INCIDENCE AND CLINICAL IMPORTANCE OF LIPOMA OF THE SPERMATIC CORD
Sikder MAF, Sarker IK*

Abstract
Introduction: Lipoma of the cord is the most common benign tumour of the spermatic cord. In most instances it is a protrusion of the retroperitoneal fat through the deep inguinal ring rather than a "true" tumour.
Objective: In this study efforts are made to find out the incidence and its clinical significance.
Methods: A total of 120 consecutive patients, having 125 hernia sites with inguinal hernia were included in this study. Hernia operations were performed by total extra peritoneal (TEP) laparoscopic method in 20 hernias and open approach in a Lichtenstein fashion in 105 hernias.
Results: All the patients were males. Indirect to direct ratio was 2:1. The proportion of number of cases with right: left bilateral involvement was 14:9:1. Incidence of cord lipoma was 9%. Among them only one was true lipoma of the spermatic cord. Cord lipomas cannot be diagnosed clinically.
Conclusion: Lipomas of the cord can cause hernia like symptoms in the absence of a true hernia. Cord lipomas may be missed at laparoscopic hernia repair procedures and symptoms may persist. This has become more important with more practice of advanced laparoscopic procedures.

Key words: Spermatic cord lipoma, inguinal hernia, laparoscopic surgery.

Introduction
Lipoma of the spermatic cord is a common feature in adult male population and may be of sufficient size to cause clinical misdiagnosis.

It is often a difficult diagnosis and usually not settled until the parts are displayed at operation. The term 'lipoma' may be a misnomer because in most instances it is a protrusion of the retroperitoneal fat through the deep inguinal ring usually at the lateral aspect of the cord structures. The blood supply usually comes from beneath the internal spermatic fascia. They are indirect by the definition of cord lipoma. They are more in patients with indirect hernia. True lipomas are rare. They are encapsulated benign neoplasms of fat cells and usually have no connection with retroperitoneal fat. Cord lipomas can cause hernia like symptoms in the absence of a hernia. It is difficult to diagnose preoperatively. Big lipomas mimic irreducible inguinal hernias. In ultrasound it is seen as a spindle shaped echogenic mass along the inguinal canal. Lipomas of the cords have been relatively ubiquitous in the practice of hernia repair. Their presence is accepted as the incidental finding at the time of open hernia repair. They are either excised or pushed back and repair is completed or mesh is placed in front. With laparoscopic herniorrhaphy, cord lipomas are likely to be missed. This is more so in Transabdominal Preperitoneal (TAPP) procedure than in Total Extra peritoneal (TEP) approach.

Materials and Methods
This is a retrospective study of 125 hernia repairs performed in two different hospitals. One hundred and five consecutive adult open hernia repairs were done at Combined Military Hospital (CMH) Bogra between the period of March 2008 and January 2010. Twenty adult laparoscopic hernioplasty procedures included in this study.

were done at CMH Dhaka between the period of March 2007 and February 2008. Congenital hernias were excluded from this study. No female with inguinal hernia was found during the period of the study. Hernia repairs were performed either by open approach in a Lichtenstein fashion or by Total Extra peritoneal (TEP) laparoscopic method.

In either way, site and type of hernia and presence of cord lipoma were noted. A lipoma of the spermatic cord was identified as a discrete mass of fat within the inguinal canal. This mass was always continuous with the retroperitoneal fat through the deep inguinal ring. The true lipoma remained in the spermatic cord within a thin fibrous capsule easily separable from the cord structures with no connection with the preperitoneal tissue. Preoperative evaluation included a history and physical examination. In no patient ultrasonography of the groin was performed. In open hernia repairs, cord lipomas were excised before hernioplasty. At laparoscopy also, the lipoma was excised and repair was completed. Data obtained were compiled in tabulated form. Categorical data were expressed in percentage (%) and frequency (f).

Results
A total of 120 male patients with 125 hernias were included in this study. Age ranged from 15 years to 80 years with a mean age of 42 years. Among them, 70 (59%) were right sided, 45 (37%) were left sided and 5 (4%) were bilateral inguinal hernias. Indirect hernias were found in 80 (64%) cases, direct in 40 (32%) cases and recurrent in 5 (4%) cases. In total, 11 (9%) cord lipomas were noted (Table 1 & 2). Among them only one was true lipoma. This was limited in the inguinal canal with no connection to the extraperitoneal fat. Open operation discovered 10 (90%) lipomas and laparoscopic procedure only one (10%). True lipoma was not associated with any hernias. Seven lipomas (64%) were found on the right side and 4 (36%) on the left. Ten (91%) cord lipomas were associated with inguinal hernias and one (9%) had no hernia associated. This was misdiagnosed before surgery as irreducible inguinal hernia. Nine of the lipomas were small preperitoneal protrusions of fat through the inguinal ring and only one extended up to the superficial ring. None of them passed beyond it. No recurrence of symptom was noticed in 1-year follow-up.

Table 1: Type of lipoma (n=11)

<table>
<thead>
<tr>
<th>Type of Lipoma</th>
<th>No of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total lipoma</td>
<td>11</td>
<td>100%</td>
</tr>
<tr>
<td>True lipoma</td>
<td>1</td>
<td>9%</td>
</tr>
</tbody>
</table>

Table 2: Association of cord lipoma with types of hernia (n=110)

<table>
<thead>
<tr>
<th>Type of hernia</th>
<th>No of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect inguinal hernia</td>
<td>77</td>
<td>70%</td>
</tr>
<tr>
<td>Direct inguinal hernia</td>
<td>27</td>
<td>24%</td>
</tr>
<tr>
<td>No hernia (True lipoma)</td>
<td>6</td>
<td>6%</td>
</tr>
</tbody>
</table>

Fig.1: Lipoma of the spermatic cord. The mass is seen emerging through the deep inguinal ring with the cord containing the hernial sac (indirect hernia)

Fig.2: True lipoma of the spermatic cord. Cord is seen beside the mass

Fig.3: Excised lipoma
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Conclusion: Lipomas of the cord can cause hernia like symptoms in the absence of a true hernia. Cord lipomas may be missed at laparoscopic hernia repair procedures and symptoms may persist. This has become more important with more practice of advance laparoscopic procedures.

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It is often a difficult diagnosis and usually not settled until the parts are displayed at operation\(^1\). The term 'lipoma' may be a misnomer because in most instances it is a protrusion of the retroperitoneal fat through the deep inguinal ring usually at the lateral aspect of the cord structures. The blood supply usually comes from beneath the internal spermatic fascia. They are indirect by the definition of cord lipomas\(^2\). They are more in patients with indirect hernias. True lipomas are rare. They are encapsulated benign neoplasms of fat cells and usually have no connection with retroperitoneal fat. Cord lipomas can cause hernial like symptoms in the absence of a hernia. It is difficult to diagnose preoperatively. BIG lipomas mimic irreducible inguinal hernias\(^3\). In ultrasound it is seen as a spindle shaped echogenic mass along the inguinal canal. Lipomas of the cords have been relatively ubiquitous in the practice of hernia repair. Their presence is accepted as the incidental finding at the time of open hernia repair. They are either excised or pushed back and repair is completed or mesh is placed in front. With laparoscopic hernioplasty, cord lipomas are likely to be missed. This is more so in Transabdominal Preperitoneal (TAPP) procedure than in Total Extra peritoneal (TEP) approach\(^4\).

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In either way, site and type of hernia and presence of cord lipoma were noted. A lipoma of the spermatic cord was identified as a discrete mass of fat within the inguinal canal. This mass was always continuous with the peritoneal fat through the deep inguinal ring. The true lipomas remained in the spermatic cord within a thin fibrous capsule easily separable from the cord structures with no communication with the preperitoneal tissue. Preoperative evaluation included a history and physical examination. In no patient ultrasound of the groin was performed. In open hernia repairs, cord lipomas were excised before hernioplasty. At laparoscopy also, the lipoma was excised and repair was completed.

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Table 1: Types of hernias\(^6\)

<table>
<thead>
<tr>
<th>Type of Hernia</th>
<th>No of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct hernia</td>
<td>112</td>
<td>90%</td>
</tr>
<tr>
<td>Indirect hernia</td>
<td>13</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table 2: Association of cord lipoma with types of hernia\(^7\)

<table>
<thead>
<tr>
<th>Type of hernia</th>
<th>No of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct hernia</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>Indirect hernia</td>
<td>1</td>
<td>9%</td>
</tr>
</tbody>
</table>

Fig.1: Lipoma of the spermatic cord. The mass is seen emerging through the deep inguinal ring with the cord containing the herniated sac(inferior hernia)

Fig.2: True lipoma of the spermatic cord. Cord is seen beside the mass

Fig.3: Excised lipoma

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Discussion
Lipoma of the spermatic cord had been relatively unimportant and less focused in the practice of hernia repair. Their presence was accepted as an incidental finding at the time of hernia repair. It was an unimportant diagnosis. The fatty tissues were resected from the cord during open hernia operations and excised. With the advent of laparoscopic herniorrhaphy, cord lipomas are more apt to be missed. Here lies the significance of cord lipomas. Laparoscopic herniorrhaphy repair operations are relatively new procedures as compared to laparoscopic cholecystectomy. Now a days, it has gained popularity in the developed countries and more than 95% hernia operations are laparoscopic.11 TEP procedure is considered better in dealing with cord lipomas than TAPP. Michel et al in their study found an incidence of 22.5% cord lipoma. This figure is much higher than the present study. Racial variations and obesity might be associated with it. Indirect inguinal hernia had more association with cord lipomas. This finding is similar to that of other studies.12 True lipomas of the cord is also far less common than seen in other studies.11 Size or length of the lipoma had no relation with age of the patient which is a similar finding to that of some other studies.12

Conclusion
Cord lipoma is the commonest tumour of spermatic cord. Though it is not that common, it is getting more important with the use of laparoscopic surgery for hernia operations. Missed lipoma of the cord is a pitfall unique to TAPP laparoscopic hernia repair. This problem occurs when a palpable inguinal mass is noted preoperatively, but no hernia or intrapelvic defect is found at the time of laparoscopy and the procedure is terminated. With the more and more use of laparoscopic procedures for hernia repair, this unimportant tumour has gathered much of surgical attention. High frequency, high resolution ultrasound probe can be used in selected cases. More studies are needed to be done to have better understanding of the matter.

References

STRESSFUL LIFE EVENTS AMONG PATIENTS WITH DISSOCIATIVE AND SOMATOFORM DISORDER
Tabassum R1, Haque M2, Chowdhury SH3

Abstract
Introduction: Stressful life events are part of the fabric of daily existence and often produce discomfort. An emotional, cognitive and physiological functioning. Somatoform and dissociative disorder categories emerge from a common root, hysteria of the hysteric patients present with features for which there are no apparent anatomical or physiological basis and which has a temporal relationship to a precipitating event.
Objectives: This comparative cross sectional study was carried out to compare various stressful life events between diagnosed somatoform and dissociative disorder patients. Methods: A total 220 patients participated. They were interviewed through a structured Bengali questionnaire through face to face interview schedule. For the purpose of the comparison each of the somatoform and dissociative disorder patients participated equally from each group. Results: The younger population was prone to develop dissociative disorder than somatoform disorder (33.4% to 12.7%). Married people seemed to be more likely to develop somatoform disorder than dissociative (87.2% to 64.5%). While married people more likely to develop dissociative disorder (35.5% to 12.8%). House wives were observed to be more likely to develop somatoform disorder than dissociative disorder (78.18% to 60.4%). There was statistical significance between the incidence of divorce/separation of the respondents and development of either somatoform or dissociative disorder (p=0.05).

Majority of the respondents with unplanned pregnancy by the spouse (7.27%) appearing for examination or interview (2.75%), marriage/engagement (5.45%) and gains of a new family member (4.55%) tend to develop dissociative disorder. While majority of respondents with sexual problems (16.26%), burden of large loan (11.8%) seem to develop somatoform disorder.

Conclusion: There are certain factors which require equal consideration in such patients of these may shed some light on stressful life events associated with dissociative disorder and somatoform disorder.

Key words: Stressful life events, dissociative, somatoform disorder

Introduction
Stressful life events are part of the fabric of daily existence and often produce disorganized emotional, cognitive and physiological functioning. Daily hassles, chronically stressful situations may play a role in experiencing stress by individual. In general practice, it is found that somatic symptoms, such as fatigue, chest pain and headaches are extremely common complaints by the patients. Studies have found that over 20% and as many as 75% of all patients in the primary care settings present with psychological problems through somatic symptoms without any organic diseases.8

Somatoform and dissociative disorder categories have emerged from a common root - hysteria, a diagnosis given to a group of patients who presented with features for which there was no apparent anatomical or physiological basis and

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