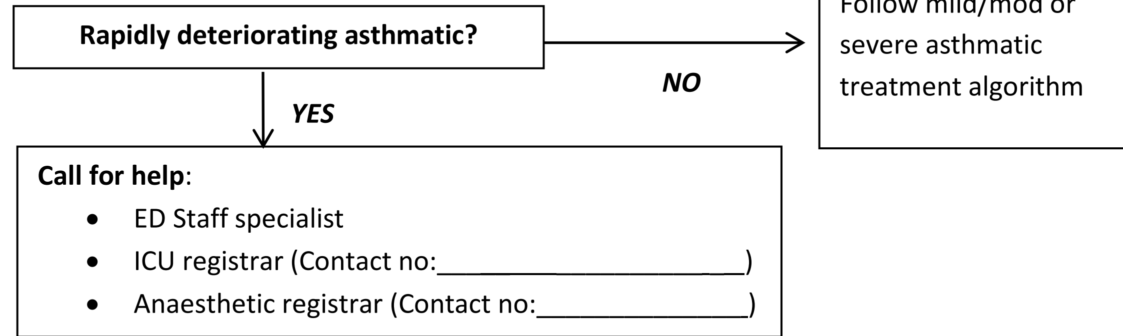
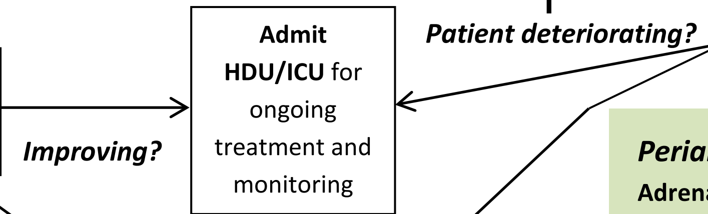
Emergency Department Flowchart for the Management of Life Threatening Asthma



BIPAP Settings (guidelines only):
Fi02 1.0, IPAP 10, EPAP 5
Urgent VBG



Consider adrenaline IV infusion

BIPAP not tolerated or patient deteriorating and on maximal medical therapy?

Intubate and ventilate
RSI in position of comfort then lay flat.
Induction with Ketamine 2mg/kg IV
Paralyse with Suxamethonium 1.5mg/kg IV
Optimally fluid load, anticipate need for ALS
Maintenance of sedation and paralysis
Propofol infusion
Rocuronium 50mg IV
Admit ICU

Monitor & treat:

Salbutamol side effects
- Hypokalaemia
- Lactic acidosis
- Tachyarryhthmias (rare if given $MgSO_4$ prior)

Magnesium side effects
- Flushing
- Hypotension & respiratory depression (rare in doses advised)

Ventilator Settings (guidelines only):
SIMV – volume control, FiO2 1.0, RR 8, TV 6-8mL/kg (ideal body weight), PEEP 0-5cm H20, I:E ratio 1:4, plateau pressure <30 cmH2O

Periarrest

Adrenaline:
0.5ml (500mcg) of 1:1000 IM
OR
5mL (500mcg) of 1:10,000 IV given slowly from a minijet
- Consider adrenaline infusion

Presents in cardiac arrest

- Start ALS
- Intubate and ventilate
- Medical treatments 1-4
- Consider adrenaline infusion post ROSC (if not already started)
- Investigate for pneumothorax

Deteriorates on ventilator

- Immediately disconnect ventilator & allow expiration
- Attach bag at 15L/min O_2 & gently ventilate
- Assess ***MASH*** & ***DOPES***
- Treat reversible causes
- Consider ECMO in consultation with Intensivist / Anaesthetist.

MASH: **M**ovement of chest, **A**rterial sats, **S**kin colour, **H**aemodynamic stability

DOPES: **D**isplacement or **O**bstruction of ETT, **P**atient factors (inadequate sedation/paralysis, pneumothorax, bronchospasm), **E**quipment (ventilator problems), breath **S**tacking

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