

Care of the patient post Abdominal Aortic Aneurysm repair

1. Monitoring and observations

Routine HDU post operative observations with:

5-lead ECG monitoring (leads II and V5 to improve detection of myocardial ischaemia)

Check circulation to feet to detect ischaemia from distal emboli and sensation and movement of lower limbs.

Check abdominal (and groin) wounds with routine observations.

2. Investigations

On admission to HDU check FBC, Coag, U&Es, ABG, 12 lead ECG & CXR

Consider transfusion if HB below 80g/dl unless condition merits transfusion at higher levels e.g. IHD

APTT should return to less than 1.5 times normal value within a few hours of surgery

Platelets not normally given unless count below 80 or patient actively bleeding

Daily Investigations

FBC, Coag, U&Es, LFTs (and ABG if arterial line is still in place) and 12 lead ECG

3. Treatment

- IV Fluids

Crystalloid 100 ml /h as alternate bags of Hartmann's solution and dextrose 5 % with K⁺ 20 mmol.

Omit potassium if renal failure present

Give additional colloid if hypovolaemic and consider transfusion if HB below 80g/dl.

- Oral Intake

If tolerated, oral intake is permitted as specified in the postoperative instructions and/or on the back of the HDU chart. e.g. Day of surgery - free oral fluids. Day after surgery - light diet.

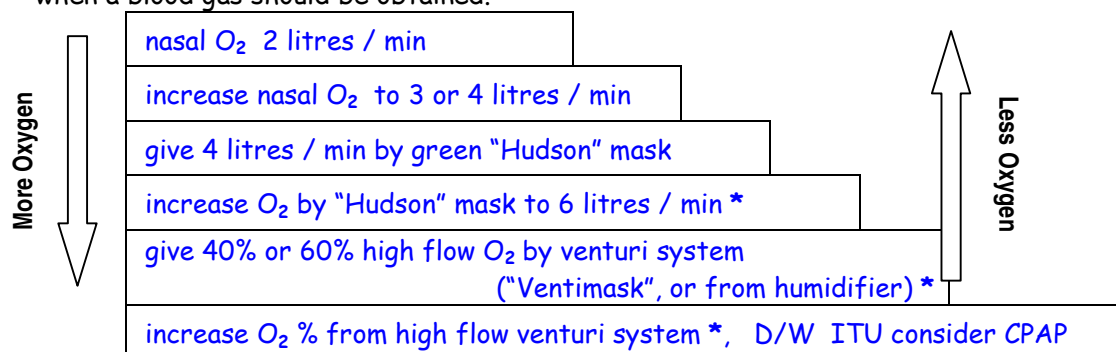
- Bowel function

Epidural analgesia with local anaesthetic drugs increases bowel motility and can cause diarrhoea.

Exclude other causes, i.e. bowel ischaemia/*Clostridium difficile* infection. Consider Loperamide.

- Oxygen therapy

Titrate oxygen to achieve SpO₂ between 93 to 97% following chart below. Nasal cannulae are generally better tolerated than facemasks. Use SpO₂ readings to adjust oxygen levels unless readings inaccurate or there are concerns about rising CO₂ /deteriorating respiratory condition when a blood gas should be obtained.



Ward 116 Royal Infirmary of Edinburgh - Guideline

- **Respiratory therapy**

All patients will be reviewed by the HDU physiotherapy team. Positioning, breathing exercises, humidification /nebuliser therapy and staged mobility will be used to prevent minimise reduction of lung volume, secretion retention, hypoxaemia and increased work of breathing

- **Pain management**

Give regular paracetamol (orally or PR). Do not give NASIDS within 48-72 hours of surgery. Monitor epidural following HDU policies. Common epidural mixture is local anaesthetic with an opioid such as fentanyl and/or ketamine. Follow Pain Team guidance. Epidural is usually weaned on second morning after surgery and replaced with standard PCA with morphine (2mg per ml, 1mg bolus, five minute lock out)

Continue CVP & arterial monitoring until epidural discontinued to allow early identification of pulmonary oedema secondary to removal of peripheral vasodilatation. Do not omit anticoagulant to remove epidural catheter- follow guidelines re timing of doses.

- Monitor for post op confusion and agitation and follow protocol

- **Wound Care**

If standard Mepore dressing leave intact for at least 48 hours. Change if any strike-through. Observe for haematoma formation & signs of infection. If blue swabs & Tegaderm leave for 5 days provided dressing remains intact, change if strike-through or seepage and inform medical staff.

4. Drug therapy

- Most cardiac drugs are continued up to the time of surgery and given postoperatively if the patient is able to take oral drugs - most patients are. Do not omit beta blockers unless BP or heart rate too low. Give IV if unable to take orally. Consider omitting ACE inhibitors/ anti hypertensives to reduce risk of post op hypotension.
- Prescribe prophylactic anticoagulation according to unit guidelines.
- Cefuroxime 750 mg is given in theatre at the start of surgery (and repeated if surgery is prolonged or the blood loss large). Two postoperative doses of 750 mg are given at approximately 8 and 16 hours after the dose given in theatre. If there is clinical suspicion of a chest infection after surgery, sputum should be sent for culture, a chest x-ray requested and an antibiotic prescribed e.g. intravenous co-amoxiclav 1.2 g three times daily.

5. Discharge from HDU

- Remove invasive monitoring lines before discharge. Ensure patent peripheral access
- Uncomplicated cases usually return to parent ward 36-48 hours post op.