THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

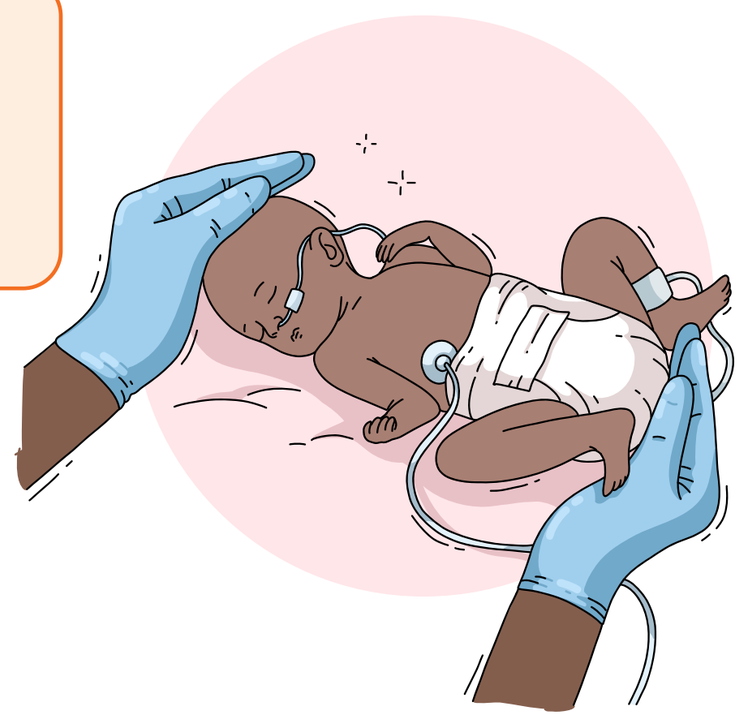
PREVENTION OF APNOEA OF PREMATURITY USING CAFFEINE CITRATE PROPHYLAXIS ALGORITHM

Preterm Infant Eligible for Caffeine Citrate Prevention of AOP:

1. Estimated gestational age less than 34 weeks using Dates & New Ballard score AND/OR ultrasound before 24 weeks of gestation
2. Neonate with a birth weight of less than 1.5 kgs
3. Previously not on caffeine citrate

Ensure the preterm infant is:

1. Kept warm to maintain body temperature 36.5-37.5°C
2. On cardiorespiratory monitoring (Preferably continuous) & has a target SPO_2 of 90-95%
3. Initiated on CPAP/oxygen as per newborn clinical care protocols If indicated
4. Having an intravenous and/or nasal/or oral gastric tube access as indicated
5. Prevented from and managed for hypoglycemia
6. Adequately assessed and systematic newborn examination done



Any contraindications to enteral feeds? **

YES

Give loading dose: IV Caffeine citrate **20mg/kg as an infusion over 30 minutes**

NO

- **Give loading dose: Oral Caffeine citrate 20mg/kg** with expressed breast milk via nasal/oral gastric tube given within the first 24 hours of birth. (OR First contact)
- **No loading dose for preterm already on caffeine citrate**

- **Give maintenance dose: Oral caffeine citrate 5mg/kg/24 hours** via nasal/oral gastric tube. The dose is to coincide with the next treatment schedule (not more than 24 hours after the loading dose) and after every 24 hours.
- **If it is not safe to give trophic or enteral feeds, give IV caffeine citrate 5mg/kg/24 hours**

Apnoea occurrence while on the **correct dose of caffeine citrate**

- Give Caffeine citrate 10mg/kg start via **nasal/oral tube AND** check the temperature, blood sugar, blood culture & exclude other causes of apnoea
- Continue maintenance dose of caffeine citrate 10mg/kg every 24 hours***

Apnoea occurrence while on the **correct dose** of caffeine citrate

Refer to Treatment Algorithm

NO Apnoea Occurrence

- Continue caffeine citrate until the newborn is **34 weeks** corrected gestational age
- Adjust caffeine citrate dose weekly based on weight.
- Stop caffeine citrate if no apnoea is recorded in the preceding 5 days
- Continue vital sign monitoring for **5 days after stopping caffeine citrate**

- **Caffeine should **NOT** be given to newborns with kernicterus (Jaundice) or symptomatic heart disease, especially arrhythmias. **Caution.** For newborns with renal or hepatic disease or seizures.*
- *Withhold caffeine citrate if the heart rate is persistently over 180beats per minute at rest*
- *Caffeine citrate is compatible with breast milk*
- *For caffeine citrate vials, dilute as per the manufacturer's instructions. Once opened, use immediately and discard the unused portion*
- ***Adjust the dose of caffeine citrate weekly** (on a fixed day) based on change in body weight.*
- *Use birth weight less than 1500 grams for eligibility for caffeine citrate when the baby is over 4 days old if gestational age is not available.*
- *****Contraindications to enteral feeding,** surgical complications such as; tracheal-esophageal fistula, necrotizing enterocolitis, and intestinal obstruction.*
- ****** Clinician may continue with caffeine citrate 5mg/kg if the apnoea episode is associated with hypoglycemia or hypothermia***