

Comparison of the effectiveness of fentanyl versus morphine for severe postoperative pain management: A randomized, double blind, clinical trial

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Intravenous rescue analgesia in the postoperative anesthesia care unit (PACU) is the most effective method for reducing postoperative pain (POP) when perioperative multimodal analgesia fails to control it. Appropriate analgesia during these first postoperative hours may prevent morbidity associated with pain. Aim of study was to compare the effectiveness of intravenous morphine versus fentanyl in the PACU for reducing severe POP. A randomized, prospective, double blind trial that included patients with severe POP measured with visual analogue scale (VAS) in the PACU was done. Rescue analgesia was performed in group M with 0.1mg/kg morphine and in group F with 1mcg/kg of fentanyl every 5 minutes intravenously until pain was reduced from severe to mild (VAS<4). 30 patients were included in both groups. There were no significant differences in the percentage of patients with reduction of severe POP to mild 5 minutes after the injection of morphine or fentanyl, or in the subsequent rescue analgesia intervals ($p>0.05$). Similarly, there were no significant differences in mean VAS (95% CI) in morphine or fentanyl groups beginning 5minutes after the first analgesic dose ($p>0.05$) between the groups. There were no significant differences in side effects such as respiratory depression, nausea, vomiting or pruritus ($p=1.0$). There was a high satisfaction in both groups ($p>0.05$). Morphine and fentanyl were equally effective in treating severe POP after 5min and following intervals after rescue analgesia was initiated, during 25minutes at PACU, with no differences in efficacy or adverse effects between groups Register # NCT02145975 clinicaltrials.gov, prospective.

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