An incidental rare presentation of peritoneal loose body in inguinal hernia sac.

JAYAPRAKASH NARASHIMMAN
Department of General Surgery,
MADURAI MEDICAL COLLEGE AND HOSPITAL

Abstract:
A 56 yr old male presented with swelling over the right groin for a period of 6 months, which had become painful and irreducible for 2 days. Examination findings revealed an oval swelling of size 7 x 6 cm extending from deep inguinal ring to root of the scrotum that was irreducible. Intraoperatively, indirect hernia sac contained omentum encasing a single large peritoneal loose body which was removed and the tension free Liechtenstein’s hernia repair was completed. Peritoneal Loose body means a structure which has worked free from the lining of abdomen, resembling the loose bodies found in joints. It may be found incidentally at laparotomy or give rise to no definite symptoms. The peritoneal loose body in the hernia sac has not been documented in literature.

Keyword: Peritoneal Loose bodies, inguinal hernia

for 2 days. There were no symptoms suggestive of intestinal obstruction. Examination findings revealed an oval swelling of size 7 x 6 cm extending from deep inguinal ring to root of the scrotum that was irreducible. (Fig 1). The pre operative diagnosis was right sided irreducible indirect inguinal hernia and planned for tension free Liechtenstein’s hernia repair. Routine blood investigations were normal.
Under regional anesthesia, right inguinal groin incision made. Indirect sac contained omentum encasing a single large peritoneal loose body. (Fig 2.) The peritoneal loose body was 4.5 x 4 cm smooth surfaced, hard in consistency, dirty white in color, and 72 grams in weight. It was removed and the hernia repair was completed. Postoperatively, the specimen was sent for biochemical analysis which revealed the presence of calcium oxalate, calcium phosphate and traces of uric acid. Post operative computed tomography (CT) abdomen didn’t reveal any other peritoneal body.

Discussion: “Peritoneal Loose body” means a structure which has worked free from the lining of abdomen, resembling the loose bodies found in joints. [1] Hunt hypothesised that necrosis of pedicle of appendixepiploica was a possible source of loose peritoneal body. Virchow [2] further elaborated that due to obesity, the fat content and the weight of appendices epiploicae increase causing gradual and progressive obliteration or obstruction of blood vessels of the pedicle and that further undergoes torsion, infarction and finally gets detached from colon and becomes a loose peritoneal body. [3] Over the years peritoneal reaction to this freely moving appendix epiploica and peritoneal serum deposition over it causes its enlargement. Thus, at center of appendix epiploica there is calcification surrounded by thick-laminated fibrinoid material.

Usually, Peritoneal loose body may give rise to no definite symptoms or may present with various symptoms like low abdominal pain or constipation[1] or even may present as acute retention of urine.[4] Many times they are found incidentally at laparotomy or in cadaver.[1]. CT and MRI are useful in finding the loose bodies’ preoperatively.

The peritoneal loose body in the hernia sac has not been documented in literature. In the present case, patient had pre existing hernia sac and we presume that peritoneal loose body because of its weight and smooth surface would have got lodged in the hernia sac causing irreducibility of hernia.

References: