrual period, expected date of delivery.
- Past obstetric history :- Past pregnancies : When, gestation, fetal or neonatal problems, current status of children.
- Antenatal :- Number of antenatal visits, tests [Hemoglobin, urine albumin, sugar; USG; Blood group, VDRL, HIV], tetanus toxoid immunizations, supplements [folic acid, iron, calcium, iodine].
- Obstetric & medical complications :- Obstetric complications [Toxemia, urinary tract infections, twins/triplets, placenta previa], fetal problems [IUGR, hydrops, Rh isoimmunization]; medical problems [diabetes, hypertension], investigations, medicine to use.
- Labour :- Presentation, onset of labour (induced/spontaneous), rupture of membranes (spontaneous/induced), liquor (clear/murky stained), duration of first and second stage of labor, fetal heart rate [tachycardia, bradycardia, irregular].
- Delivery :- Place of delivery, vaginal (spontaneous/foveum), caesarean (indication, elective/emergency); local/general anesthesia; duration of third stage; postpartum hemorrhage.
- Immediate care at birth :- Resuscitation, time of mouth & eye, APGAR score, cord care, passage of urine/stool.

Postnatal problems :- Feeding problems, Jaundice, eye discharge, fever, wound problems.

Family history :- History of perinatal illness in other siblings.

Post medical problems :- History of past medical problems if any.

Personal / social history :- Socio economic status, family support.

○ General examination :-

Immediately after birth :- Weight, gestation, congenital anomalies, sex assigning, Apgar scores, examination of umbilical placenta and umbilical vessel.

Appearance :- Overall appearance: Well or sick looking; alert / unconscious.

Vital signs :- Temperature, cold stress, respiratory rate, retractions, grunt / shiver / heart rate, palpable femoral arteries, blood pressure, capillary refill time, cry, apneic spells.

Anthropometry :- Weight length, head circumference, chest circumference.

Gestation :- Assessment of by physical markers, more detailed assessment by Expanded New Ballard examination.

Classification by uterine growth :- Appropriate / small / large for gestational age, symmetric or asymmetric and for gestational age, signs of IUGR.

Congenital anomalies :- Head to toe examination for malformations.

Birth trauma :- signs of trauma - cephalhaematoma

- # Common signs :- Cyanosis, Jaundice, pallor, bleed, petechiae, edema, depressed fontanel
- # Special signs :- Caput, umbilical stump discharge or suckles, jitteriness, eye discharge, oral thrush, development peculiarities (toxic erythema, Epstein pearls, breast engorgement, vaginal bleeding, capillary hemangioma, mongolian spot).
- # Feeding :- observe feeding on breast.
- # Reflexes :- Moro, grasp, rooting.

o SYSTEMIC EXAMINATION :-

- # Chest :- shape, respiratory rate, exertations, air entry, adventitious sounds.
- # Cardiovascular system :- apical impulse, heart sounds, murmur.
- # Abdomen :- distension, wall edema, tenderness, palpable liver/spleen/kidneys, any other lump, ascites, hernial sites, gonads, genitali
- # Musculoskeletal system :- Dysmities, tests for developmental dysplasia of hip, club foot
- # Central Nervous system :- state of consciousness, vision, pupils, eye movements, facial sensations, hearing, sucking and swallowing, muscle tone and posture, power, tendon reflexes.




 Registrar
 Malwanchal University

Signs & symptoms of Sick Newborns

- # Respiratory system :- Respiratory distress - apnea (> 30 sec / bradycardia) holding breaths, grunting, cyanosis (peripheral / central)
- # Cardiovascular system :- Distress, cyanosis, feeble pulse.
- # Gastrointestinal system :- Few smelling stool, bloody diarrhoea, vomiting, haematemesis, distension of abdomen.
- # Liver :- Jaundice, Malena, discolouration of skin & eye, dullness.
- # Skin :- Cold clammy extremities, cyanosis, dryness of mucosa, ecchymotic patches, Hypothermia / Hypothermia.
- # Brain :- Dull, shrill / invariable cry, not accepting feeds, vacant look, subtle seizures, lip smacking, flickering of eyes, Increase tone of limbs. fontanelle bulging, unconsciousness.
- # Haematological :- Pale, Petechial, polycythemia
- # Kidney :- ↓ Urinary output or ~~low~~ haematuria, edema.
- Others :- Not accepting feeds.



Registrar
Malwanchal University

KANGAROO MOTHER CARE

Care of pre-term or low birth weight infants by placing the infant in skin to skin contact with the mother / caregiver.

○ FEATURES :-

- Started early after birth and ideally provided continuously for prolonged period.
- Exclusive breastfeeding
- Initiated in hospital / birth facility, continued at home after early discharge.

○ ADVANTAGE :-

- Improve breastfeeding
- Provide thermal protection
- Improve bonding between mother and child.
- Reduces severe morbidity
- Modern method of care giving in any setting.

* KMC → Name derived from practical similarities to marsupial caregiving - infant kept warm in maternal pouch & close to breast for unlimited feeding.

○ PROCEDURE :-

* POSITION :-

- Baby kept neutrally upright.
- Head turned to one side
- Legs fixed at hips and knees : FROG LEG POSITION

• Head additionally covered.

* FEEDING:-

• Exclusive breast feeding or expressed milk depending on condition of the baby.

* DURATION:-

- Variable (upto 24 hours)
- Long duration preferred.
- Short duration : avoided (< 1 hour)

* When to stop:-

- When baby is of term gestation (> 37 weeks)
- When baby weighs > 2.5 kg. (if LBW).



AD

- a) Comply with international code of marketing of breast milk substitutes and world health assembly resolutions.
- b) Written infant feeding policies.
- c) Establishment of monitoring and data management system.
2. Staff should have knowledge and skills to support breast feeding.
3. Discuss importance and management of breast feeding with pregnant women & families.
4. Facilitate immediate skin-to-skin contact & support mothers to initiate breast feeding as soon as possible.
5. Support mothers to maintaining breast feeding & manage common difficulties.
6. Exclusive breast feeding to newborns - NO FOODS or FLUID other than breast milk to breast fed newborn, unless medically indicated.
7. Practice rooming-in 24 hours a day for mothers & their infants.
8. Counsel mothers on the use in risk of feeding bottles, teats & pacifiers.
9. Support mothers to recognize & respond to their infant's feeding cues.
10. Co-ordinate discharge so that patients & their infants have access to ongoing support & care.

CONSTITUENTS OF BREAST MILK:-

Breast milk contains:-

Proteins:- Casein, Lactalbumin, Beta-lactoglobulin, Lactotransferrin, Immunoglobulin, Lysozyme.

Lipids:- Linoleic acid

Carbohydrates:- Lactose, Nitrogenous oligosaccharides.

Minerals:- Calcium, Phosphorus, Iron.

Vitamins:- Vitamin C & Vitamin D.

ADVANTAGES OF BREAST FEEDING:-

- i) Protection from illness / infection - like E. coli infections, respiratory infections.
- ii) Decreases the risk of allergy.
- iii) Decreased risk of diabetes & heart disease in later life.
- iv) IQ:- Breast fed babies have higher IQ than non-breastfed babies.
- v) Breast feeding promotes brain growth and myelination.
- vi) Facilitates colonization of GI tract by good bacteria.
- vii) Enhance the integrity or maturity of gastro intestinal epithelium.

o Benefits of Breast feeding for mother:-

- Helps in uterine involution.
- Decreased incidence of Post Partum hemorrhage.
- Lactational amenorrhoea for around 6 months.
- Decreased risk of carcinoma of breast & ovary.
- Shedding weight after pregnancy.

NEONATAL RESUSCITATION PROGRAMME

Antenatal counselling
Team Briefing
Equipment Check

BIRTH

Term Gestation?
Good tone?
Breathing or crying?
NO

Infant stays with mother for routine care, warm & maintain normal temp., position airway, clear secretions if needed, dry, ongoing evaluation

Warm & maintain normal temperature, position airway, clear secretions if needed, dry, stimulation

Apnea or Gasping?
HR < 100/min?

Laboured breathing or persistent cyanosis?

PPV, SpO₂ monitor
Consider ECG monitor

Position & clear airway, SpO₂ monitor, supplementary O₂ as need CPAP

HR < 100/min?
YES

Check chest movement, ventilation, corrective steps if needed ETT or LMA

HR < 60/min?
YES

Intubate if not already done
Chest compressions, coordinate with PPV 100% O₂, ECG monitor, consider UVC

HR < 60/min
YES

IV & umbilical if HR < 60/min persists 10 min 85-95%

Targeted preductal SpO₂ after Birth

1 min	60-65%
2 min	65-70%
3 min	70-75%
4 min	75-80%
5 min	80-85%
10 min	85-95%