

Outcome and Patient's Perception Following Laparoscopic Inguinal Hernia Repair

FAROOQ BUTT, M. NADEEM ASLAM, AYESHA BUTT

ABSTRACT

Background: Total Extraperitoneal (TEP) is a commonly used procedure for laparoscopic inguinal hernia repair (IHR). It is now a standard and being used for unilateral, bilateral and even recurrent IHR.

Aim: To determine the satisfaction and perception of our patients who have undergone TEP procedure.

Methods: This study was conducted at Allama Iqbal Memorial Trust Hospital, Gujranwala, over a period of 2 months from January, 2016 to March, 2016. Patients who had undergone TEP repair in last 5 years at our setup were selected. They were called for follow up visit. If they were from far flung areas and refused to come, they were interviewed at mobile phone. They were asked for postoperative outcome and satisfaction for procedure. We had tried to contact 124 patients, however, the response was available for 80 patients as remaining 44 patients had changed their contact numbers or their contact numbers were not accessible. Data were analysed using SPSS version 20.0.

Results: A total of 80 patients were included in this study. The mean age of patients was found to be 43.44 ± 14.73 years. Most of the respondents (92.5%) were male in this study. Sixteen patients (20%) told that they were having post-operative pain. Most of the respondents (56 of 80) had visited other surgeons also. The most common reason for it was found to be removal of stitches. Overall satisfaction with laparoscopic hernia repair was good as only 4 patients were unsatisfied after procedure. Our last question was "Will you recommend this procedure to other relatives and friends also". Majority of respondents (76 of 80) replied as yes to this question.

Conclusion: We may conclude that our patients' assessment of outcome following laparoscopic IHR supports our ongoing use of the technique. Also it shows that overall patients are happy and satisfied after TEP IHR.

Keywords: TEP; Inguinal Hernia; TAPP; Laparoscopy

INTRODUCTION

Inguinal Hernia repair (IHR) is one of the most commonly performed procedures in general surgery. The traditional way of doing IHR is the open Liechtenstein hernioplasty. However, since the introduction of minimal invasive surgery (MIS) or laparoscopy, its management has been changed¹. Since 1997, Total Extraperitoneal (TEP) laparoscopic inguinal hernia repair has been offered as standard to all patients presenting with primary, recurrent or bilateral inguinal hernia who are candidates for general anaesthesia^{2,3,4}.

The other procedure which is used for IHR in laparoscopy is Trans-abdominal Pre-Peritoneal (TAPP) repair. Both TAPP and TEP have their own pros and cons and the selection of either of these procedures is dependent on expertise of the surgeons. It all depends on which procedure operating surgeon is comfortable with⁵. Open hernia

repair is now reserved for patients whose fitness for general anaesthetic is in question, and for patients requiring re-operation for hernia recurrence following laparoscopic repair^{6,7,8}.

We set out to evaluate the long-term outcome of TEP laparoscopic inguinal hernia repair using patients' responses to a questionnaire carefully designed to elicit their perception. The main objective of the study was to determine perception and satisfaction of the patients following TEP repair.

MATERIALS AND METHODS

This cross-sectional study was conducted at Allama Iqbal Memorial Trust Hospital, Atawa Gujranwala, Lahore, over a period of 2 months from January, 2016 to March, 2016. Ethical committee approval was obtained from our ethical review board. The cohort of patients who underwent laparoscopic hernia repair between 2011 to 2015, over 5-years duration was selected from hospital record. A total of 124 patients underwent laparoscopic hernia repair during this five-year period. A questionnaire was designed and they were called for follow up visit. If they were

Department of Surgery, Services Institute of Medical Sciences, Lahore

Correspondence to Dr. Farooq Butt, Asstt. Prof. Surgery, Sialkot Medical College, Sialkot Email: hafizfarooqbutt@gmail.com Cell: 0322-8645500

from far flung areas and refused to come, the questionnaire was asked on mobile phone.

The categories assessed in the questionnaire were: previous inguinal hernia operation; postoperative time in weeks to return to normal activities; postoperative time in weeks to return to work; attendance to any other surgeon in the postoperative period; reason for attending other surgeon; postoperative pain; postoperative swelling; whether satisfied with the result of surgery; and whether the operation would be recommended to a friend or relative. We had tried to contact 124 patients, however, the response was available for 80 patients as remaining 44 patients had changed their contact numbers or their contact numbers were not accessible. Data were analysed using SPSS version 20.0.

RESULTS

A total of 80 patients were included in this study. The mean age of patients was found to be 43.44 ± 14.73 years. Most of the respondents (92.5%) were male in this study. Sixteen patients (20%) told that they were having post-operative pain. General questions regarding post-operative outcome are summarized in table 1.

Table 1: Post-operative course of patients in this study

	n
Time to return to normal activity	
1 week	9
2 weeks	11
3 weeks	5
4 weeks	40
>4 weeks	15
4 weeks	40
>4 weeks	15
Time to return to work	
1 week	5
2 weeks	9
3 weeks	5
4 weeks	28
>4 weeks	33
Postoperative pain	
Yes	16
No	64
Postoperative swelling	
Yes	6
No	74

Also they were asked about their visit to any other surgeon in post-operative period. Most of the respondents (56 of 80) had visited other surgeons also. The most common reason for it was found to be removal of stitches. The reasons for visiting other surgeons are given in figure 1.

Overall satisfaction with laparoscopic hernia repair was asked about and responses are shown in the figure 2. Our last question was "Will you recommend this procedure to other relatives and friends also". Majority of respondents (76 of 80) replied as yes to this question.

Fig. 1: Reasons for visit to other surgeons during post-operative period

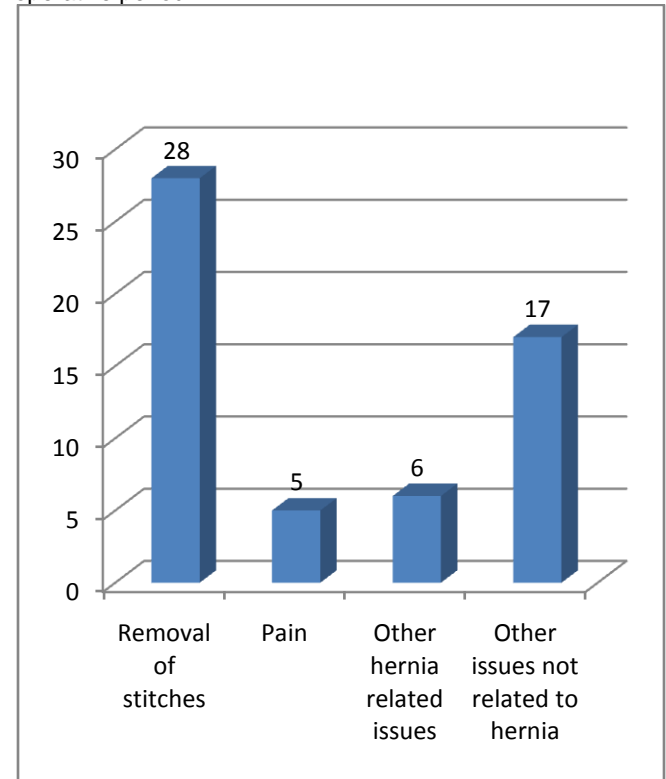
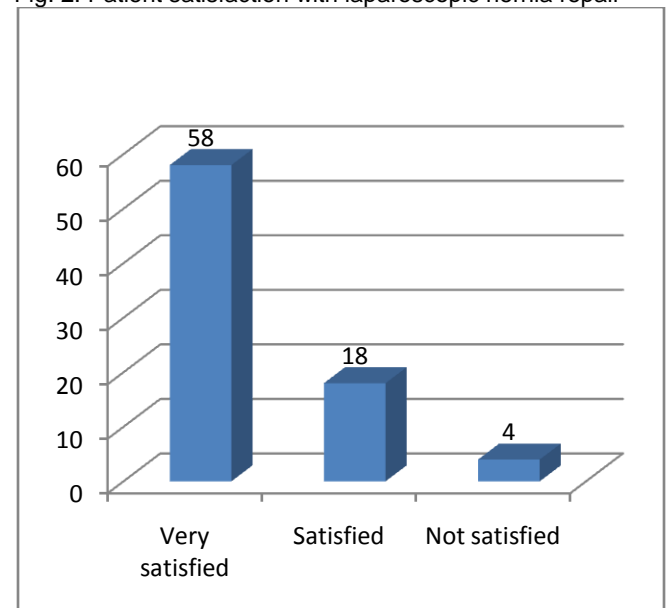


Fig. 2: Patient satisfaction with laparoscopic hernia repair



DISCUSSION

This questionnaire-based study measures our patients' assessment of the results of their TEP laparoscopic IHR with the objective to determine perception and satisfaction of the patients following TEP repair. It was found that most of the patients in this study were satisfied and 72.5% reported to be very satisfied while 22.5% were not satisfied. However, 4 patients (5%) were not satisfied after TEP IHR. Similar results were found in response to question of referring others to the same procedure as 95% agreed to this question.

Patient's perception and satisfaction about any surgical procedure is important as it is one of the most ignored aspects in surgical practice. Also only this thing may increase the acceptability of new and innovative techniques for any surgical disease⁽⁹⁻¹¹⁾. Like all other new practices, laparoscopic IHR was first ignored and rejected by many agencies. However, now it has become a standard and is preferred over open IHR procedures, despite of having disadvantage of requiring general anaesthesia¹².

In a trial, authors found that 84.3% preferred for TEP again while remaining opted for open procedure for future surgeries. Also in the similar study, patients narrated the advantages of TEP including lesser pain, faster recovery and better cosmesis¹³. Despite the inevitable element of subjectivity introduced by the design of the study, we feel that the data collected and analysed above are both relevant as indicators of our performance in laparoscopic inguinal hernia repair and complementary to more traditional measures of outcome such as failure, conversion, re-operation and infection rates.

We may conclude that our patients' assessment of outcome following laparoscopic IHR supports our ongoing use of the technique. Also it shows that overall patients are happy and satisfied after TEP IHR. However, there were some limitations of this study. Firstly, it was a purely quantitative study and no qualitative component had been placed in it. Secondly, it assessed perception of patients from only two centres with experienced surgeons. So we recommend more studies with focal group discussions from patients from different centres.

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