

Hypertension

v1.1

Hypertension is most commonly related to sedation and/or analgesia. The commonest pathological cause is a neurosurgical crisis

START: IMMEDIATELY NOTIFY DRIVER, STOP SAFELY

1 Immediate actions

- Follow Key Basic Plan.
- Recheck blood pressure, confirm correct NIBP cuff size, confirm arterial line transducer location appropriate
- If pregnant, see Hypertension in Pregnancy EAC

2 Breathing

- Exclude **hypoxia** and **hypercarbia** as causes
- Assess for high airway pressure

3 Circulation

- Check rate, rhythm, perfusion

4 Drugs

- Optimise sedation and analgesia
- Consider additional muscle relaxation

5 Consider potential causes (Box B)

- Treat accordingly

6 Consider temporising drug (Box C) if problem not resolving

- Patient may require multiple agents

Box A: CRITICAL CHANGES

- If problem worsens significantly, or a new problem arises, go back to **START** of Key Basic Plan
- If Transfer Practitioner or Transfer Doctor transfer, contact Remote Duty Consultant
- Consider contacting Leadership SPOC for support, if required

Box B: POTENTIAL CAUSES

- Inadequate sedation / analgesia
- Inadequate neuromuscular blockade
- Consider whether you could have made a drug error
- Medical causes:
 - Raised intracranial pressure (→ EAC)
 - Seizure (→ EAC)
 - Serotonin syndrome
- Distended bladder
- Omission of usual antihypertensives

Box C: TEMPORISING DRUGS FOR HYPERTENSION

- Alfentanil (0.5-1mg / 0.5-1ml)
- Fentanyl (50-100mcg / 0.5-1ml)
- Propofol bolus (depending upon patient, 10-20mg / 1-2ml 1% or 0.5-1ml 2%)
- Labetalol 0.25mg/kg (12.5-25mg / 2.5-5ml); repeat as necessary
- Esmolol 0.5mg/kg over 30 seconds; follow with infusion of 0.3mg/kg/min
- Glyceryl trinitrate 2-20ml/hr of 1mg/ml solution