

**5. Judul Artikel : Patient-Controlled Epidural Analgesia (PCEA) Versus Intravenous Patient-Controlled Analgesia (PCA) for Acute Postoperative Pain in Minimally Invasive Abdominal Surgeries : A Systematic Review; **Bukti korespondensi :****

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**Abstract**

To reduce acute postoperative pain in major abdominal surgeries, patient-controlled epidural analgesia (PCEA) has been considered the gold standard. However, in recent years, its safety is being questioned as despite its low incidence rate of serious complications, these complications are often very dangerous nevertheless. On the other hand, for minimally invasive surgeries (MIS) with estimated reduced postoperative pain, intravenous patient-controlled analgesia (IV PCA) is seen as a possibly more effective alternative due to the autonomy and satisfaction given to the patient. A systematic review of previous RCTs and clinical trials of patients undergoing abdominal MIS was done to compare acute postoperative pain, length of hospital stay, time to first flatus, and incidence of postoperative nausea and vomiting (PONV) between PCEA and IV PCA. During movement, pain scores consistently showed a lower pain score in the PCEA group rather than the IV PCA group, because epidural analgesia with local anesthetics blocks non-nociceptive stimuli on top of nociceptive stimuli. Only 1 study showed > 0.1 day difference in length of stay after surgery. The IV PCA group took a longer time to first flatus and showed a higher percentage of patients experiencing PONV than in the PCEA group. This review showed that incidence of severe complications in PCEA proves to be low and is therefore the best method to reduce postoperative pain in abdominal MIS.

**Others Information**

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