

Comparison between Infusion Pumps: Fentanyl/Ketamine and Fentanyl/Paracetamol in Pain Control Following Tight and Leg Surgeries

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Abstract : Background: Adjuvants such as ketamine, promethazine, and paracetamol could bring up patient's satisfaction and control the harmful effects of opioids besides lessening their needed doses, as seen by the fentanyl/paracetamol and fentanyl/ketamine combination before. The current study is headed to compare paracetamol and ketamine, in addition to fentanyl, applied by infusion pumps in order to pain relief following major surgery. Materials and Methods: Through a double-blinded, randomized clinical trial, patients between 18 and 65 with elective surgery for tight or leg fractures with ASA Class 1 and 2 referred to a university hospital in Arak, a town in the central region of Iran, were recruited and used infusion pump for their postoperative pain control. The participants were divided into cases and controls regarding using ketamine/fentanyl (KF) or paracetamol/fentanyl (PF) infusion pumps. Results: The mean pain score was a total of 3.87, with the highest value in KF (5.06) and the lowest in PF (4.50) immediately after finishing the surgery and getting conscious when started using an infusion pump. There was no statistical difference between the groups in this regard. Concerning the side effects of the applied medications, blood pressure and heart rate had no differences comparing the groups. Conclusion: This study showed that paracetamol used in infusion pumps could be brilliant in pain control after major surgeries like those done in lower extremities and joint replacement while lessening opioid use. Although paracetamol was more effective than ketamine in the current trial, more qualified studies at bigger sizes and in other fields of surgery besides orthopedic ones would be useful to support the effects if applicable

Keywords : infusion pump, Ketamine, Paracetamol, pain

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