

NEONATAL RESUSCITATION CASE PRESENTATION

PRESENTER: DR.LATIM EMMANUEL

CASE PRESENTATION

- Extreme preterm neonate delivered on 23/06/25 at 7:49AM by SVD at 22WOA by dates, 24WOA by Ballard to a 39yr P7+2 mother who came in 2nd stage of labor with cord prolapse and breech presentation
- **Bwt-950g, Apgar score-4 at 1min, 5 at 5mins, 6 at 10mins, was put on oxygen**
- No documentation of suctioning, bag mask ventilation or CPR
- Vitamin K given
- Transferred to NICU for further management
- Received in NICU at 10am
- Vitals- SpO2-86% on room air, PR-100bpm, RR-50/min, temp-35.6C, RBS-4.4mmol/l
- Interventions-put on oxygen by CPAP 3L/min, SpO2-100%, PR-133bpm, RR-51/min

CASE PRESENTATION

- **11:50AM**
- Noted a ELBW extreme premature transferred from Maternity with persistent DIB and bluish discoloration and swelling of the lower limbs
- No fever or convulsions
- ROS-unremarkable
- Mum reports labor-like pains started the day before, no drainage of liquor
- Tested positive for malaria 3 days prior from a H/C, given coartem which she had completed yesterday
- No h/o prenatal steroid administration
- Mum attended ANC 2x, started at 14WOA, tested negative for HIV and syphilis, given FeFo but didn't get fansidar
- Mum reports no chronic conditions
- Other 6 siblings are all fine
- 2 previous miscarriages, all were in 1st trimester, causes not known

CASE PRESENTATION

- Examination findings
 - Sick looking, lying in incubator, on CPAP, extremely small, moderate respiratory distress, lower limbs all cyanosed from upper thighs to the lower limbs to the feet and soles, also with mild swelling, upper part of the body is pink, no dysmorphic features
 - No jaundice, pallor, or dehydration
- Temp-35.7C, RR-56/min, PR-136bpm, SpO2-100% on CPAP, RBS- 4.0mmol/l
- Respiratory: **dyspneic with chest indrawing, grunting, subcostal recession, intercostal recession, resp score-5/10**, chest clear
- CVS: normal heart sounds, normal rhythm, peripheral pulses are all present and synchronous,

CASE PRESENTATION

- CNS: moves all limbs, weak cry, normal fontanelles, primitive reflexes all weak, no localizing signs
- P/A: normal cord, no organomegalies or palpable masses
- **Diagnosis:**
 - **Extreme prematurity, ELBW with**
 - **Moderate to severe RDS**
 - **Hypothermia**
 - **At risk of multiple prematurity complications**
- **Plan**
 - Admit in NICU
 - Keep in incubator
 - Keep on bubble CPAP 3L/min
 - NPO for 48-72hrs
 - IV Caffeine 20mg stat as loading dose
 - Then IV Caffeine 5mg BD (maintenance dose) for 2weeks
 - IV dextrose 5% infusion 3ml/hr for 24hrs
 - IV Ampicillin 50mg BD for 5 days
 - IV Gentamicin 3mg OD for 5 days
 - Monitor vitals 2hrly

CASE PRESENTATION

- **24/06/25, 10:20AM**

- Noted to have deteriorated while in incubator, on CPAP, gasping, apneic, no spontaneous breathing, cyanosed, floppy, no cry
- PR-68bpm, SpO2-63%, hypothermic (Temp-34.7C)
- Put under radiant warmer, resuscitation started by bag mask ventilation for unspecified duration, IV D5% 2ml bolus, IV adrenaline 0.1mg given, IV caffeine 20mg stat, then 10mg infused in IV D5%
- Despite all this, baby's prognosis not good, with vitals only improving on resuscitation and dropping immediately post bagging
- Other treatment given, oxygen therapy, IV D5% infusion 3ml/hr

- **11:00AM**

- Baby noted to be unresponsive, peripheral pulses absent, no cardiac activity, vitals unrecordable
- Resuscitation initiated by BMV and CPR, 3ml of IV D5% given as bolus
- No response despite interventions done
- **Death confirmed at 11:25AM**
- **Cause of death:**
- Extreme prematurity, ELBW with severe respiratory distress syndrome with severe respiratory failure