

Original Article

Desarda Repair - A new method of tension free repair for Inguinal Hernia - Experience of 77 cases at DHQ Hospital Abbottabad

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ABSTRACT

Objective: To determine the frequency of patients with inguinal hernia in whom Desarda repair can safely be accomplished and study the morbidity and mortality in such cases.

Background: Inguinal hernia is a common disorder in males which requires corrective surgery to lead a comfortable life. Tension free surgery is aim of the surgeon to avoid recurrence of the disorder. Mesh repair has been the most widely performed surgery for inguinal hernia. A new technique of inguinal hernia repair has been developed which utilizes the normal tissue of the patient to create a tension free repair.

Study Design: A prospective study.

Place and Duration of Study: This study was conducted at DHQ Hospital Abbottabad from September 2009 – June 2011.

Patients and Methods: A prospective study was conducted at DHQ Hospital Abbottabad on 77 patients having inguinal hernia. All patients above the age of 15 years were included. Patients having recurrent inguinal hernia were excluded from study. Most common age group was (56-65 yrs). Out of 77 patients 64% were of indirect inguinal hernia while 36% were of direct inguinal hernia. Common age group with direct hernia was above 50 years.

Results: Post operative complications, hospital stay and return to routine activities were evaluated. Hematoma formation and wound infection in two cases were only complications noted. Patients were free of post operative pain.

Conclusions: Desarda repair is simple, very safe technique of inguinal hernia repair free from any complications.

Keywords: Inguinal hernia, Tension free repair, Mesh repair, Desarda repair.

INTRODUCTION

Inguinal hernia is a common disorder in males which requires corrective surgery to lead comfortable life. Dragging pain and discomfort are major complaints of uncomplicated hernia. Obstruction and strangulation are major complications which require urgent surgery. Hernia, which may descend into the testis, hinders daily routine activities. Inguinal hernia repair remains still a problem because of high recurrence rate, risky dissection of inguinal floor in Bassini's / Shouldice repair. Tension free surgery is aim of the surgeon to avoid recurrence of the disorder. Mesh repair has been the most widely performed surgery for inguinal hernia. Infection, chronic pain and foreign body reaction are common complications of mesh repair which may require removal of mesh in some cases. The cost of mesh may not be afforded by poor patients. Desarda repair consists of construction of firm and dynamic post. wall of the inguinal canal with the help of external oblique aponeurosis which remains undetached from its origin. The procedure is free from complications and can be performed as a day case surgery.

PATIENTS AND METHODS

This study was conducted at DHQ Hospital Abbottabad from Sept 2009-June 2011. Total of 77 patients having inguinal hernia were subjected to surgery. Patients of all ages above 15 years were included in this study. Patients having recurrent inguinal hernia were excluded from study. All patients having reducible and irreducible hernia were included in the study. All patients were investigated with Blood Complete Picture, ECG, X-ray Chest and Ultrasound abdomen. Patients having Enlarged Prostate associated with inguinal hernia were operated first for Enlarged Prostate and then Desarda Repair done. Patients were divided into six age groups. Common age group was (56-65yrs) 25%. All patients were male and no female patient above 15 years reported with inguinal hernia. All operations were done under General Anaesthesia or Spinal Anaesthesia. Average operation time was 25 minutes. All patients were followed up as out patients for complications. Maximum follow up of the patients is about 02 years. Out of 77 patients 45(58%) had Rt sided hernia and 32(42%) had Lt sided hernia. In 28 patients (36%), it was direct hernia while in 49(64%) it

was of indirect type. Out of 28 patients having direct hernia 22(79%) patients were between 50-70 years. In indirect type out of 49 patients 33(67%) were below 50 years. Anaesthesia administered was general anaesthesia in 34(44%) patients and spinal in 43(56%) patients. Incision made was inguinal incision. Repair was done with prolene 2/0 and skin closed with interrupted silk sutures.

RESULTS

Repair was done by suturing an undetached strip of external oblique aponeurosis with inguinal ligament and conjoint muscle. Prolene 2/0 suture was used for repair. Average operation time was 25 minutes. Post operative recovery was very good and mean hospital stay was 01 day. All the patients were pain free and were mobilized after the effects of anesthesia were over. The reason for hospitalization was that we operated all patients under G/A or Spinal Anaesthesia. The patients were discharged next day. Only 01 patient had hematoma formation at operation site which resolved itself without any intervention and 01 patient had mild wound infection which was treated successfully. Patients were followed up in OPD and no recurrence has been reported so far after follow up for about 02 years.

Table No. 1: Age Distribution

Age (years)	No: of Cases	Percentage
15-25	07	9%
26-35	17	22%
36-45	11	14%
46-55	15	20%
56-65	19	25%
66-75	08	10%

Table No.2: Various Parameters of Inguinal Hernia

Parameter		No of patients	Percentage
Side of Hernia	Rt side	45	58%
	Lt side	32	42%
Type of Hernia	Direct hernia	28	36%
	Indirect hernia	49	64%
Anaesthesia	GA	34	44%
	Spinal	43	56%
Complications	Heamatoma	01	1.3%
	Wound infection	01	1.3%

DISCUSSION

Inguinal hernia is a common disorder in males which requires corrective surgery to lead comfortable life. Inguinal hernia repair remains still a problem because of high recurrence rate, risky dissection of inguinal

floor in Bassini's / Shouldice repair. Tension free surgery is aim of the surgeon to avoid recurrence of the disorder. Mesh repair has been the most widely performed surgery for inguinal hernia. Infection, chronic pain, foreign body tissue reaction, migration of mesh and recurrence of hernia are common complications with mesh repair. The cost of mesh may not be afforded by some patients. Anterior posterior compression of the inguinal wall is lost due to loose and adynamic post. inguinal wall. Wear and tear with aging leads to weak and loose posterior inguinal wall and is the cause of direct inguinal hernia in elderly. Providing a strong and physiologically dynamic post. inguinal wall is essential to restore anterior posterior compression. Absent aponeurotic extension in the post. wall are replaced with an aponeurotic structure. Additional muscle strength of the external oblique muscle helps the weakened muscle arch to keep the newly formed post wall.

Desarda repair is the new method of tension free repair for inguinal hernia. Dr. Desarda introduced this tension free repair for inguinal hernia in 2001. In this technique a strip of undetached external oblique aponeurosis is used to construct firm and dynamic post. inguinal wall. It can be safely done under local anaesthesia as a day care surgery.

This avoids unnecessary dissection of the posterior wall as in shouldice repair. The complications of mesh repair such as post operative pain, infection, F/body reaction are avoided. It is very cost effective as cost of mesh and hospital stay is reduced. In our study, all the patients were operated under GA/ Spinal anaesthesia so they had to be admitted to hospital and discharged next day when the effects of anaesthesia were over. During the follow up of the patients 01 patient had slight superficial wound infection and 01 patient had mild hematoma formation. No other complication was noted. No recurrence has been reported so far in our patients.

CONCLUSION

Inguinal hernia is a common disorder in males which requires corrective surgery to lead comfortable life. Inguinal hernia repair remains still a problem because of high recurrence rate, risky dissection of inguinal floor. Desarda repair is simple, very safe technique of inguinal hernia repair free from any complications. It avoids all the complications of mesh repair. The recurrence rate is zero.

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