

Inflammatory Pseudotumor of Mesentery

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ABSTRACT

Inflammatory pseudotumor is one of infrequent lesions of mesentery in pediatric age group. They usually mimic a malignant lesion. A 5-year-old male child presented with abdominal pain and a palpable mass in the umbilical region. Ultrasound revealed a mixed echoic mass in the same area. CT scan showed a solid mass with internal calcifications. At operation a hard mass in the mesentery of the distal ileum was found. The mass was excised completely and limited hemicolectomy done. Histopathology of the excised specimen was reported as inflammatory pseudotumour of the mesentery.

Key words Inflammatory pseudotumor, Mesentery, Pediatric.

INTRODUCTION:

Brunn, in 1939, was the first to describe the lesion in the lung. It has been so named by Umiker et al in 1954 due similarity of the lesion with malignant tumor. Inflammatory pseudotumor has frequently been reported in lungs and orbits.¹ The final diagnosis is based on histopathology of the lesion. Inflammatory pseudotumor of the mesentery is a rare lesion.^{2,3} Herein we report one such case.

CASE REPORT:

A 5-year-old male child presented with complaints of periumbilical pain and a palpable abdominal mass for 15 days. Parents noticed a mass in the central abdomen. There were no other associated symptoms. The general physical examination was unremarkable. Abdominal examination revealed a firm mass in the periumbilical region with irregular margins. Ultrasound revealed a mass of mixed echogenicity while CT scan showed a heterogeneous mass in the periumbilical region with internal calcifications. The preoperative diagnosis was neuroblastoma. All the laboratory parameters were within normal limits.

At operation a firm mass arising from the mesentery of distal ileum was found (Fig I). The mass was completely excised along with some part of distal ileum and limited hemicolectomy performed. The postoperative recovery was uneventful.

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Histopathology 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 pseudotumor.



Fig I: Mass in the mesentery of small intestine.

DISCUSSION:

Inflammatory pseudotumor is also named as inflammatory fibrosarcoma, inflammatory myofibroblastic tumor, etc. They have been reported in all parts of the body.¹ Clinically and radiologically, they resemble malignant tumors like sarcomas. In pediatric 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 The preoperative diagnosis is usually of a malignant lesion and even in our case the preoperative diagnosis was neuroblastoma. The etiology of the lesion is mostly controversial. Most of authors believe that it is 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.^{1,4}

These lesions are usually diagnosed on histopathological features.²⁻⁴ 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 pseudotumor is complete surgical excision. Radiotherapy and chemotherapy have been advised in partially resected lesions, however, their role is controversial. The recurrence is reported as 18-40%.^{1,2} The follow up in the index case is of 2 years; however, a long term follow up is required to comment on the recurrence. To conclude, inflammatory pseudotumor of the mesentery is a rare lesion in pediatric age group. It should be kept in differential of abdominal masses with calcification.

REFERENCES:

1. Bonnet JP, Basset T, Dijoux D. Abdominal inflammatory myofibroblastic tumors in children: Report of an appendiceal case and review of literature. *J Pediatr Surg.* 1996;31: 1311-4.
2. Gupta CR, Mohta A, Khurana N, Paik S. Inflammatory pseudotumor of the omentum: An uncommon pediatric tumor. *Indian J Pathol Microbiol.* 2009;52:219-21.
3. Mahale A, Venugopal A, Acharya V, Kishore MS, Shanmuganathan A, Dhungel K. Inflammatory myofibroblastic tumor of lung (pseudotumor of the lung). *Indian J Radiol Imaging.* 2006; 16: 207-10.
5. Jain S, Bhargava SK, Upreti L, Mohta A. Inflammatory myofibroblastic tumor of sigmoid mesocolon. *Indian J Radiol Imaging.* 2004; 14: 103-4.