

Abstract

Comparission of the effecttiveness of paracetamol with lidocaine in prevention of the pain of the injection of propofol

Background & Objective: Pain occurrence during propofol anesthesia induction is a common problem (between 28 to 90 percent) and can be very distressing to the patients. This study was conducted for compression of the effectiveness of paracetamol with lidocaine in prevention of the pain of the injection of propofol.

Methods: In this double-blind randomized clinical trial, 200 patients who were candidates for surgeries with general anesthesia with propofol were divided into 4 groups of 50 patients. In group I, II, III, and IV, 40 ml lidocaine in 5 ml normal saline, 2 mg/kg paracetamol in 5 ml normal saline, 2 mg/kg paracetamol in 20 ml normal saline, and 5 ml normal saline were injected respectively. Then, 25 percent of calculated dose of propofol (2.5 mg/kg) was injected with 0.5 ml/sec rate and patients' pain were assessed according to VRS scale from 0 to 3. Then general anesthesia was inducted.

Results: The four study groups did not show significant difference regarding gender distribution ($p=0.098$), mean age ($p=0.230$), ASA class ($p=0.606$), amount of consumed propofol ($P=0.133$), and pain onset time ($p=0.573$). Pain level was significantly lower in lidocaine group ($p=0.001$), paracetamol in 5 ml normal saline group ($p=0.036$), and paracetamol in 20 ml normal saline ($p=0.009$) compared with control group; but, there was no significant difference in reduction of pain on injection of propofol among these three groups ($p>0.05$).

Conclusion: Both 2 mg/kg paracetamol in 5 ml normal saline and 2 mg/kg paracetamol in 20 ml normal saline are as effective as 40 mg lidocaine in 5 ml normal saline in reduction of pain on injection of propofol.

Key words: Paracetamol, lidocaine, pain of the injection of propofol.