1. **Introduction of the maternal history**

Joyce Mapara is a 19 year old Gravida 1 Para 1 and she was 29 weeks of gestation when she gave birth. Lives in Mamelodi Ext 1. The mother is single and unemployed. The patient said that she fell on the floor the floor while she was cleaning then started bleeding from the vagina and feeling pains on her abdomen then she immediately reported to her local clinic and the patient was immediately referred to Mamelodi hospital for sonar to check if the fetus is still alive. On arrival she was seen by the Dr and was told that she had placental abruption( meaning that the placenta has detached from the uterine wall which caused the bleeding) and that her baby is at risk of not getting blood and oxygen and was told that they need to perform cesarean section to save the baby and she also agreed then she was taken to theatre and the neonate was taken out. Meaning that she delivered a premature neonate.

* 1. **Neonatal history**

Baby to Joyce Mapara was born at 29 weeks of gestation on the 13th of March 2019 at 19:20 with a weight of 930g, Head circumference of 26cm, Length of 30cm. A male neonate with an Apgar score of 6/10 in one minute and 7/10 in 5minutes the reason for this Apgar score was that the neonate was having respiratory distress and he was not crying, he was not moving actively, his respond to stimuli was grimace and his body was pink but the limbs were blue. The neonate was suctioned and resuscitated then he was put on oxygen 1litre and was transferred to Neonatal ICU. Then he was admitted with Prematurity Respiratory Distress Syndrome, Extremely low birth weight.

1. **Specific problems of the neonate**

* **Prematurity**

**Definition**

* Birth that occurs that occurs after fetal viability (28 weeks of gestation is viable) but before 37 completed weeks of pregnancy. (sellers pg 278)
* This is characterised by low birth weight of less <1500g, length of less than 50cm, and head circumference of less than 34cm with soft skull bones, bones have not completely merged.

**Causes**

* Obstetric causes associated with antepartum haemorrhage, abruptio placenta and asphyxia.
* Trauma or accidents (such as falling on her abdomen)
* Fetal distress observed through CTG (which is indicated by a non-reassuring CTG with many decelerations than accelerations and a baseline that is lower than 110bpm)
* **Manifestation**
* Spontaneous onset of regular, rhythmic uterine contractions as in normal labour.
* Bleeding from the vagina and abdominal pains.
* **RESPIRATORY DISTRESS SYNDROME**

**Definition**

* Its an emergency condition when a new born has difficulty in breathing.
* It develops due to immature lung development.

**Causes**

* Antepartum haemorrhage
* Insufficient surfactant in the immature lungs at birth. The surfactant is necessary in order to lower the surface tension of the alveoli and when the surfactant is deficient, the alveoli collapse during expiration.

**Manifestations**

* Nasal flaring
* Chest retractions
* Tachypnea and grunting as a result of the immature lungs of the newborn, they cannot maintain air, the lung air spaces empty completely and collapse after exhalation.

* **EXTREMELY LOW BIRTH WEIGHT**

**Definition**

* It is a birth weight of less than <1000g

**Causes**

* Preterm birth (birth before 37 complete weeks of gestation)
* Poor nutrition (the mother not eating well balanced diet)
* Insufficient prenatal care (less time in the mother’s uterus to grow and gain weight)

**Manifestations**

* Birthweight of less than 1000g
* Looks very thin with little body fat
* Blood vessels can be easily seen through the skin

1. **In-depth overview of medical treatment that the neonate received and is receiving.**

**Blood for FBC-** On the 14th of March 2019 blood was collected for full blood count and the result and the Hb was low at 7.2gdl and the doctor prescribed one unit of Red Blood cells and it was administered and the was no reaction and the observations were also normal.

**The placenta was taken for histology-** To check if there’s any underlying causes that might have caused these problems.

**Abdominal ultrasound done-** On the results, mild hepatomegaly was noted in the liver, the gallbladder was contracted, CBD not dilated, IVC was normal diameter. Pancreas was obscured. Left renal pelvis was mild dilated and no calculi or renal mass. Free fluid collection was noted in the anterior abdominal wall subcutaneous tissue, more prominent on the right side extending towards the lower pole of the right lobe of the liver. ?fetal hydrops

**Seen by a dietician –** The neonate was seen by a dietician and they inserted a nasogastric tube as the neonate had difficulty in suckling. She prescribed EBM 6ml+1 scoop of FM 85 3hourly via nasogastric tube.

**MEDICATION**

**Vitamin D 400 IVI PO daily**

* Classification – Supplement
* Action – Regulation of calcium and phosphorus which supports cellular processes, bone mineralization and neuromuscular function.
* Indication- Used to treat vitamin D deficiency
* Side effects- kidney stones, poor appetite, nausea and vomiting
* Contraindications – kidney disease

**Vidalyin 0.6ml PO daily**

* Classification – Vitamin for paediatric use
* Action – Provides vitamins for infants.
* Indication – Are intended for use as a dietary supplement.
* Side effects- Rash, diarrhea, anorexia, bright yellow urine.
* Contraindication – Hypersensitivity to any of the ingredients.

**Spironolactre 2mg PO daily**

* Classification- Potassium-sparing diuretics
* Action – Regulation of low potassium levels and conditions in which the body is making too much of a natural chemical(aldosterone)
* Indication – Lowers the risk of kidney problems, removes excess fluid and improving symptoms such as breathing problems.
* Side effects- Diarrhea, rash, slow irregular heartbeat.
* Contraindication – hypersensitivity.

**Lasix 2mg PO daily**

* Classification – Loop diuretic
* Action- Prevents your body from absorbing too much salt. This allow the salt to instead be passed in the urine
* Indication- used to treat fluid retention
* Side effects- Chills, cough, fever, Shortness of breath
* Contraindications – Kidney disease, diabetes, sulfa drug energy

**An in-depth overview of Nursing care that the neonate received and is receiving**

* Wash hands before entering the rooms to prevent cross infections.
* Wear aprons, hats to prevent hair falling and causing infections and contaminating your clothes with secretions from the neonate.
* Dry the neonate dry the well and cover with a plastic to prevent hypothermia
* Ensure that the incubator is cleaned every morning with water and soap to prevent dusts which may cause respiratory problems. And the temperature should be 33 degrees to keep the neonate warm to prevent hypothermia.
* Observations done 3 hourly to monitor the neonate condition, buttock care, cord care and feeding.
* Skin to skin contact demonstrated to the mother and its importance, it promotes growth, bonding between mother and the neonate, regulates body temperature of the neonate.
* Always asses for breathing pattern and skin color to alleviate cyanosis and resuscitate if the neonate stops breathing.
* Administration of medication as prescribed medication according to five rights of giving medications.
* Administer oxygen via CPAP to keep the saturation above 92% and monitor the saturation continuously.
* Monitoring blood glucose daily to prevent hypoglycaemia.
* Insertion of nasogastric tube if the baby has difficulty in suckling and making sure that the tube is in situ before feeding the neonate to prevent aspirations.
* Ensure that the drip site is not swollen or inflamed to prevent tissue infiltration.
* The neonate was only visited by his mother and the number of visitors were minimized to prevent infections or exposure to certain conditions as they are immune compromised.
* Noise is minimized to provide a therapeutic environment for the neonate.

**Care of the neonate (compare with literature)**

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| **Care of the neonate in the unit** | **Literature consulted** |
| Staff members in the unit do not wash hands upon arrival in the unit and between neonates | Hand was should be done upon arrival in the unit and between patients according to infection control policy |
| Staff members do not wear aprons and hat on their heads | Wear protective clothing upon entrance into a neonatal unit to prevent spread of infections |
| Observations aren’t exactly done 3 hourly they start earlier to finish on time so that they can knock off early | Observations should be done according to hospital protocols and on the correct time |
| Sometimes medication is not given to the neonate as the drip is out and that certain medication is to be given intravenously or not given at the right time | There are five right of giving medication and the staff members should adhere to those rights and report the drip to the Dr as soon as it is out. |
| Incubators are only cleaned when the dust is visible | Incubators should be cleaned daily according to sellers et al (2015;253) |
| Thermometers are used more than once | According to the instructions of a next temp thermometer “it says use and discard” |
| Feeds are given 3 hourly as prescribed | Neonates should be fed 3 hourly whether they are awake or if they are asleep u wake them up to prevent drop in glucose |