Anaesthesia for Robotic Cystectomy

April 2017

Pre-operative counselling on day of surgery	During the anaesthetic consultation on the day of surgery please state the following to the patient: 'That the patient is part of an enhanced recovery programme designed to reduce complications and shorten hospital stay.' 'The anaesthetic is designed specifically to provide good pain relief, prevent nausea and allow them to be mobilising and drinking as soon as possible after the operation.' 'On return to the ward they will be fit and safe enough to sit out of bed.'
Pre-operative oral fluids prescribed	If the surgery is going to be greater than 2 hours away prescribe oral water on the drug chart. If the patient is fasted within the rule 'clear fluid up to 2 hours before' they should arrive for theatre euvolaemic.

Induction	As per Anaesthetist preference but consider:
	
	- 0.25-0.5mg/kg of ketamine iv unless contraindicated.
	  o Analgesic (NMDA antagonist)
	  o Reduced opioid use in first 24 hours
	  o Co-induction agent reducing induction related hypotension
	- 2mg/kg iv lignocaine bolus followed by infusion 2mg/kg/hour
	  o Opioid sparing analgesic with potential to reduce ileus
	
	<u>Pre-induction low dose Sub-Arachnoid Block as per Analgesia section below</u>

Relaxation	A combination of remifentanil and intermittent boluses of muscle relaxation will be adequate.

Positioning	Patients are in Lloyd Davies and head down (approx. 20 degrees) with arms at the patient's sides. Agree at team brief that head down will be levelled off for 15 minutes if console time (time for robotic surgery) exceeds 4 hours (if BMI >30 or GLAUCOMA) or 5 hours (if no contraindication).
Intraoperative Fluids	Patient should be euvolaemic. Give maintenance fluid during operation equivalent to 4ml/kg/hr (70kg man in 2 hours = 560ml). If bleeding replace using goal directed therapy, measuring PPV/SVV and noting response.
Intraoperative blood pressure management	Monitor BP with invasive arterial blood pressure. **Maintain systolic within 20% of pre-op reading.** Hypotension on induction and during maintenance is primarily the result of vasodilation, negative inotropy and postural change not intravascular depletion. Maintain BP with a vasopressor infusion (-e.g. Phenylephrine or metaraminol) and boluses of vasopressor (phenylephrine, metaraminol, ephedrine). Consider: 10mg phenylephrine in 50ml commenced at 10ml/hr immediately before induction and titrated to effect.
Intra- and post-operative analgesia	<u>Pre-induction Spinal.</u> Minimise local anaesthesia used to minimise post-operative motor block and hypotension. 2ml 0.5% Heavy Marcain and 300mcg-500mcg preservative free morphine **Complete PCA chart indicating intrathecal opioid given.** (This will also help track PACU and post-operative pain scores and nausea) <u>Intra-operative Paracetamol</u> Consider bolus 2g iv if no significant liver or renal disease and weight > 50kg. Omit next dose if within 6 hours of administration <u>Intra-operative Paracoxib</u> If pre-op eGFR >70 and no other contra-indications <u>Bilateral TAP (Surgeon) immediately before or after closure</u> To contribute to post-operative analgesia (reduce/ avoid systemic opioids) 2 x 20ml 0.25% Levobupivacaine

	<u>Post-operative analgesia</u> **PACU** 'Rescue analgesia' – Morphine/Oxycodone 1-10mg iv **Ward** Paracetamol 1g iv/po qds Parcoxib 40mg iv bd for 2 days Tramadol 50-100mg iv/po qds Oromorph/Oxycodone 5 -10mg 2 hourly prn Avoid PCA unless analgesia not adequate after 10mg iv morphine/oxycodone in PACU
PONV	Dexamethasone 6.6mg on induction Ondansetron 8 mg 30 minutes prior to emergence **PACU/Ward** Ondansetron 4mg tds max 12mg in 24 hours Cyclizine 50mg tds
Post-operative fluids	Prescribe 1ml/kg/hr for 12 hours and 1 x 250ml bolus stat if systolic BP 20% below normal.
GI tract + Nutrition	Ensure 1 tds Metoclopramide 10mg iv tds Ranitidine 150mg po bd Senna 2 tablets bd
Anaesthetist to PACU and PACU to ward handover	Please document: 1 hour after returning to the ward the patient is safe to sit out of bed with assistance (Check BP before mobilising). Please sit patient out of bed for 1-2 hours.

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