Anaesthesia for Laparoscopic colorectal surgery

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 design 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 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	**<u>As per Anaesthetist preference but consider</u>**:
	
	- 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 (and followed by infusion 2mg/kg/hour if anaesthetist happy)
	  o Opioid sparing analgesic with potential to reduce ileus
	
	<u>Pre-induction low dose Sub-Arachnoid Block as per Analgesia section below</u>

Maintenance	Oxygen/air/Desflurane or TIVA Avoid remifentanil infusions <u>if possible</u> and maintain relaxation with intermittent NDMR. Spinal anaesthesia, ketamine and lignocaine should provide adequate analgesia without hyperalgesia or respiratory depression on emergence.
Intraoperative Fluids	Patient should be euvolaemic. Give maintenance fluid during operation with overall total of 4ml/kg/hr. If bleeding replace using goal directed therapy measuring PPV/SVV and noting response
Intraoperative blood pressure management	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 and boluses (phenylephrine or metraminol). 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. Consider: 2ml 0.5% Heavy Marcain and 200- 300mcg preservative free morphine. **Complete PCA chart indicating intrathecal opioid given.** (This will also help track PACU and post-operative pain scores and nausea) <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>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>Post-operative analgesia</u> **PACU** 'Rescue analgesia' – Morphine/Oxycodone 1-10mg iv **Ward** Paracetamol 1g iv/po qds 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
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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