

ABSTRACT 15

Review of Continuous Wound Infusion Compared to Epidural Analgesia for Post-Operative Pain After Laparotomy In Hospital Sultanah Aminah Johor Bahru

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Objectives: Post-operative pain remains a major concern and managing it optimally is core responsibility for Acute Pain Service (APS). Studies to demonstrate clear benefit of one analgesia modality over another are limited. The aim of this study was to compare analgesic efficacy of epidural analgesia with a relatively new method of analgesia, continuous wound infusion (CWI) for post-operative pain management after laparotomy.

Methods: A retrospective observational study was performed to evaluate post-operative pain, length of stay and rescue analgesia requirements of 177 patients who underwent laparotomy between the year 2020 and 2021 in Hospital Sultanah Aminah Johor Bahru. Data from peri-anaesthetic care records, Enhanced Recovery After Surgery (ERAS) Audit form and medical records were collected and analysed. **Results:** 85 patients received continuous epidural analgesia (CEA) and 92 patients received CWI. CEA group was better in pain control at rest ($p=0.05$) and on movement ($P=0.007$). CEA group also had higher percentage of patients with well controlled pain (pain score $<4/10$) at rest (92.9% vs. 88%), and on movement (72.3% vs. 48.9%). CWI group had a median length of stay of 4 days and showed better effect of reducing length of stay ($p=0.01$). CEA group had a tendency towards longer admission days (>4 days) compared CWI. **Conclusions:** CEA significantly produced lower pain scores after laparotomy surgery compared to CWI. Nevertheless, CWI had as role as an alternative in patients whom epidural is contraindicated or not planned in advance, while providing shorter hospital stay.

Keywords: Postoperative analgesia, epidural, continuous wound infusion

International Journal of Human and Health Sciences Supplementary Issue 02, 2024

DOI: <http://dx.doi.org/10.31344/ijhhs.v8i40.759>

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