

# ***Free lipoma in the sac of right inguinal hernia: A case report.***

## ***Abstract:***

A 43-year-old male patient who was previously healthy, presented at the surgical outpatient clinic with a right inguinal hernia. On laparoscopy, a free lipoma was found inside the hernial sac.

***Keywords: peritoneal loose bodies, lipoma, and inguinal hernia.***

## ***Introduction:***

Peritoneal loose bodies (PLBs) are usually seen intraoperatively or at autopsy. Sometimes, a peritoneal mouse can be considered a PLB (8). It is generally accepted that the source of these bodies is the epiploic appendices via sequential processes of torsion, infarction, saponification, or calcification (1). Usually, the PLBs are small (less than 1 cm) but Giant loose bodies (more than 5 cm) are very rare and only a few cases have been reported in the literature (1). However, these bodies may grow to bigger dimensions and cause some symptoms such as urinary retention and intestinal obstruction (2-7). The size of the peritoneal loose bodies is ranging from 2.5cm to 10.4 cm with a mean of 6.26 cm (6-9-10). The PLBs are misinterpreted as intraabdominal tumors or foreign bodies and unnecessary surgical interventions are

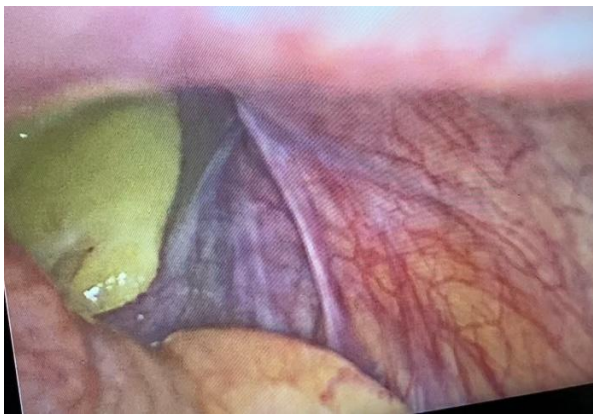
usually done (3). However, surgical exploration may be the imperative method for definite management in some instances (4). One of these PLBs is lipoma. Intraperitoneal lipoma is extremely rare (5).

### ***Case history:***

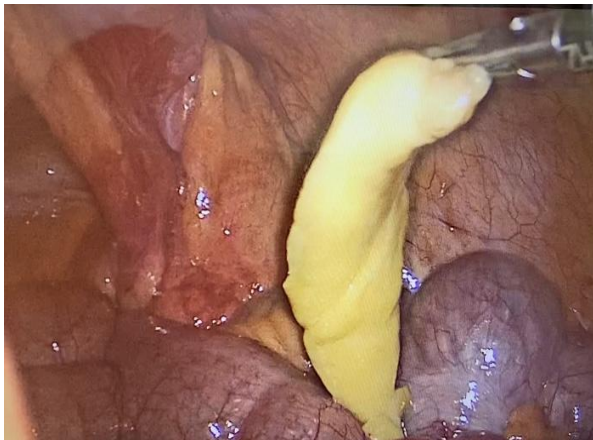
A 43-year-old male patient who is previously healthy, presented at the outpatient clinic with a picture of an uncomplicated right side inguinal hernia. He was scheduled for laparoscopic hernia repair (TAPP repair). On laparoscopy, a free mass like lipoma was found inside the hernia sac, which was extracted easily by forceps and sent for histopathology. The gross picture of histopathological examination revealed a yellow adipose tissue fragment measuring 6.6 x 2.3 x .7 cm and microscopically showed mature fat cells with fat necrosis. The patient had a postoperative smooth course, and he was discharged home on the 1<sup>st</sup> postoperative day. After 15 days, the patient was seen in the surgical outpatient clinic, and he was completely asymptomatic.



***Before seeing the lipoma***



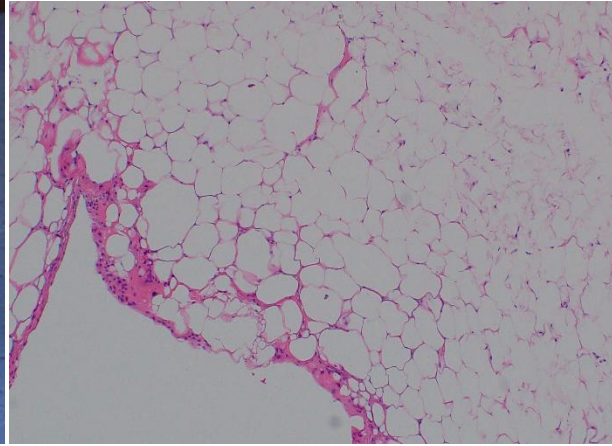
***Seeing the lipoma***



***During extraction***



***Outside the abdomen***



***The histopathology***

## ***Discussion:***

Giant loose bodies, also known as peritoneal mice, are extremely rare; that is why there are only a few cases in the literature (1). Their pathogenesis has not been fully understood, although a theory suggests that it is a sequential process that begins with the torsion of an epiploica, followed by ischemia, saponification, or calcification. As a result, the pedicle of these epiploica atrophies leading to its detachment from the colon surface, becoming a loose body (1 -7). It is difficult to diagnose these lesions, as almost all patients are asymptomatic, and can be found during abdominal exploration for other pathologies. Grossly, lipomas usually are oval, yellow, soft, and capsulated. Lipomas generally grow slowly and are mobile masses that do not infiltrate the surroundings (6). The parietal and the visceral peritoneum are very sites for lipomas (11). In our case, the lipoma was found free in the inguinal hernia sac.

## ***Conclusions:***

The rarity of the peritoneal loose bodies is well established, and there are only a few cases in the literature. Still, their development is unclear. Asymptomatic patients require no treatment. However, surgical intervention may be required if these bodies are complicated with, for example, intestinal obstruction or if the diagnosis is in doubt. We highly encourage the surgical community to document and share these types of cases to overcome the limitations of resources available within the literature.

## **Ethical Approval:**

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

## ***CONSENT***

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

## ***COMPETING INTERESTS***

Authors have declared that no competing interests exist.

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