TO STUDY THE SOCIO-DEMOGRAPHIC PROFILE PATIENTS UNDERGOING LICHTENSTEIN TENSION FREE INGUINAL HERNIOPLASTY FOR INGUINAL HERNIA

Dr. Prteet Negi1, Dr. Priyanka Thakur2, Dr. Ramesh Bharti3, Dr. Amar Verma4, Dr. Rajesh Sharma5, Dr. Abhinav Sharma6

1MS, Department of General Surgery, Dr. Rajender Prasad Medical College Kangra Tanda H.P India
2MD, Department of Anaesthesia Indira Gandhi Medical College, Shimla HP India
3MS, Department of General Surgery, Dr. Rajender Prasad Medical College Kangra Tanda H.P India
4MS, Department of General Surgery, Dr. Rajender Prasad Medical College Kangra Tanda H.P India
5MS, Department of General Surgery, Dr. Rajender Prasad Medical College Kangra Tanda H.P India
6MS, Department of General Surgery, Dr. Rajender Prasad Medical College Kangra Tanda H.P India

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Corresponding author: Dr. Priyanka Thakur
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Abstract
Background: All the hernias, 75% occurs in groin and inguinal hernia is the most common form of all. Acquired hernia can be direct, indirect or combination of both. In adult males 65% of inguinal hernias are indirect and 55% of them are right side. Methods: This prospective study was conducted in the Department of Surgery, Dr. Rajendra Prasad Government Medical College Kangra at Tanda from May 2018 to December 2019 after being approved by institutional protocol review committee and ethics committee. 50 patients were included in the study. Results: In our study, the patients age ranged from 18 years to 87 years with a mean age of 50.26±15.76 years. 22 (44%) patients had inguinal hernia on right side.
Conclusion: We concluded that mostly patients were more than 50 yrs age group and right side.
Keywords: Age, Site, Hernia

Introduction
All the hernias, 75% occurs in groin and inguinal hernia is the most common form of all. Acquired hernia can be direct, indirect or combination of both. In adult males 65% of inguinal hernias are indirect and 55% of them are right side. Cause of the hernia is multi-factorial. Increased intra-abdominal pressure and weak abdominal wall are the basis of hernia formation. Inguinal hernia surgery is the most commonly performed surgery worldwide. About one third of the surgical interventions made by general surgeons are inguinal hernia repair.1

The open mesh repair technique, Lichtenstein tension free hernia repair is the most frequently performed for inguinal hernia. Many randomized trials and meta-analyses have shown that mesh repair reduces the risk of hernia recurrence and the prosthetic repair is worldwide accepted as the gold standard in inguinal hernia repair. The Lichtenstein technique is a tension free repair of weakened inguinal floor using a polypropylene mesh.2

Material and Method
This prospective study was conducted in the Department of Surgery, Dr. Rajendra Prasad Government Medical College Kangra at Tanda from May 2018 to December 2019 after being approved by institutional protocol review committee and ethics committee. 50 patients were included in the study.

Inclusion criteria
• All Patients of both gender above the age of 18 years with unilateral or bilateral inguinal hernia.

Exclusion criteria
• Patients with recurrent or strangulated inguinal hernia.
• Femoral hernia and giant scrotal hernia with massive defect.
• Below 18 years of age.
• Allergic to injection Amoxicillin+ Clavulanic acid.
• With systemic diseases like diabetes mellitus.
• Liver or renal impairment.
• Patients on steroid or antibiotic therapy within a week before surgery.
• Pregnant or lactating women.
• Immunocompromised patients will be excluded from the study.

Characteristics of the study
Participants: 50 patients who underwent inguinal mesh hernioplasty.
**Intervention:** Surgery-Lichtenstein tension freeinguinal mesh hernioplasty

**Statistical analysis**
Data were expressed as frequency, percentage, mean and standard deviation. Diagnostic values were calculated using MedCalc for Windows, version 19.1.17 (Med Calc Software, Ostend, Belgium).

**Results**

### Table 1: Age distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>2</td>
<td>4.00</td>
</tr>
<tr>
<td>21-30</td>
<td>5</td>
<td>10.00</td>
</tr>
<tr>
<td>31-40</td>
<td>4</td>
<td>8.00</td>
</tr>
<tr>
<td>41-50</td>
<td>11</td>
<td>22.00</td>
</tr>
<tr>
<td>51-60</td>
<td>14</td>
<td>28.00</td>
</tr>
<tr>
<td>61-70</td>
<td>12</td>
<td>24.00</td>
</tr>
<tr>
<td>&gt;70</td>
<td>2</td>
<td>4.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
</tbody>
</table>

In the present study, age of the patients ranged from 18 years to 87 years with a mean age of 50.26±15.76 years. Out of total fifty patients, 14 (28%) patients were in age group of 51-60 years, followed by 12 (24%) patients in age group of 61-70 years, 11 (22%) patients in age group of 41-50 years, 5 (10%) patients in the age group of 21-30 years and 4 (8%) patients in the age group of 31-40 years. There were only 2 (4%) patients less than 20 years of age and 2 (4%) patients age were more than 70 years.

### Table 2: Side of hernia

<table>
<thead>
<tr>
<th>Side of hernia</th>
<th>No of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>22</td>
<td>44.00</td>
</tr>
<tr>
<td>Left</td>
<td>19</td>
<td>38.00</td>
</tr>
<tr>
<td>Bilateral</td>
<td>9</td>
<td>18.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Out of total 50 patients, 22 (44%) had inguinal hernia on right side, 19 (38%) patients had inguinal hernia on left side and 9 (18%) patients had pantaloon hernia.

### Table 3: Type of Hernia

<table>
<thead>
<tr>
<th>Type of hernia</th>
<th>Antibiotic group (Group-A)</th>
<th>Non-antibiotic (Group-B)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Indirect</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Both</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
</tbody>
</table>

In our study, out of total 50 patients, 26 (52%) had direct inguinal hernia, 21 (42%) had indirect inguinal hernia and remaining 3 (6%) patients had pantaloon hernia.

**Discussion**

The present study was aimed to evaluate the role of single dose antibiotic prophylaxis in elective open inguinal mesh hernioplasty to prevent surgical site infection in the patients admitted in department of surgery, Dr. Rajendra Prasad Government Medical College Kangra at Tanda, during 1year period from May 2018 to December 2019. Total 50 patients were enrolled into the study after fulfilling the inclusion and exclusion criteria.

In our study, we observed that the age distribution ranged from 18-87 years with a mean age of 50.26 years. Majority of patients were in the age group of 40-60 years. These findings were comparable to the observation of Shankar et al, where the age of patients ranged from 15-83 years with a mean age of 45 years. Another similar study conducted by Tzovaras et al, found that the age of patients with inguinal herniaranged from 15-90 years with mean age was 63 years. In our study, all the patients were male. In another similar study by N Vinoth et al, out of 60 patients all the patients of their study were male.

In our study, 22(44%) patients had right sided inguinal hernia, 19 (38%) patients had left sided hernia and 9(18%) patients had pantaloon hernia. In the similar study conducted by UI Haq et al, on 100 patients noted, 47(47%) patients had right sided inguinal hernia, 29(29%) patients had left sided hernia and 24(24%) patients had...
bilateral inguinal hernia. This study was comparable to our study.

**Conclusion**

In our study, we concluded that statistically insignificant difference was found in the incidence of SSI in Antibiotic and Non-antibiotic Group.

**References**