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Case Report

INFLAMMATORY PSEUDOTUMOUR OF MESENTERY: A CASE REPORT

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Case Report

A 5-year-old male child was presented to our hospital with complaint of abdominal pain and a palpable abdominal mass for 15 days. The child was alright 15 days back when he had an episode of pain abdomen in the peri-umbilical region. The parents noticed a mass like hardness in the central abdomen. There was no history of vomiting, constipation, fever, rash or trauma.

The general physical examination of the patient was normal. Abdominal examination revealed a hard mass in the peri-umbilical region with irregular margins.

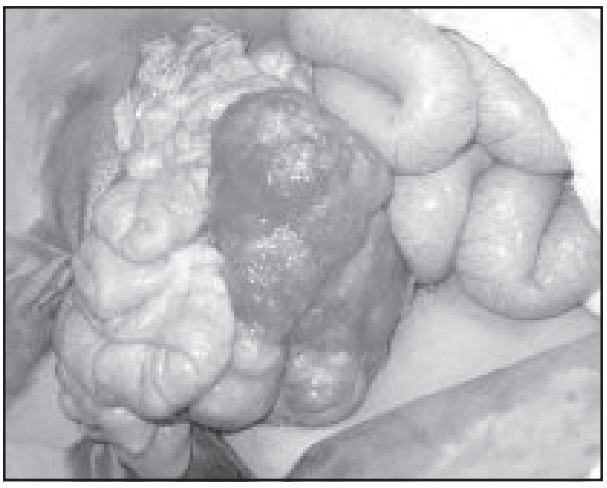

Fig.-1: *Is showing mass in the mesentery of small intestine.*

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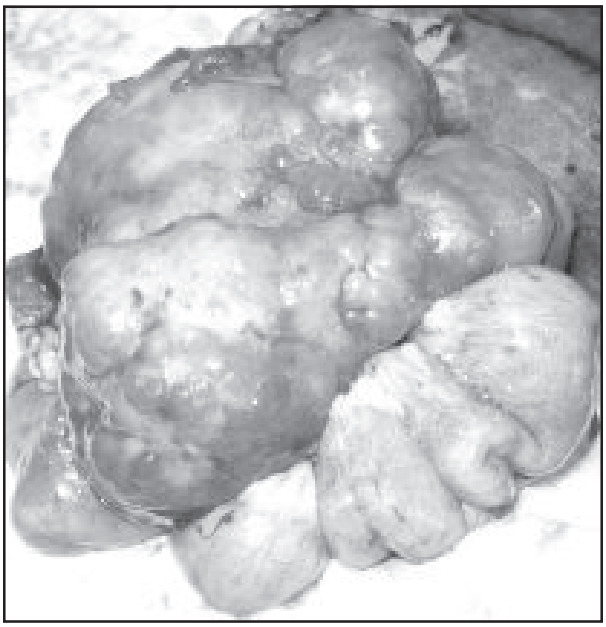

Fig.-2: *Showing excised mass*

Ultrasound abdomen revealed a mass of mixed echogenicity in that region. CT scan abdomen showed a heterogeneous mass in the periumbilical region with internal calcifications. The preoperative diagnosis was neuroblastoma. All the laboratory parameters were in normal limits. The patient was optimized for surgery and an exploratory laparotomy was performed.

At operation there was a hard mass arising from the mesentery of distal ileum [Image 1]. The mass was completely excised along with some part of distal ileum and limited hemicolectomy performed [Image 2]. The postoperative recovery was uneventful. The patient was started orally on 4th postoperative day and discharged on 8th postoperative day.

Histopathology of the submitted sample revealed a benign lesion comprising of spindle shaped fibroblasts

and myofibroblasts against a fibrocollagenous background. In addition there was abundant inflammatory cells infiltrate comprising of plasma cells, eosinophils, neutrophils, and lymphocytes. The histopathological opinion was inflammatory pseudotumour.

Discussion

Inflammatory pseudotumour is also pronounced as inflammatory fibrosarcoma, inflammatory myofibroblastic tumor, inflammatory myofibrohistiocytic proliferation, plasma cell granuloma, inflammatory fibroid polyp, xanthoma etc. The common locations for inflammatory pseudotumour are lungs and orbits; however, it has been reported in airways, stomach, liver, omentum, mesentery, testes, spleen, pancreas, kidneys, adrenals, diaphragm, central nervous system, and so on.[1,4,5]

Clinically and radiologically, they resemble malignant tumors like sarcomas. Computed tomography appearance is somewhat variable. In paediatric patients CT scan may delineate calcifications inside the heterogeneous mass. Calcifications are rarely observed in adult patients. The preoperative diagnosis is never suspected in almost every patient.[1,6,7] The preoperative diagnosis is usually a malignant lesion and even in our case the preoperative diagnosis was neuroblastoma. We were not suspecting it as inflammatory pseudotumour during operation; our operative diagnosis was lymphoma.

The etiology of the lesion is mostly controversial. Most of authors believe in an exaggerated response to tissue injury or infection due to the presence of inflammatory cells and association with trauma, surgery or other malignancy. Others consider it as a low grade sarcoma with inflammatory cells on the basis of its propensity to infiltrate locally, recurrence and sometimes malignant transformations.[1,5,7]

These lesions are usually diagnosed on histopathological features characterized by spindle cells, myofibroblasts, plasma cells, lymphocytes and histiocytes; and they stain positive for actin, desmin and vimentin.[2,3,5] In our case spindle shaped fibroblasts and myofibroblasts were present along with lot of inflammatory cells like plasma cells, eosinophils, neutrophils and lymphocytes.

The recommended treatment of inflammatory pseudotumour is complete surgical excision. Radiotherapy and chemotherapy has been advised in case of partially resected lesions, however, their role is controversial. The recurrence is reported to be 18-40%.[1,2,4] The follow up in the index case is of 6 months; however, a long term follow up is required to comment on the recurrence.

conclusion

Inflammatory pseudotumour of the mesentery is a rare lesion in pediatric age group. It should be kept in differential diagnosis of abdominal masses with calcification.

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