

**Comparative study on the effectiveness of acetaminophen and diclofenac pretreatment in the relief of acute pain after out-patient surgery.**

**ABSTRACT**

The aim of this study is to evaluate and quantify the pain relief after minor surgery when certain analgesics are used before surgery. Double blind study was conducted on 300 outpatient surgery patients who were allocated into two groups. Before surgery, 100 mg of acetaminophen was given to one group and 75 mg of diclofenac to the other one. The pain level after surgery was measured and recorded in both groups by a ruler 10 cm using the Visual Analog Scale (VAS) method at intervals of 30 min, 1, 2 and 4 h after surgery. Also for the patients with VAS more than 7, it was recommended to administer IM 50-100 mg tramadol ampoule. Mean VAS in acetaminophen group was  $5.28 \pm 1.17$ ,  $5.17 \pm 1.04$ ,  $4.47 \pm 1.05$ ,  $3.97 \pm 1.09$  while, in diclofenac group was  $5.09 \pm 1.10$ ,  $5.10 \pm 1.02$ ,  $4.27 \pm 1.05$  and  $3.73 \pm 1.07$  at 0.5, 1, 2 and 4 h after surgery, respectively. In fact there was no significant difference in pain level after surgery between acetaminophen and diclofenac groups ( $p > 0.05$ ). Moreover, there was no significant difference in the effectiveness of pain relief induced by administering tramadol analgesic ampoule along with acetaminophen and diclofenac groups ( $p > 0.05$ ). Acetaminophen results in as effective pain relief as diclofenac with or without tramadol analgesic. Due to minimal side effects of acetaminophen when compared to other analgesics, like diclofenac, it is recommended to use acetaminophen for safe and efficient pain relief after outpatients surgeries.

**Keyword:** Acetaminophen; Post-surgical pain; Diclofenac; Non-steroidal analgesics.