

## AB026. 170. Laparoscopic guided regional analgesia (LaGRA) reduces post-operative pain after laparoscopic cholecystectomy—a randomised, controlled trial

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**Background:** Successful day case laparoscopic cholecystectomy (LC) relies on adequate analgesia with judicious opiate use. Ultrasound guided blockade of the abdominal wall nerves is useful but time consuming and requires specialist skillset and equipment. This study investigated the effectiveness of surgeon administered, laparoscopic guided, regional anaesthesia technique.

**Methods:** A prospective, double-blind, randomised controlled trial was performed. Consenting patients undergoing LC were randomised, to a laparoscopic guided 2-point blockade (subcostal transversus abdominis plane and rectus sheath) using either Chirocaine® 2.5 mg/mL (LaGRA)

or 0.9% Saline (Placebo) after specimen extraction. Primary endpoints were pain score at 1, 2 and 6 hours post-operatively. Secondary endpoints were analgesic/anti-emetic usage and day case and re-admission rates. Data were analysed using GraphPad Prism (V7).

**Results:** Seventy-six out of 115 eligible patients (power calculation N=76) were randomised (28% male; 72% female). Forty-two patients (55%) were randomised to LaGRA and 34 (45%) to placebo. There was no statistical demographic difference between groups ( $P=0.195$ , Chi2 test). Mean pain scores at 1 hour were lower in the LaGRA group, although this did not reach significance ( $P=0.09$ ). Pain scores 2 and 6 hours were significantly lower in the LaGRA group ( $P<0.05$ ), (unpaired t-test). Post-operative opiate and anti-emetic use and discharge and readmission rates were similar.

**Conclusions:** LaGRA results in significantly less pain in patients undergoing LC which should reduce intraoperative opiate use in the unblinded setting. This effective technique, which has a short learning curve and minimal intraoperative delay, is now a routine step in our day case LC pathway.

**Keywords:** Laparoscopic; cholecystectomy; day-case; surgery

doi: 10.21037/map.2018.AB026

**Cite this abstract as:** Joyce DP, Craig R, Bernard K, Gamal A, Mansoor N, Mansoor S, Toomey DP. Laparoscopic guided regional analgesia (LaGRA) reduces post-operative pain after laparoscopic cholecystectomy—a randomised, controlled trial. *Mesentery Peritoneum* 2018;2:AB026. doi: 10.21037/map.2018.AB026