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A rare case of omental liposarcoma: Computed tomography features

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Abstract

Omental liposarcoma is rare presentation of liposarcoma, commonly found in the lower limbs and retroperitoneum. We present a case of omental low grade myxoid liposarcoma and discuss imaging findings in computed tomography to differentiate omental liposarcoma from another abdominal tumor. I herein present a case of a 30-year-old female presented with abdominal pain and swelling for 4-month, with normal bowel habit. Contrast-enhanced Computed tomography was done which revealed heterogenous enhancing non infiltrative lobulated abdominal mass measuring about 11x10x8 cm in size, compressing the pancreas, no evidence of local infiltration. The liver was normal and no lymph node metastasis was observed. The omental origin of the tumor was revealed only on post laparotomy. The patient underwent explorative laparotomy, intraoperative a 4-kg tumor seemed to be emanating exclusively from the greater omentum was simply resected. Histopathology of the tumor revealed a low grade myxoid liposarcoma. After the operation the patient received neither radiotherapy nor chemotherapy. The patient had no recurrence or complications 8 months post operative. This case accentuates the importance of considering contrasted computed tomography in evaluating abdominal liposarcoma in conjunction with laparotomy in establishing the origin of the mass.

Keywords: Omental liposarcoma, Computed tomography features.

Introduction

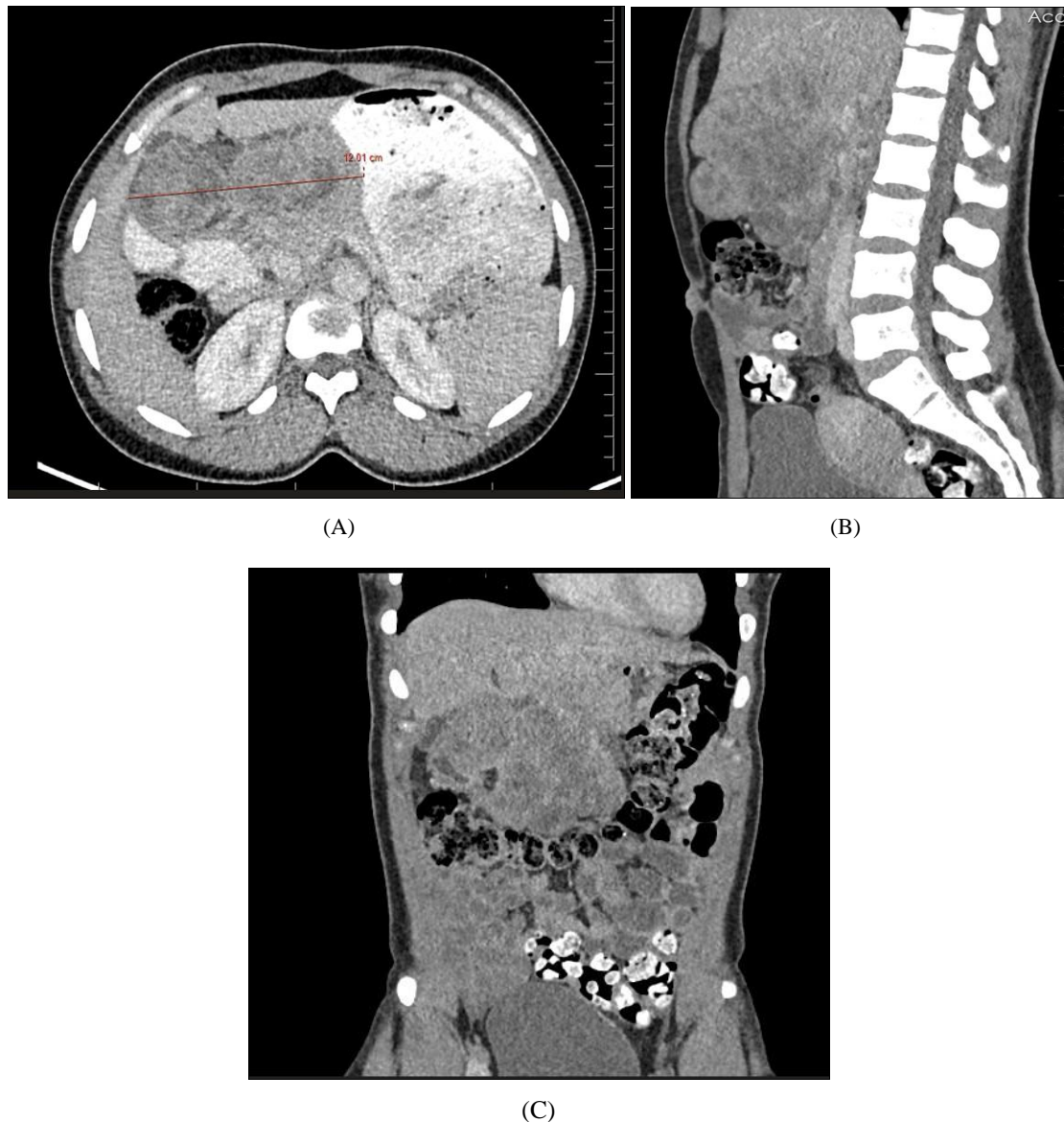
Liposarcoma usually occurs in the retroperitoneum and limbs. Liposarcoma of the greater omentum is rare, and most information of such liposarcomas has come from case reports [1, 2].

Case Report

A 30-year-old female presented with abdominal pain and swelling for 4-month, with normal bowel habit, no vomiting, weight loss or fever. Contrast-enhanced Computed tomography (Fig 2 A, B and C) which revealed heterogenous enhancing non infiltrative lobulated abdominal mass measuring about 11x10x8 cm in size, compressing the pancreas, no evidence of local infiltration. The liver was normal and no lymph node metastasis was observed. The omental origin of the tumor was revealed only on post laparotomy. The patient underwent explorative laparotomy, intraoperative a 4-kg tumor seemed to be emanating exclusively from the greater omentum was simply resected. Histopathology of the tumor revealed a low grade myxoid liposarcoma. After the operation the patient received neither radiotherapy nor chemotherapy. The patient had no recurrence or complications 8 months post operative.



Fig 1: Gross view of the tumor post resection



(A)

(B)

(C)

Fig 2: (A, B and C): Computed tomography showing a large heterogenous enhancing mass compressing the pancreas, no evidence of local infiltration. The liver is normal and no lymph node metastasis is observed.

Discussion

Liposarcoma originates from primitive mesenchymal cells, common sites are in the deeper soft tissues, especially in the gluteal region, thighs, popliteal fossa, shins and the retroperitoneum, they are rarely found in the greater omentum [1, 2].

Omental liposarcoma occur more frequently in the sixth and seventh decades of life with a male to female ratio of 2:1 [3, 4]. This is in contrary to our case; the patient was a female at 30 years.

Vague abdominal pain and progressive abdominal distension are the most common presenting symptoms, however large masses may present with signs of compression i.e. vomiting, constipation and urinary symptoms [1-3, 6]. The same as our case patient presented with abdominal pain and swelling.

The diagnosis of omental liposarcoma is typically made by imaging studies such as Computed Tomography or Magnetic resonance Imaging, with definitive diagnosis confirmed by histopathology [7, 8].

Studies have shown Computed tomography appearance as non-infiltrative lobulated heterogeneous masses displacing abdominal organs [6-8]. Another study reports homogenous

fat areas with enhancing septa and sclerotic component on enhancing computed tomography [9, 10]. In our case we observed the non-infiltrative lobulated heterogenous enhancing mass compressing the pancreas.

Conclusion

Computed tomography is important in evaluating abdominal liposarcoma, but it is difficult to make a clearly omental origin pre-operatively, in most cases the omental origin of the mass is diagnosed intraoperatively. If pre-operative diagnosis cannot be established laparotomy should be performed.

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