

# Achieving Most Effective Analgesia in Pain Control Post Appendectomy patients on first and second post-operative day

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## ABSTRACT

Present study clinically examined the 64 patients after appendectomy. For the management of post-operative pain opioid and non-opioid analgesics were given to the patients in injectable form. The findings of this study were very realistic and it has been seen that the efficacy of Nalbuphine was excellent than diclofenac sodium and Tramadol. Nalbuphine, Diclofenac Sodium, Tramadol were given to the number of patients (25.01±0.00, 25.10±1.01, 14.10±2.21) for the duration of (3.1±1.10, 3.1±1.10, 3.1±1.10) respectively.

**Keywords:** Pain control, analgesia, appendectomy

## INTRODUCTION

Anatomically appendix is located at ileocaecal junction. Exact function of appendix is still unknown however it is considered that it plays an important role in recovering from diarrhea, inflammation and infections of the small and large intestines<sup>1</sup>. Appendicitis is an inflammatory condition of the appendix and in this condition a surgical process i.e., appendectomy is adopted for its removal from the body. Human body can function properly without an appendix. In case of appendicitis swollen appendix may burst and spread bacteria into the other organs of the body cavity which is very dangerous and life-threatening<sup>3</sup>. When the appendix becomes inflamed and swollen, bacteria can quickly multiply inside the organ and lead to the formation of pus [8]. Walking or coughing can make the pain worse. Nausea, vomiting, and diarrhea are very common indications of appendicitis. Appendectomy is the standard treatment for appendicitis in which majority of the people show fast recovery without complications<sup>2</sup>.

Postoperative pain is an anticipated and temporary condition which may be of two to five days. The main cause of postoperative pain is due to burn excision or grafting procedures. Pain may increase from newly created wounds at the site where skin is grafted because of any mishandling or any contamination infections [5]. The effective relief of pain after each surgery is most important for each patient. Postoperative Pain treated by using different analgesia depends upon the conditions and levels of complications. Pain absolutely changed the social behavior, gait, posture of an individual<sup>3</sup>. Most swine will become very reluctant to move when in pain and, if forced to move, will vocalize with even greater enthusiasm than they generally display. Opioid and non-opioid analgesics

both in injectable and oral form used for the treatment of postoperative pain<sup>6</sup>.

## MATERIALS AND METHODS

Present study was conducted at surgical unit-1, Allama Iqbal Memorial Teaching Hospital Sialkot. Total 64 patients with appendicitis were selected for this study and divided them into three groups i.e., group A, group B and group C. In group A and group B the numbers of patients were 25 in each one while 14 patients were in group C. After their appendectomy, different analgesics in injectable form were given to them for three days. Nalbuphine 0.1 mg/kg i.v, Diclofenac sodium 1.5 mg/kg i/m were injected to the patients of group A and group B respectively whereas Tramadol 1.0 mg/kg i/v was given to the patients of group C. The results were interoperated by SPSS software.

## RESULTS

There were no significant differences between the groups with respect to demographics and intraoperative data. Nalbuphine 0.1 mg/kg i.v was given to individuals of group A and its efficacy was excellent as compared to the individuals of other groups.

Table 1: Demographic Data

Parameters	Mean±SD	P value
Male	48.01±00.10	0.00
Female	18.01±00.20	0.00
Age	38.29±30.20	0.00
Weight	78.20±31.10	0.00
Duration of surgery (Min)	127.85±13.68	0.00

<0.005

Table 2: Analgesic Effects

Analgesic	Number of patients Mean±SD	Duration Mean±SD	Efficacy
Nalbuphine	25.01±0.00	3.1±1.10	Excellent
Diclofenac sodium	25.10±1.01	3.1±1.10	Good
Tramadol	14.10±2.21	3.1±1.10	Acceptable

<0.005

## DISCUSSION

The analgesic efficacy was considered significant if pulse rate and blood pressure changes were lesser than 20 % of baseline value<sup>6</sup>. Researchers were concluded from their studies that Pain has immunosuppressive effects and opioids analgesics may immunomodulate pain's relieving effects. Therefore analgesics provide relief in pain after surgical procedures<sup>7,8</sup>.

In the present study different analgesics were given to the patients of each group after appendectomy. Nalbuphine was given to the patients of group A (25.01±00), Diclofenac sodium was injected to the patients of group B (25.10±1.01). Tramadol was prescribed for the patients of group C (14.10±2.21). These analgesics were applied for the for the post-operative pain relief for duration of (3.1±1.10, 3.1±1.10, 3.1±1.10) respectively. Peak serum levels of these analgesics remain about six to eight hours. In this study both opioid and non-opioid analgesics were given to the patients and their efficacy is acceptable but results of Nalbuphine were excellent.

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