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Original Research

Prevalence of inguinal hernia in a known population: A Prospective study

Hari Kesh Yadav,

Assistant Professor, General Surgery Department, Government Medical College & Superfacility Hospital, Azamgarh

***ABSTRACT*:**

Background: Inguinal hernia is the most common form of abdominal hernia but the incidence is unknown. The present prospective study was conducted to evaluate the prevalence of inguinal hernia in a known population. **Material and methods:** The present prospective study was carried out in 78 patients over the period of 6 months. Ethical approval was taken before the commencement of the study from the Institutional Ethic Review Committee. Informed consent was sought from each patient before being enrolled into the study. All patients who presented to the surgical wards and outpatient with a clinical diagnosis of inguinal hernia were included in the study. Patients those who refused to give consent were excluded from the study. The clinical diagnosis of inguinal hernia was made by detailed history and clinical examination. Statistical data analysis was done using SPSS software version 22.0 (SPSS Inc., Chicago, IL, USA). **Results:** In our study total patients were 78 in which 62 were males and 16 were females. Inguinal hernia was more prevalent in age group 41-50. It was more common right side. Primary type of inguinal hernia was more common. **Conclusion:** Inguinal hernias was the cause of morbidity and mortality. Late presentation of disease was due to the lack of awareness. Increasing awareness of the disease among general population will lead to inguinal hernias being detected at earlier stage and will decrease the morbidity due to this disease.

Keywords: Inguinal hernia, abdominal hernia.

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Corresponding author: Dr. Hari Kesh Yadav, Assistant Professor, General Surgery Department, Government Medical College & Superfacility Hospital, Azammgarh, Uttar Pradesh.

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INTRODUCTION:

A hernia occurs when an organ pushes through an opening in the muscle or tissue that holds it in place. It is protrusions of body parts through defects in the anatomic structures that normally contains it and are most common in the abdomen. Abdominal wall hernias are frequently encountered in surgical practice accounting for 15% - 18% of all surgical procedures.[1,2] An Inguinal hernia is a protrusion of abdominal cavity and its contents through the inguinal canal. It is very common in men with lifetime risk of 27% and 3% for women.[3] Inguinal hernias account for 75% of all abdominal wall hernias with a lifetime risk of 27% in men and 3% in women.[4] In India, the estimated annual incidence of inguinal hernias is 1,957,850.[5] The complications of inguinal hernia include incarceration, bowel obstruction, and bowel strangulation with the greatest risk being found among older persons. Inguinal hernia repair is a commonly performed general surgery procedure in both adults and children with inguinal hernias constituting more than 95% of all groin hernia repairs.[6] Inguinal hernia can either be congenital or acquired. The proposed and well known risk and causes for inguinal hernias were increased abdominal pressure, preexisting weakness of abdominal muscles, straining during defecation, heavy lifting of weights, obesity, pregnancy etc.[7] The present prospective study was conducted to evaluate the prevalence of inguinal hernia in a known population.

MATERIAL AND METHODS:

The present prospective study was carried out in 78 patients over the period of 6 months. Ethical approval was taken before the commencement of the study from the Institutional Ethic Review Committee. Informed consent was sought from each patient outpatient with a clinical diagnosis of inguinal hernia were included in the study. Patients those who refused to give consent were excluded from the study. The clinical diagnosis of

inguinal hernia was made by detailed history and clinical examination. Statistical data analysis was done using SPSS software version 22.0 (SPSS Inc., Chicago, IL, USA).

RESULTS:

In our study total patients were 78 in which 62 were males and 16 were females. Inguinal hernia was more prevalent in age group 41-50. It was more common right side. Primary type of inguinal hernia was more common.

Table 1: Age distribution of patients with inguinal hernia

Age group	Number of patients
≤10	**2**
11-20	**7**
21-30	**9**
31-40	**15**
41-50	**29**
51-60	**11**
61-70	**3**
≥70	**2**
Total	**78**

Table 2: Frequency distribution of inguinal hernia between two genders.

Gender	Number of patients
Male	62
Female	16
Total	78

Table 3: Side distribution of inguinal hernia.

Side	Number of patients
Right only	46
Left only	29
Bilateral	3
total	78

Table 4: Distribution of patients on the basis of type of hernia.

Type	Number of patients
Primary	67
recurrent	11
Total	78

DISCUSSION:

In our study total patients were 78 in which 62 were males and 16 were females. Inguinal hernia was more prevalent in age group 41-50. It was more common right side. Primary type of inguinal hernia was more common. It has been said that inguinal hernia is a disease of infants due to defect in inguinal canal[8] by some, whereas others have found higher incidence of inguinal hernia in higher age groups.[9] Literature suggests that inguinal hernias are more common in males than in females (20:1).[10] Inguinal hernias have a predilection for right side, and this was demonstrated in our study and was in agreement with existing literature. It has been postulated that the reason for this is as the right testis descents later and this leads to the higher incidence of failure of closure of processus vaginalis.[11,12]

A similar study conducted in Khanpur by Mukesh Sangwan et al showed right sided hernia was more common than left side.[13]

Constance *et al*.[8] did not find an association with factors that might exert an effect through such a mechanism, including physical activity, constipation, chronic cough, and chronic obstructive pulmonary disease. An increased risk of inguinal hernia with greater physical exertion was found in two Spanish hospital-based case–control studies investigating occupational activity[15] or both work and recreational activity,[16] while greater current sports activity was found to decrease the risk among Dutch women.[17] There was no relation with work-related physical activity among Israeli men. Other factors that might increase intraabdominal pressure were not associated with inguinal hernia in previous studies, with the exception of an increased risk with constipation in the Dutch study.[15,16]

CONCLUSION:

Inguinal hernias was the cause of morbidity and mortality. Late presentation of disease was due to the lack of awareness. Increasing awareness of the disease among general population will lead to inguinal hernias being detected at earlier stage and will decrease the morbidity due to this disease.

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