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Research Article

**TO DETERMINE THE INDIRECT INGUINAL HERNIA
INCIDENCE AMONG MALES ABOVE 50 YEARS OF AGE AND
ITS MANAGEMENT****¹ Dr Farzana Hanif, Dr Ayesha Khalid², Dr. Aisha Aziz³**¹ Women Medical Officer DHQ Hospital, Jhelum² WMO Lady Wallingdon Hospital, Lahore³ Services Institute of Medical Sciences, Lahore**Abstract:**

Aim: To determine the incidence of indirect inguinal hernia in men over 50 years of age and to evaluate the results of repair with prolene in primary indirect inguinal hernia in men over 50 years of age.

Study Design: A prospective study.

Place and Duration: In the Surgical Unit II of Jinnah Hospital Lahore for one year duration from April 2018 to April 2019.

Material and methods: A total of 100 patients were operated on with primary inguinal hernia between 15 and 80 years of age. However, this study included primary patients with inguinal hernia with age from 51 to 80 years old. Direct inguinal hernia in this age group was excluded. All these patients underwent surgery and the results were evaluated.

Results: Only 35 of 100 patients with inguinal hernia treated in the surgical ward were included. In our study, the incidence of indirect inguinal hernia was > 50 years > 34.57% and was quite high as expected. Thirty one patients (88.6%) had a reducible hernia. Four patients (11.42%) had an irreducible hernia at the outpatient clinic. Twenty eight (80%) patients had a hernia on the right and 7 (20%) had a hernia on the left. Superficial skin infection (SSI) was observed in one patient (2.85%). Hematoma was observed in one patient (2.85%). One patient (2.85%) had urinary retention. No recurrence was observed up to one year of follow-up.

Conclusion: Repair of inguinal hernia with prolene is a safe and inexpensive method of repair. It has limited postoperative complications such as recurrence, pain and wound infection.

Key words: indirect inguinal hernia, prolene, cover repair.

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INTRODUCTION:

A hernia is defined as an abnormal projection of viscous or a part of viscous from an abnormal opening in the cavity wall that contains it¹⁻³. An intermediate inguinal hernia occurs along the inguinal canal from the deep ring to the superficial inguinal ring. Inguinal hernia repair is the second most common surgical procedure after appendicitis⁴⁻⁵. Most commonly occurs are indirect inguinal hernia. The choice of hernia repair method is controversial⁶. A high inguinal hernia rate is the reason of most common procedure performed in general surgery. A number of hernia repair techniques have been published in recent years. Currently, polypropylene and the Dacron mesh are the most satisfactory because they are easily accessible and well connected through connective tissues. Maloney achieved a low recurrence rate of 0.8% due to darn repair Abrahamson was the first to point out repair defects that could lead to a high repeatability rate⁷. In 1995, more than 1,000 repair series broke records by only 0.8%. Recently, in 2005, Omer Farooq reported a 0.6% repeatability rate with hernia repairs⁸⁻⁹. Because the prolene mesh is not easily obtainable and is relatively expensive it increase processing costs¹⁰. In this study, we prefer darn repair because

the finished thread material has a limited reaction and an acceptable frequency of relapses.

MATERIALS AND METHODS:

This Prospective study was held in the Surgical Unit II of Jinnah Hospital Lahore for one year duration from April 2018 to April 2019. A total of 100 patients were operated on with primary inguinal hernia between 15 and 80 years of age. However, this study included primary patients with inguinal hernia with age from 51 to 80 years old. Direct inguinal hernia in this age group was excluded. All these patients underwent surgery and the results were evaluated.

RESULTS:

Although 100 patients with indirect inguinal hernia were operated by various surgeons with age range from 15 to 80 years. However, this study only included cases of primary indirect inguinal hernia from 51 to 80 years old. Thirty five (31.57%) patients underwent one procedure, i.e. darn repair with prolene. Postoperative complications such as age, hernia, pain, hematoma, SSI and early relapse were observed. Twenty two (63%) patients were between 50 and 60 years old. Ten (28.6%) patients were 61-70 years old. Three (8.6%) patients were aged 71-80 (Table 1).

Table-1 Distribution of patients by age groups (n=35)

Age in years	=n	%age
51-60	22	63
61-70	10	28.67
71-80	3	8.67

31 (88.63%) patients had a reduced indirect inguinal hernia, and 4 (11.42%) patients had an irreducible hernia (Table 2).

Table 2: Mode of presentation (n=35)

Mode of presentation	=n	%age
Reducible	31	88.63
Irreducible	4	11.42

Regarding the inguinal hernia site, 28 (80%) patients were on the right and 7 (20%) patients were on the left (Table 3).

Table 3: Side of hernia

Side	=n	%age
Left	7	20
Right	28	80

Postoperative pain was moderate in all surgical cases treated with analgesics (NSAIDs). No opium was used. All patients were operated on under spinal anesthesia. One patient (3.33%) had a superficial skin infection (SSI) treated with an antibiotic and bandage for 3 days. Only one patient (3.33%) developed hematoma on the third day of surgery. Two previous patients had diabetes controlled by insulin s / c as directed by their physician. There was no relapse before the year of observation. One patient had transient urinary retention treated with a Foley catheter (Table 4). All patients were released on the third day after surgery except for two patients with complications. They were released at the end of the first week.

Table. 4 Post- operative complications

Complication	=n	%age
Wound infection	1	2.85
Hematoma	1	2.85
Recurrence	Nil	0
Urinary retention	1	2.85

DISCUSSION:

An important factor preventing the hernia process is the anatomy of the inguinal canal. If the aponeurotic element of the posterior wall is not present, the transverse fascia alone is not able to withstand repeated attacks of increased abdominal pressure for a long time. Therefore, the strong musculoskeletal structure around the inguinal canal provides protection for the hernia in this person. The goal of the surgical procedure is to restore the strength of the posterior wall of the canal by various methods, but the results depend on the patient's experience and the choice of different procedures. The success of surgical techniques is assessed based on the hernia recurrence rate¹¹. If it occurs within six months, it may be due to a technical error or transaction selection. Maximum recurrence occurs within the first six months after surgery. Inguinal hernia repair is one of the most common general surgical procedures performed in the UK. Inguinal hernia surgery has changed dramatically over 20 years. One of the main goals of hernia surgery in modern age was to reduce the rate of relapses¹². The general surgeon should choose the repair he considers most comfortable to achieve minimum repetitive results of up to 1-2%¹³. The basic parameter of the result after groin repair is the risk of recurrence and restart 1. Review of results 308 cases of inguinal hernia operated on in the years 1989-1991 at the General Surgery Department of the Medical Faculty in Istanbul. Darn repair in 56 of 132, mesh repair in 8 patients, high ligation in 11 patients and 132 hernia repairs with Darn method. The postoperative hospital stays lasted two days in all cases except four. The prolene curse method was found to be better than all other techniques¹⁴. In this personal experience, the results can be compared to national and international research. However, a comparable result was obtained in the bleaching process. Mesh repair costs half. This profitable aspect of the organization puts you in a more comfortable position. Cost-effective transactions have a valuable place in developing countries where income is limited¹⁵. More research is needed to achieve the desired results and assess the effectiveness of the

blood pressure repair technique in terms of early relapse and cost-effectiveness.

CONCLUSION:

Although it depends on the operator and experience, it is found that the darn repair is still above as a tension free modality. Postoperative complications associated with curettage repair, low relapse rate, low cost and early return to work are limited.

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