AB105. 91. Double blind randomised control trial to assess the efficacy of pre-insufflation intraperitoneal local anaesthetic infiltration in laparoscopic surgery (ILLS TRIAL)

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Background: Laparoscopic surgery has gained popularity and acceptance across the world, but as yet there is no consensus on optimum pain control modalities peri-operatively. Selected randomised control trials have demonstrated improved pain control for laparotomy over laparoscopic surgeries. In particular, abdominal and shoulder pain remains a challenge in laparoscopic surgery. There is a paucity of conclusive data on the effectiveness of intraperitoneal local anaesthetic infiltration for many laparoscopic surgeries. The aim of this study is to compare the efficacy of pre-insufflation intraperitoneal local anaesthetic infiltration compared to local wound Infiltration.

Methods: This randomised controlled trial is a joint venture between the surgical and gynaecological departments at St. Luke's General Hospital Kilkenny. This study will include 50 patients in each group. After standardisation of anaesthetic technique and other analgesia protocols, this study will compare the effects of pre-insufflation administration of local anaesthetic with local wound infiltration and placebo. All elective and emergent laparoscopic surgeries will be included except perforated viscus or extensive peritoneal contamination. The primary endpoints will include validated visual assessment scores at 2, 4 and 6 hours post-operatively in addition to supplementary analgesia requirements. Bupivacaine 0.25% at standardised dosages will be used for intraperitoneal infiltration through the first Hassan port. Preoperative pain scores, extent of IV and volatile anaesthetic agent administration will also be recorded. Interim results will be presented.

Results: Three groups are analysed for their postoperative pain score. Group A having local anaesthetics infiltration at wound needs more and stronger analgesia with pain score mean 3.3 at 2 hours, 4.06 at 4 hours and 4.66 at 6 hours with SD of 2.5, 1.96 and 2.15 respectively, Group B having intra-peritoneal local anaesthetics infiltration needs normal analgesia with pain score of 2.12 at 2 hours, 3.37 at 4 hours and 2 at 6 hours with SD of 2.16, 2.44 and 1.41. Group C placebo needs more frequent and early analgesia.

Conclusions: Results showed that intraperitoneal local anaesthetics infiltration decrease the analgesia requirement with low pain score mainly at 6 hours after operation.

Keywords: Intraperitoneal analgesia; local wound infiltration; post op pain

doi: 10.21037/map.2018.AB105

Cite this abstract as: Javid MS, Usman N, Balfe P, Awan F, Elfaedy O, Pretorius R, Sullivan RO. Double blind randomised control trial to assess the efficacy of pre-insufflation intraperitoneal local anaesthetic infiltration in laparoscopic surgery (ILLS TRIAL). Mesentery Peritoneum 2018;2:AB105. doi: 10.21037/map.2018.AB105