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A RARE CASE OF OMENTAL TERATOMA -CASE REPORT

General Surgery

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ABSTRACT

Mature teratomas (benign cystic teratomas or dermoid cysts) are among the most common ovarian tumours; however, teratomas of the omentum and mesentery are extremely rare. The first omental dermoid cyst was described by Lebert in 1734. To date, only 31 cases of teratoma of the greater omentum (TGO) have been published. This is a rare case of an omental teratoma in a 47-year-old woman who was treated with omental cyst excision

KEYWORDS

Teratoma, Dermoid, Omentum

INTRODUCTION

Teratomas of the greater omentum have been reported more frequently in women. They are typically found in women of reproductive age, but may also appear in young girls and in older women. Mumley and colleagues in 1928, reported a 16.7% occurrence rate of these tumours in men[1]

The underlying mechanism for the development of teratomas in the omentum has not yet been clarified; however, there are three theories on the possible cause for these cysts' occurrence and their diverse locations:

- Omental teratomas might develop from germ cells that, for one reason or another, may have been displaced.
- Omental teratomas might develop within a supernumerary ovary.
- Omental teratomas might develop due to the self-amputation of a dermoid cyst in the ovary, and then become re-implanted into the omentum[2]

Primary omental teratoma occurs more commonly in females than in males, with the average of the males being much younger than of the females, and malignant transformation (MT) is rare[3]

The omentum, because of its special role in intra-abdominal inflammatory defence process, is probably the main location for secondary implantation for the tumor[4]

Usually omental dermoid cysts produce no specific symptoms. Roentgenogram and CT scans are helpful in suspecting the condition preoperatively. But the diagnosis can be confirmed only at surgery[5].

The exact localisation of the tumour is however extremely difficult. Potential malignant degeneration has to be considered, but is infrequent[6]

Consensus regarding the management of these tumors is needed for a multidisciplinary approach in a specialized clinic[7]

Case Study

In this case report, we present the case of 47 years old female who presented in general medicine ward with complaints of unable to walk and lower limb weakness for a duration of 15 days, history of loss of appetite, history of vomiting, abdominal pain for the past 1 week. Patient was initially managed conservatively in medicine ward and was referred for general surgery department for abdominal pain. Patient had similar episodes in the recent past, thrice during a period of past 6 months. Patient was already diagnosed to have Acute flaccid paralysis with proximal muscle weakness.

The patient was observed to be thin built and on bed-side examination, the patient was found to be underweight for age and undernourished. Pallor was noted and the woman was found to be afebrile. She was observed to be mildly dehydrated with no tachypnoea or tachycardia. She was normotensive and other systemic examinations were found to be normal.

Examination of the abdomen revealed mildly distended abdomen, mild tenderness over epigastric region and bowel sounds were present, but the abdomen was soft with no guarding or rigidity. Examination of external genitalia was normal. Digital rectal examination revealed normal tone of external sphincter and presence of faecal staining.

Diagnostic Imaging and other investigations:

Routine blood investigations were within normal range except for positive for HbsAg. Routine USG screening was done which showed complex cyst with coarse internal echoes, multiple septations superior to bladder midline and towards left iliac region. Contrast Enhanced CT scan was planned for further evaluation.

Clinical course at the hospital:

The patient, was initially presented with complaints of unable to walk and lower limb weakness, loss of appetite, h/o vomiting, abdominal pain. Patient came with complaints of unable to walk and lower limb weakness for 15 days and was initially admitted under Female medical ward for paraparesis for evaluation. Regular blood investigations were done and was done to be within normal limits As a part of routine investigations USG abdomen was taken which revealed complex cyst with coarse internal echoes, multiple septations superior to bladder midline and towards left iliac fossa region . CECT abdomen was taken to confirm the findings which revealed cystic lesion.Patient was planned for exploratory laparotomy.

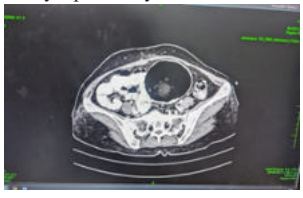

Figure 1 : CECT abdomen showing a well defined cystic lesion (orange arrow)

Intra operative course:

Laprotomy was proceeded with lower midline incision. Abdomen was opened in layers. During initial assessment, A swelling of size 15x10cm noted attached to greater omentum. Lower midline incision made. Incision was deepened. Abdomen was opened in layers and the above findings were visualised. Omental Adhesions around the cyst was cauterised and cut with 2 cm of clearance margin. Cyst was removed and sent for Histology pathological examination. Omental adhesions around the midline scar was cauterised.Omental band connecting to sigmoid colon was excised . Bowel walk done and found to be normal. previous scar excised.Abdomen closed in layers with 1-prolene and skin was closed with staplers. Specimen was sent for HPE.

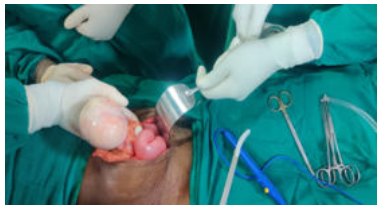

Figure 2: Intra Operative picture showing cystic lesion arising from Omentum

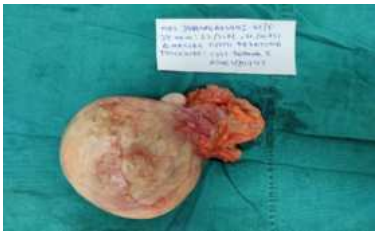

Figure 3 : Specimen excised from omentum

Post-operative recovery of the patient:
Patient's postoperative period was uneventful with smooth recovery. Intravenous fluids, antibiotics and analgesics were administered. Patient passed stools on day-2 and was started on solid diet on day-3

CONCLUSION:

The definitive diagnostic finding is the presence of fat and calcification, so CT is the diagnostic modality of choice. In our patient, the discovery of hair in the excised tumour certainly suggested the diagnosis of mature teratoma. Teratomas of the greater omentum are benign lesions, but malignant transformation of mature cystic teratomas has been described. Surgical removal is always necessary. Immature teratomas are potentially malignant, so the patient may require chemotherapy and radiotherapy.

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Consent- Informed & Written consent obtained from the patient.

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