MANAGEMENT OF THE COLLAPSED NEONATE

INITIAL RESUSCITATION IS GENERIC ABCD+D(Duct)

Use a 2222 paediatric call to gather the team with the skills for advanced resuscitation AND call SORT as soon as possible: 02380 775502

APPLY CONTINUOUS MONITORING: *SpO_2 & BP ON RIGHT ARM (PRE-DUCTAL), ECG*

Airway & Breathing	○ Oxygen with reservoir bag *OR* use Ayres T-piece for CPAP & BMV ▪ **DO NOT LIMIT OXYGEN DURING INITIAL PHASE OF RESUSCITATION**
Circulation	○ IV or IO access + venous gas ○ If shocked use 5mls/kg isotonic crystalloid boluses, titrated to heart rate & BP ▪ ***Stop if deterioration in shock, hypoxia or signs of heart failure (liver edge)*** ○ Use 0.5 to 1ml boluses of adrenaline *(**diluted** as per the SORT drug calculator)* for profound hypotension/shock, titrated to pulse volume & BP ○ Give Cefotaxime (50mg/kg) & Amoxicillin (60mg/kg)* ○ IF HR>200 consider SVT *(see arrhythmia guideline)* and consider adenosine trial
Disability	○ Check blood sugar, ammonia and correct hypoglycaemia** ○ Treat seizures*** and look for signs of raised ICP or focal neurology
Duct (PDA)	○ ***Start*** Dinoprostone at 50ng/kg/min if weak/absent femoral pulses ***or*** hypoxaemia/shock persist

REASSESSMENT:

Evidence of persistent pre-ductal hypoxaemia, severe respiratory distress, apnoea, shock, ongoing seizures or raised intracranial pressure?

IF YES: INTUBATE and VENTILATE (using Ketamine & Rocuronium) and update SORT

PERSISTENT HYPOXAEMIA: PREDUCTAL SpO_2< 75% in FiO_2 1

Low pulmonary blood flow (PPHN/anatomical) ***OR*** TGA ***OR*** primary respiratory pathology:

Speak to SORT Consultant

1. **FiO_2 = 1**
2. **$PaCO_2$ = 4-4.5kPa**
3. **Increase Dinoprostone (max 100ng/kg/min)**
4. **SORT [nitric oxide OR *on-site* septostomy]**

PERSISTENT SHOCK: HYPOTENSION OR LACTATE > 4

5mls/kg fluid boluses ***only*** if responsive +
0.5-1ml boluses of dilute adrenaline prn:

1. **PERIPHERAL ADRENALINE (start 0.1mcg/kg/min)**
2. **CALCIUM GLUCONATE 10% (0.5mls/kg) bolus**

If central access (or IO line):

3. **ADD NORADRENALINE (start 0.05mcg/kg/min)**
4. **Consider HYDROCORTISONE (2.5mg/kg)**

Only consider reducing FiO_2 if preductal SpO_2 >75% and cyanotic congenital heart disease is suspected

Broad Differential: Sepsis, Cardiac, Abuse, Metabolic, Seizures(SCAMS)

***SEPSIS:**
Add aciclovir if encephalitis or <2wks/coagulopathic/deranged LFTs/shocked/maternal risk factors *(low threshold)*

****HYPOGLYCAEMIA:**
10% dextrose 2mls/kg &
8 mg/kg/min glucose with maintenance. Blood ketones + metabolic screen + consider steroid deficiency

*****SEIZURES/COMA:**
Metabolic screen/***ammonia***, consider CAH/steroid deficiency, consider CT head, remember NAI (check Hb)

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