



Surgery

A STUDY TO EVALUATE PRESENTATION AND OUTCOME OF GROIN HERNIA. A PROSPECTIVE STUDY

Dr Muthuraman. S Assistant Professor Department Of Surgery, Maharishi Markendeshwer Medical, College Kumarhatti Solan.

Dr Naveed Anjum Qureshi* Senior Resident Department Of Surgery Government Medical College Jammu.
*Corresponding Author

ABSTRACT An inguinal hernia occurs in the abdomen near the groin area. They develop when fatty or intestinal tissues push through a weakness in the abdominal wall near the right or left inguinal canal. Each inguinal canal resides at the base of the abdomen.

Both men and woman have inguinal canals. In men, the testes usually descend through their canal by around a few weeks before birth. In women, each canal is the location of passage for the round ligament of the uterus. If you have a hernia in or near this passageway, it results in a protruding bulge. It may be painful during movement.

Many people don't seek treatment for this type of hernia because it may be small or not cause any symptoms. Prompt medical treatment can help prevent further protrusion and discomfort.

Materials and Methods: This study was conducted on 50 patients admitted in the Postgraduate Department of Surgery in Stanley Medical College Chennai for inguinal hernia surgery during the period of January 2002-September 2003.

Inclusion Criteria: All patients with groin hernia.

Exclusion criteria : Patient with serious cardiovascular or renal complications.

CONCLUSION : Majority of patients comes with direct inguinal hernia especially patient belonging to old age. Young patient presents with indirect inguinal hernia. Postoperative complications can be minimize with good surgical technique and proper postoperative care.

KEYWORDS :

INTRODUCTION

An inguinal hernia occurs in the abdomen near the groin area. They develop when fatty or intestinal tissues push through a weakness in the abdominal wall near the right or left inguinal canal. Each inguinal canal resides at the base of the abdomen.

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An inguinal hernia happens when contents of the abdomen—usually fat or part of the small intestine—bulge through a weak area in the lower abdominal wall. The abdomen is the area between the chest and the hips. The area of the lower abdominal wall is also called the inguinal or groin region.

Two types of inguinal hernias are indirect inguinal hernias, which are caused by a defect in the abdominal wall that is congenital, or present at birth direct inguinal hernias, which usually occur only in male adults and are caused by a weakness in the muscles of the abdominal wall that develops over time Inguinal hernias occur at the inguinal canal in the groin region.

MATERIALS AND METHODS: This study was conducted on 50 patients admitted in the Postgraduate Department of Surgery in Stanley Medical College Chennai for inguinal hernia surgery during the period of January 2002-September 2003.

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OBSERVATION

Table 1: age of patients

| Age (years) | Number of patients (%) |
|-------------|------------------------|
| 10-20. | 3 (8) |
| 20-30. | 6 (14) |
| 30-40. | 9 (16) |

| | |
|--------|---------|
| 40-50. | 13 (28) |
| 50-60. | 7 (18) |
| 60-70. | 6 (12) |
| 70-80. | 2 (4) |

Table 2: The distribution of patients according to occupation

| Occupation. | Number of patients (%) |
|-----------------------|------------------------|
| Manual worker. | 23(48) |
| Sedentary worker. | 11 (20) |
| Retired from service. | 16 (32) |

Table 3: Distribution of patients according to the side of hernia

| Side of hernia. | Number of patients (%) |
|-----------------|------------------------|
| Right side. | 31(60) |
| Left side. | 11 (26) |
| Both sides. | 7 (14) |

Table 4 The percentage of direct and indirect inguinal hernia

| Type of hernia. | Number of patients (%) |
|------------------|------------------------|
| Indirect. | 35(72) |
| Direct. | 13 (24) |
| Direct/indirect. | 2 (4) |

Table 5 Type of indirect hernia Types of indirect hernia Number of patients (%)

| | |
|-------------|---------|
| Incomplete. | 30 (60) |
| Complete. | 6 (12) |

Table 6 The time consumed for surgery

| Time in minutes. | Number of patients |
|------------------|--------------------|
| 25-35. | 12 |
| 35-45. | 25 |
| 45-55. | 9 |
| 55-65. | 4 |

Table 7 Ambulation of patients after surgery

| Ambulation after surgery | Number of patients (%) |
|--------------------------|------------------------|
| Immediately. | 4 (8) |
| 1st POD. | 46 (92) |

POD: Post-operative day

Table 8: Distribution of cases according to the pain score

| VAS of pain. | Number of patients (%) |
|---------------|------------------------|
| Mid (1-3) | 42 (84) |
| Moderate. | (4-6) 8 (16) |
| Severe (7-10) | 0 (0) |

VAS: Visual analog score

Table 9: The post operative complication

| Complications. | Number of patients (%) |
|-------------------|------------------------|
| Ecchymosis. | 1 (2) |
| Seroma. | 3 (6) |
| Wound infection. | 2 (4) |
| Scrotal swelling. | 1 (2) |

DISCUSSION

In the past, surgical repair was recommended for all inguinal hernias because of the risk of complications such as incarceration or strangulation. However, recent studies have proved that small, minimally symptomatic, first occurrence hernias do not necessarily require repair, and these patients can be followed expectantly. However, they should be counseled on the symptoms of incarceration and strangulation, and to seek prompt evaluation if these occur. Patients with symptomatic, large, or recurrent hernias should be referred for repair, generally within one month of detection. Hernia repair almost always involves some type of prosthetic material (i.e., mesh), with the possible exception of women of childbearing age because stretching of tissues during pregnancy may result in a recurrent hernia. The choice of mesh material used in the repair is based on the surgeon's preference.

The choice of open vs. laparoscopic repair depends on surgeon preference, but only about 10 percent of inguinal hernia repairs in the United States are performed via a laparoscopic technique.¹⁹ Open repair may be particularly beneficial in older, less healthy patients.²⁰ Laparoscopic repair is usually reserved for recurrent or bilateral hernias. Open and laparoscopic techniques have similar results. Both procedures are effective if performed by an experienced surgeon, and have a recurrence rate from 0% to 9.4%.

Although the concept of inguinal herniorrhaphy, described by Albert Edoardo Bassini has stood the test of time but recurrence was 8-10% many techniques of inguinal herniorrhaphy were known till date. It was Lichtenstein (1989) that challenged the concept of both the darn technique and should ice operation. Inguinal hernia is more common in males. Amid et al., in his study of 4000 patients with inguinal hernia reported that all his patients were males. Plumbo et al. reported an incidence of 64% of indirect inguinal hernia, 19.2% direct hernia, and 16.3% combined inguinal hernia. Massino and Mauro also reported similar figures in this study. Kruger and Kark⁷ reported the occupation of 3175 patient with inguinal hernia; 31% were office workers, 37% were manual worker, and 32% were retired. While our study showed 48% were manual workers. Nordin and Barteimess reported that mean duration of 54 min for Lichtenstein repair. Leibi and Schmedt,⁸ Bittner and Schmedt² reported 5% complication in transabdominal preperitoneal (TAPP). Nordin and Barteimess, Wright et al. no significant difference in pain between Lichtenstein and TAPP.

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