Original Article

Surgery

Incidence of Inguinal Hernia with relation to Age, Sex, Occupation, Socio-Economic Status, Dietary Habits & Urban or Rural Area of District Sialkot

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ABSTRACT

Objective: To study the incidence of Inguinal Hernia with relation to age, sex, occupation, socio economic status, dietary habits & urban or Rural area of District Sialkot and its peripheral districts.
Study Design: original study.
Place and Duration of Study: This study was conducted at Islam Teaching Hospital Sialkot from 1st January 2012 to 31 December 2012.
Materials and Methods: 100 cases of Inguinal Hernia were selected randomly from patients attending to OPD & emergency of Islam Teaching Hospital Sialkot
Results: The result are shown in the Table No. 1 to Table No. 6
Conclusion: There was maximum percentage of inguinal hernia in age group 10-20 years (24%) & minimum in age group 81-90 years (04%) (Table No.1).The incidence of inguinal hernia was maximum in male (80%) as compared to female (20%) as shown in Table No.2 There was maximum incidence of inguinal hernia in students (28%) & in factory workers, laborers, farmers was (20%) in each group & minimum in shop keepers & service men (06%) in each group as shown in Table No.3. The incidence of inguinal hernia was maximum in people of low socio economic status (50%) , (35%) in middle class & (15%) in people of high class as shown in Table No.5. The incidence of inguinal hernia was (66%) in patients on low fibre diet & (34%) in patients on normal fibre diet as shown in Table No.4. The incidence of inguinal hernia was (70%) in patients coming from rural area & (30%) in patients coming from Urban area as shown in Table No.6.
Key Words: Inguinal Hernia ,Incidence, Dietary, occupation, socio economic, urban or Ruler.

INTRODUCTION

A hernia is the protrusion[1] of an organ or the fascia of an organ through the wall of the cavity that normally contains it.[2] There are different kinds of hernia, each requiring a specific management or treatment.

Signs and symptoms: By far the most common hernias develop in the abdomen, when a weakness in the abdominal wall evolves into a localized hole, or "defect", through which adipose tissue, or abdominal organs covered with peritoneum, may protrude. Another common hernia involves the spinal discs and causes *sciatica*. A hiatal hernia occurs when the stomach protrudes into the *mediastinum* through the esophageal opening in the diaphragm.

Hernias may or may not present with either pain at the site, a visible or palpable lump, or in some cases more vague symptoms resulting from pressure on an organ which has become "stuck" in the hernia, sometimes leading to organ dysfunction. Fatty tissue usually enters a hernia first, but it may be followed or accompanied by an organ.

Symptoms and signs vary depending on the type of hernia. Symptoms may or may not be present in some inguinal hernias. In the case of reducible hernias, a bulge in the groin or in another abdominal area can often be seen and felt. When standing, such a bulge becomes more obvious. Besides the bulge, other symptoms include pain in the groin that may also include a heavy or dragging sensation, and in men, there is sometimes pain and swelling in the scrotum around the testicular area

Irreducible abdominal hernias or incarcerated hernias may be painful, but their most relevant symptom is that they cannot return to the abdominal cavity when pushed in. They may be chronic, although painless, and can lead to strangulation. Strangulated hernias are always painful and pain is followed by tenderness. Nausea, vomiting, or fever may occur in these cases due to bowel obstruction. Also, the hernia bulge in this case may turn red, purple or dark and pink.

Diagnosis:

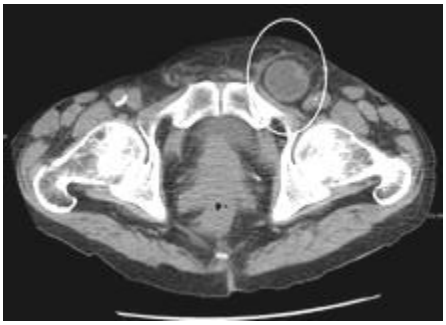

Figure No.1:An incarcerated inguinal hernia as seen on CT

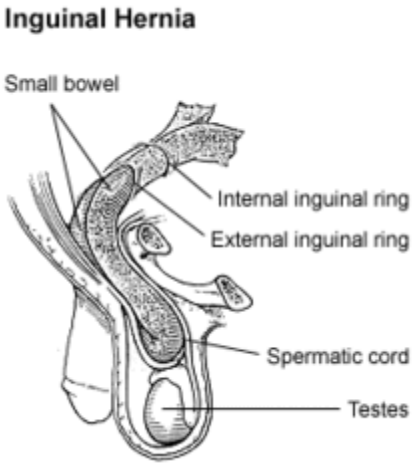

Figure No.2: Diagram of an indirect, scrotal inguinal hernia (median view from the left)

Figure No.3: Treatment Hernia repair and Inguinal hernia surgery

In the diagnosis of abdominal hernias, imaging is the principal means of detecting internal diaphragmatic and other nonpalpable or unsuspected hernias. Multidetector CT (MDCT) can show with precision the anatomic site of the hernia sac, the contents of the sac, and any complications. MDCT also offers clear detail of the abdominal wall allowing wall hernias to be identified accurately.[4]

MATERIALS AND METHODS

Fifty (50) patients of cholecystitis were selected randomly attending OPD & emergency of Islam teaching hospital Sialkot. This hospital drains Patients from District Sialkot, Narowal & other adjacent districts.

RESULTS

There was maximum percentage of inguinal hernia in age group 10-20 years (24%) & minimum in age group 81-90 years (04%) (Table No.1).The incidence of inguinal hernia was maximum in male (80%) as compared to female (20%) as shown in Table No.2 There was maximum incidence of inguinal hernia in students (28%) & in factory workers, laborers, farmers was (20%) in each group & minimum in shop keepers & service men (06%) in each group as shown in Table No.3. The incidence of inguinal hernia was maximum in people of low socio economic status (50%) , (35%) in middle class & (15%) in people of high class as shown in Table No.5. The incidence of inguinal hernia was (66%) in patients on low fibre diet & (34%) in patients on normal fibre diet as shown in Table No.4. The incidence of inguinal hernia was (70%) in patients coming from rural area & (30%) in patients coming from Urban area as shown in Table No.6.

Table No.1: Incidence of Inguinal Hernia with relation to Age

Sr.#	Age (years)	Cases (Patients)	Percentage
1	10-20	24	24%
2	11-30	12	12%
3	31-40	13	13%
4	41-50	06	06%
5	51-60	13	13%
6	61-70	14	14%
7	71-80	14	14%
8	81-90	04	04%
	Total	100	100%

Table No.2: Incidence of Inguinal Hernia with relation to Sex

Sr.#	Sex	Cases (Patients)	Percentage
1	Male	80	80%
2	Female	20	20%
	Total	100	100%

Table No.3: Incidence of Inguinal Hernia with relation to Occupation

Sr.#	Occupation	Cases (Patients)	Percentage
1	Students	28	28%
2	Shop keeper	06	06%
3	Factory worker	20	20%
4	Laborer	20	20%
5	Farmer	20	20%
6	Service Man	06	06%
	Total	100	100%

Table No.4: Incidence of Inguinal Hernia with relation to Dietary Habits

Sr. #	Dietary Habits	Cases (Patient)	Percentage
1	Fibre diet	34	34%
2	Non Fibre diet	66	66%
	Total	100	100%

Table No. 5: Incidence of Inguinal Hernia with relation to socio economic status

Sr.#	Socio- economic Status	Cases (Patients)	Percentage
1	Low	50	50%
2	Middle	35	35%
3	High	15	15%
	Total	100	100%

Table No. 6: Incidence of Inguinal Hernia with relation to Urban/ Rural area

Sr. #	Residential area	Cases (Patients)	Percentage
1	Urban	30	30%
2	Rural	70	70%
	Total	100	100%

DISCUSSION

There was maximum percentage of inguinal hernia in age group 10-20 years (24%) & minimum in age group 81-90 years (04%) as shown in Table No.1.The incidence of inguinal hernia was maximum in male (80%) as compared to female (20%) as shown in Table No.2 There was maximum incidence of inguinal hernia in students (28%) & in factory workers, laborers, farmers was (20%) in each group & minimum in shop keepers & service men (06%) in each group as shown in Table No.3. The incidence of inguinal hernia was (66%) in patients on low fibre diet & (34%) in patients on normal fibre diet as shown in Table No.4.The incidence of inguinal hernia was maximum in people of low socio economic status (50%) , (35%) in middle class & (15%) in people of high class as shown in Table No.5. The incidence of inguinal hernia was (70%) in patients coming from rural area & (30%) in patients coming from Urban area as shown in Table No.6.

In the study of Akin ML, et al the typical adult in the included studies was a man in his mid-50s, of average weight, experiencing a primary unilateral hernia. About a quarter of the men worked in physically strenuous jobs; for these men, a durable repair is relatively important to prevent recurrence.

In the study of Akin ML et al also for adult inguinal hernia, it would be helpful to know recurrence rates over the very long term. The typical patient was middle-aged, presumably with a few decades of life ahead in which a hernia might recur. Studies have generally not reported recurrence rates past 5 to 10 years, but conceivably patients and clinicians would be interested in much longer timeframes (e.g., 30 years). Projection factors have been proposed (e.g., to estimate the 25-year recurrence rates, multiply the 1-year rate by 5); however, they have not been tested empirically. We also encourage greater focus on outcomes that matter most to patients, such as chronic pain, long-term QOL, SFN, and the feeling of a foreign body.

CONCLUSION

These outcomes may be associated with the type of mesh or mesh fixation methods, or size and severity of the hernia, but our evidence review neither revealed nor ruled out potential influencing factors because of low precision.

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