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Case Report

Intestinal liposarcoma: an unusual cause for peritonitis

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ABSTRACT

Liposarcoma is the commonest type of soft tissue sarcomas which can occur in any part of the body, most commonly involving the limbs and retroperitoneum but it rarely involves small bowel. Only very few cases had been reported of liposarcoma involving small intestine in the past. The clinical presentations of this type of tumour arising from small bowel are nonspecific mostly during the initial stages of the disease and because of this the disease is often diagnosed at advanced stage. We report a very rare case of primary small bowel liposarcoma of ileum which had spontaneously perforated leading to peritonitis in an elderly female who underwent laparotomy, the tumour mass is resected with adequate margins and primary bowel anastomosis was done. The patient was followed up for a year with no complication. Although the liposarcomas occurring in the gastrointestinal tract leading to intestinal perforation is extremely rare. This unique case represents an important learning point for all clinicians and pathologists.

Keywords: Liposarcoma, Atypical lipomatous tumor, Well-differentiated liposarcoma

INTRODUCTION

Liposarcoma is the commonest type of soft tissue sarcoma which can occur in any parts of the body but one originating from small bowel is extremely rare.[1] It is very difficult to detect the disease at early stage because of its vague presentation which led to its diagnosis at advanced stage.[2] We report the clinical and pathologic findings of a primary small bowel well differentiated-type liposarcoma with perforation causing peritonitis.

CASE REPORT

A 65-year-old female presented to our emergency department with complaints of diffuse abdominal pain for past three days associated with vomiting containing food particles, non-bilious, not blood stained. Patient not passed stools since three days. The patient had no other significant history. On examination patient was febrile with tachycardia, abdomen showed signs of peritonitis. Patients erect x-ray showed air under right side of diaphragm. Patient was taken up for emergency exploratory laparotomy after initial resuscitation. Intraoperatively a large mass of 16x14x12 cm mass in ileum approximately 60 cms away from ligament of trietz (Figure 1). External surfaced of tumour is lobulated, congested and encapsulated with focal area of perforation at the surface of tumour.

The tumour mass is resected with adequate margins and primary bowel anastomosis was done. Postoperatively, the patient general condition improves and was discharged on post-operative day 10 without any complication.

Histology of the specimen shows encapsulated tumour composed of varying sizes of adipocytes, some of them showing hyperchromatic and mildly pleomorphic nuclei. Occasional lipoblasts are seen suggestive of well differentiated liposarcoma of ileum (Figure 2). The patient was followed up for a year with no complication.

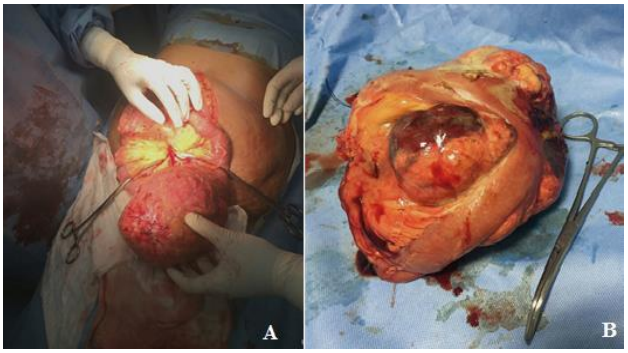

Figure 1: Highlights of intra and postoperative images (A) tumour in ileum (B) resected section of tumour.

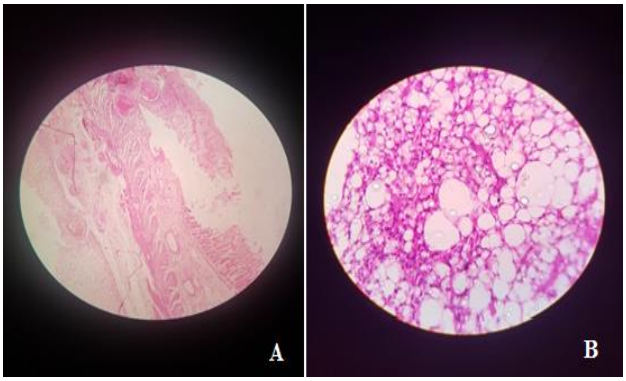

Figure 1: Highlights of the microscopic images (A) macroscopic view. (B) encapsulated tumour with varying size of adipocytes some of them showing hyperchromatic and mildly pleomorphic nuclei, occasional lipoblast is seen.

DISCUSSION

The world health organization classify liposarcoma in to 5 types which are well differentiated, dedifferentiated, myxoid, round cell and pleomorphic.[3]

The term atypical lipomatous tumour (ALT)/well-differentiated liposarcoma (WDLS) represent tumours which are locally aggressive and it is not a metastatic tumour. The term ALT is reserved for the tumours that arise in the extremities. The term WDLS is reserved for the tumours found in the retroperitoneum or mediastinum but both shares same histological features.[4]

The well differentiated liposarcoma usually have good prognosis. The five-year survival rate is around 75 to 100 percentage when compared to other types.[5]

Horiguchi et al described a case of liposarcoma with peritonitis due to jejunal perforation, but the cause of perforation was adhesions due to previous surgery and not due to direct infiltration of tumour cells as observed in our study.[6]

KS Benaragama et al descried a case of perforated ileum associated with a mesenteric mass. The tumour had perforated causing peritonitis which was similar to our study.[7]

Surgical resection with adequate clear margins is the treatment of choice for all primary liposarcomas which was achieved in our case.[8]

CONCLUSION

In summary we have presented a very unusual case of well differentiated liposarcoma of the small bowel with perforation leading to peritonitis. Although, the liposarcomas occurring in the gastrointestinal tract leading to intestinal perforation is extremely rare. This unique case represents an important learning point for all clinicians and pathologists.

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