

To Compare the Degree of Postoperative Pain Between Laparoscopic and Lichtenstein Surgery of Inguinal Hernia

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ABSTRACT

Aim: To compare the degree of post operative pain between laparoscopic and Lichtenstein surgery of inguinal hernia.

Setting: Surgical department, DHQ teaching Hospital, Sargodha

Duration of study: March, 2017 to December, 2017.

Methodology: 100 patients fulfilling the inclusion criteria were included. They were divided into two groups A and B. The group A was with laparoscopic procedure and group B was with Lichtenstein's surgery.

Results: On 4th post operative week in Group A, 38% patients had mild pain, 12% patients had moderate pain and no patient with severe pain, while in group B, 36% patients had mild pain, and 32% patients had complaint of moderate pain and 12% patients had severe pain. On 8th post operative week in Group A, only 12% patients had mild pain while in group B, 36% patients had moderate pain and no patient with severe pain.

Conclusion: Laparoscopic repair is safe and has minimum post operative effects as compared to Lichtenstein procedure.

Keywords: Hernioplasty, Laparoscopic Repair, Lichtenstein's repair

INTRODUCTION

Lichtenstein repair is the most commonly used method in UK and is gold standard for inguinal hernia repair. The technique is simple, safe and effective for hernia repair.¹ After introduction of laparoscopic repair, there is reduction of post operative pain and patients are able to do activities in a better way.² Another benefit of laparoscopic method is that bilateral hernias may be done simultaneously without complication. Laparoscopic methods are effective in patients with recurrent hernia. Recurrence rates are 0.7% in open and 0.4% in Laparoscopic repair.³

METHODOLOGY

One hundred patients of inguinal hernia were included and divided into two groups (A and B), comprising 50 patients in each. Male >25 years of age and unilateral reducible direct /indirect inguinal hernia were included. Irreducible hernia, Strangulated hernia, H/o Past abdominal surgery, Diabetes Mellitus and Chronic liver disease were excluded. Patients were observed for postoperative pain on 4th and 8th weeks. The data was entered into SPSS version 17.

RESULTS

Detail of results is given in tables 1, 2 and Fig 1

Table 1: Comparison of post op pain at four week

Post op pain	Group A	Group B
Mild	19 (38%)	18 (36%)
Moderate	06 (12%)*	16 (32%)
Severe	00 (00%)	06 (12%)*
No pain	25 (50%)*	10 (20%)
Total subjects	50 (100%)	50 (100%)

P<0.01(HS)

A=Laparoscopic repair, B=Lichtenstein repair

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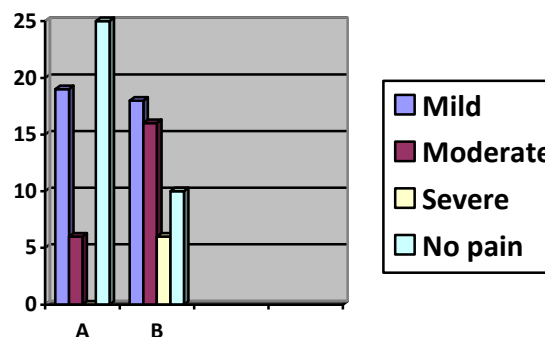
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Table 2: Comparison of post op pain at eight week

Post op pain	Group A	Group B
Mild	06 (12%)	18 (36%)*
Moderate	00(00%)	04 (08%)
Severe	00 (00%)	00 (00%)
No pain	44 (88%)*	28 (56%)
Total subjects	50 (100%)	50 (100%)

Statistical analysis: * p< 0.01 (HS)

Fig 1: Comparison of post op pain



DISCUSSION

In this study, on 4th post operative week in Group A, 38% patients had mild pain, 12% patients had moderate pain and no patient with severe pain, while in group B, 36% patients had mild pain, 32% patients had complaint of moderate pain and 12% patients had severe pain. On 8th post operative week in Group A, only 12% patients had mild pain while in group B, 36% patients had moderate pain and no patient with severe pain. So post operative pain is lower in group A as compared to group B and difference was highly significant statistically (p< 0.01). Memon and colleagues⁴ observed in their studies that patients who had laparoscopic repair discharged earlier with short duration of

post operative pain as compared to patients who had open repair.

In another study by McCormack et al⁵, it is found that laparoscopic method required long operation time as compared to open surgery and subjects who had laparoscopic surgery have less discomfort and returned to normal activity rapidly. They observed postoperative complications less frequently in Laparoscopic repair and visceral and vascular injuries occurred more frequently with laparoscopic repair. In this study, there are no major operative complications in both groups. These results are consistent with a study by Picazo et al⁶. In one study, subjects with laparoscopic repair have significantly less pain than those open repair⁷. Neumayer et al⁸ had observed less pain in the laparoscopic method. In another study by Moreno-Egea et al⁹, 300 patients with laparoscopic surgery reported 100% subjects of laparoscopic repair had no hospitalization.

CONCLUSION

Laparoscopic repair is superior to Lichtenstein surgery in term of postoperative pain.

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