

# Assessment of Demographic Details of Patients with Hernia Visited in a Tertiary Care Teaching Hospital

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## ABSTRACT

**Background:** Hernia is generally defined as the protrusion of a viscus from the cavity in which it is normally contained or more precisely, as the protrusion of a loop or knuckle of an organ or tissue through an abnormal opening. Hence; we planned the present study to assess the demographic profile of patients with hernia.

**Materials & Methods:** The present study included assessment of demographic profile of patients presenting with hernia. A total of 100 subjects were enrolled in the present study. Detailed demographic information of all the patients was obtained.

**Results:** Mean age of the present study was 32 years. 40 percent of the patients belonged to the age group of 41 to 60 years. 55 percent of the patients had hernia of the right side. 25 percent of the patients had hernia of the left side. 20 percent had bilateral hernia. In 18 percent of the cases, the hernia was of direct type, while in 82 percent of the cases, hernia was of indirect type.

**Conclusion:** Hernia usually affects the young males are more commonly affected in comparison to females.

**Key words:** Demographic, Direct, Hernia.

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## INTRODUCTION

Hernia is generally defined as the protrusion of a viscus from the cavity in which it is normally contained or more precisely, as the protrusion of a loop or knuckle of an organ or tissue through an abnormal opening. Hernias are among the oldest known affliction of humankind.<sup>1-3</sup>

Hernias have been a subject of interest since the dawn of surgical history. The history of hernia repair is the history of surgery. The earliest recorded reference for hernia was in 'Egyptia Papyrus of Ebers' 1522 BC.<sup>4,5</sup>

There have been a number of erudite reviews on the history of hernia and its treatment. The final word on surgery for hernia is yet to be heard. Today new techniques are being explored and introduced frequently in inguinal hernia surgery. The future will tell how hernia repair will evolve in the next decades.<sup>6-8</sup> Hence; we planned the present study to assess the demographic profile of patients with hernia.

## MATERIALS & METHODS

The present study was conducted in the Department of General Surgery, Varun Arjun Medical College, Banthra - Shajahanpur,

Uttar Pradesh (India) and it included assessment of demographic profile of patients presenting with hernia. Ethical approval was obtained from the institutional ethical committee and written consent was obtained after explaining in detail the entire research protocol.

## Inclusion Criteria

- Patients between 20-60 years of age and having uncomplicated hernia

## Exclusion Criteria

- Patients below the age of 20 years and above the age of 60 years were excluded.
- Patients having complicated hernia, complicated inguinal hernia
- Patients with h/o collagen vascular disease and who have underlying predisposing factors or comorbid diseases were excluded from the study.

After meeting the inclusion and exclusion criteria, a total of 100 subjects were enrolled in the present study. Detailed demographic information of all the patients was obtained. All the results were recorded in Microsoft excel sheet and was assessed by SPSS software.

**RESULTS**

A total of 100 patients with hernia were enrolled. 42 percent of the patients belonged to the age group of 20 to 30 years. Mean age of the present study was 32 years. 40 percent of the patients belonged to the age group of 41 to 60 years. 55 percent of the patients had hernia of the right side. 25 percent of the patients had hernia of the left side. 20 percent had bilateral hernia. In 18 percent of the cases, the hernia was of direct type, while in 82 percent of the cases, hernia was of indirect type.

**Table 1: Distribution of subjects according to age group**

Age-group (years)	n	%
20- 30	42	42
31- 40	18	18
41- 50	20	20
51-60	20	20
Total	100	100
Mean age (years) = 32		
±SD = ±11.37		

**Table 2: Distribution of patients according to the site of inguinal hernia**

Site of hernia	n	%
Right	55	55
Left	25	25
Bilateral	20	20

**Table 3: Distribution of patients according to type of hernia**

Type of hernia	n	%
Direct	18	18
Indirect	82	82

**Table 4: Distribution of patients according to gender**

Gender	n	%
Males	55	55
Females	45	45

**DISCUSSION**

There have been a number of erudite reviews on the history of hernia and its treatment. The final word on surgery for hernia is yet to be heard. Today new techniques are being explored and introduced frequently in inguinal hernia surgery. The future will tell how hernia repair will evolve in the next decades.<sup>7</sup> Improvement in surgical techniques, together with the development of new prosthetic materials and a better understanding of how to use them, have significantly improved the outcome for many patients.<sup>8</sup> A study was done by Amid et al. in 1996 on 3480 patients to measure morbidity and recurrence. The study concluded that repair of primary inguinal hernias under local anaesthesia with the open, tension free technique using polypropylene mesh results in acceptable morbidity, and appreciable reductions in postoperative discomfort, duration of hospital stay, recurrence rate and cost of procedure.<sup>8</sup>

In the present study, a total of 100 patients with hernia were enrolled. 42 percent of the patients belonged to the age group of 20 to 30 years. Mean age of the present study was 32 years. 40 percent of the patients belonged to the age group of 41 to 60 years. 55 percent of the patients of the present study were males. Amra MA (2017) evaluated short-term outcomes of Lichtenstein technique of hernia repair using ParietexProGrip monofilament polyester mesh in Egyptian patients with inguinal hernias. Prospective analysis of 50 patients underwent Lichtenstein technique for hernia repair was done. The primary outcome was chronic pain measured at 3 weeks, 3, 6, and 12 months postoperatively. Secondary outcomes were perioperative and early postoperative complications, return to usual activities and recurrence rate of the hernia. A difference in pain between preoperative and postoperative values was calculated at all follow-up time points. Fifty cases (all males) were studied. Mean ± standard deviation (SD) patient age was 39.2 ± 10.4 (range 18–60) years. Most hernias were Gilbert's type II [12 (24%)] or III [16 (32%)]. During 12 months postoperatively, none of the patients developed systemic postoperative complications or recurrent hernia. The mean ± SD pain visual analog scale score decreased from 12.8 ± 8.4 after 3 weeks to 0.72 ± 2.2 after 6 months. From postoperative 3 weeks to 6 months, there were notable improvements in health and also in health-related quality of life. They concluded that the use of self-gripping ParietexProGrip composite monofilament polyester mesh in Lichtenstein inguinal hernia repair is rapid, effective, simple, and safe. It is correlating with low postoperative groin pain and improved quality of life activities patients.<sup>9</sup>

In the present study, 55 percent of the patients had hernia of the right side. 25 percent of the patients had hernia of the left side. 20 percent had bilateral hernia. In 18 percent of the cases, the hernia was of direct type, while in 82 percent of the cases, hernia was of indirect type. Lin H et al (2018) conducted a study to clarify which mesh fixation method was more suitable in Lichtenstein inguinal hernia repair. Articles published up to July 2017 were searched using MEDLINE, the Cochrane Library, Embase and the Web of Science. Randomized controlled trials (RCTs) comparing glue versus suture mesh fixation in Lichtenstein inguinal hernia repair were included in the review. The quality assessment and data extraction of included studies were applied by 2 independent authors. Thirteen RCTs with 2375 patients were eligible for inclusion. Eight trials compared synthetic glue with suture fixation and five compared biological glue with suture fixation. The results showed that there was a lower incidence of early chronic pain, and hematoma in the glue fixation group. Suture mesh fixation method cost more time in operation than glue. There was no evidence of an increase in chronic pain or recurrence rates with glue fixation method in the long-term follow-up. Mesh fixation with glue compared with sutures in Lichtenstein repair inguinal hernia repair is faster and less painful, without an increasing in terms of recurrence rates in the long term.<sup>10</sup>

**CONCLUSION**

Under the light of above obtained, the authors conclude that hernia usually affects the young males are more commonly affected in comparison to females. Indirect type of hernia is more common than direct type. However; further studies are recommended.

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