Inflammatory pseudotumor of the mesentry

Rajeeva B. Shetty
Department of General Surgery, Bowring and Lady Curzon Hospitals, Bangalore Medical College, Bangalore, India

For correspondence:
Prof. Rajeeva B. Shetty, Medical Superintendent, Bowring and Lady Curzon Hospitals, # B71, KPWD Quarters, Jeevanabheemanagar, Bangalore, Karnataka - 560 075, India. E-mail: rsbannadi@yahoo.com

ABSTRACT

Inflammatory pseudotumor is a benign, chronic inflammatory disorder known by many names. This condition presents with features suggestive of malignant disease. But surgery is curative for this condition. We report a case of inflammatory pseudotumour of the mesentery and retroperitoneum in a 40 year-old patient for whom curative resection was done.

Key words: Inflammatory pseudotumour, mesentry, myofibroblastic proliferation, plasma cell granuloma

INTRODUCTION

Inflammatory pseudotumor is a rare benign disorder characterized by chronic inflammatory infiltration with myofibroblastic proliferation. The rate of prevalence of mesentric inflammatory pseudotumor is not known. In a study of 85 cases of abdominal inflammatory pseudotumor, 36 (42.2%) originated from the mesentry and / or omentum.[1] This condition presents with features suggestive of malignant disease and although it occurs commonly in the lung, it can occur anywhere in the body.[2] The following case of inflammatory pseudotumor of the mesentry and retroperitoneum is reported because of its rarity and close resemblance to malignancy.

CASE REPORT

A 40 year-old male patient presented with complaints of abdominal distension of six months' duration and abdominal pain for two months. There was no history of altered bowel habits, urinary symptoms or loss of weight or appetite. Clinical examination revealed three intraabdominal masses. The largest was in the right lumbar region-18 x 12 cm size, had a smooth surface, diffuse margins, was hard in consistency and mobile in both vertical and horizontal directions. Other masses were found in the umbilical region (10 x 6 cm) and left lumbar fossa (8 x 6 cm). Both of them were freely mobile, had smooth surfaces, regular margins and were nontender and hard in consistency. Per rectal examination was normal.

Blood, renal and hepatic parameters were normal. Ultrasonography revealed six masses-five intraabdominal and one retroperitoneal mass. All masses were mixed echogenic masses. Computed tomography (CT) scan revealed six contrast-enhancing masses, five of them were in relation to the mesentry and one was found in the retroperitoneum between the 4th part of the duodenum and left kidney. Diagnosis of myxomatous variety of liposarcoma was suspected based on CT findings. Ultrasonography (USG)-guided fine needle aspiration cytology (FNAC) was inconclusive.

The patient was posted for laparotomy. On exploration, five masses were noted in the mesentry of the jejunum close to its mesenteric margin partially compressing the lumen [Figure 1]. All masses including the segment of the jejunum were removed in toto and ends of jejunal coils were anastomosed. The retroperitoneal mass was also excised, taking care not to injure the adjacent structures.

A histopathological study of the specimen showed diffuse infiltration of plasma cells in all the specimens [Figure 2]. Occasional giant cells of foreign body type were found. Fibroblastic reaction was also noted. No evidence of dysplasia or metaplasia was present in any specimen.

Postoperative recovery was uneventful. Patient is healthy at two months’ follow-up.
DISCUSSION

Inflammatory pseudotumor is a benign, chronic, inflammatory disorder known by many names—inflammatory fibromyoblastic pseudotumor, plasma cell granuloma, plasma cell pseudotumor and inflammatory fibrosarcoma.\(^2\) It is characterized pathologically by a diffuse infiltration of inflammatory cells with fibromyoblastic proliferation. The predominant cells may be plasma cells, neutrophils or lymphocytes.\(^1\)

The etiology and pathogenesis of this condition is not known. It occurs commonly in the lungs but can affect any site of the body. The rate of prevalence of mesentric inflammatory pseudotumor is not known. But in a study of 85 cases of abdominal inflammatory pseudotumor, 36 (42.2%) originated from the mesentery and/or omentum.\(^1\)

This condition commonly affects pediatric and young adult patients. Common clinical features include fever, malaise, pain and weight loss. Radiologic features of this condition are nonspecific. USG shows a well-defined, solid, mixed, echogenic mass. CT scan may show heterogenous attenuation.\(^2\) Doppler may show increased vascularity.\(^3\)

This condition should be differentiated from other benign fibrous tumors like mesenteric fibromatosis (mesenteric desmoid tumor), sclerosing mesenteritis and extrapulmaonary, solitary, fibrous tumor. The differentiation is based mainly on histopathological findings of specimens. The findings in a case of inflammatory pseudotumor are described above. Mesenteric fibromatosis is composed of fibroblasts in an un inflamed, abundant, collagenous stroma. One of the most characteristic features of mesenteric fibromatosis is tentacular insinuation into or through the muscularis propria of the bowel wall (melting insinuation).

Sclerosing mesenteritis usually presents in old age (average 60 years), is characterized by sclerosing fibrosis, fat necrosis with lipid-laden macrophages, chronic inflammation with germinal centers, focal calcification and absent insinuation into the muscularis propria. An extrapulmonary, solitary, fibrous tumor is characterized by the presence of an intact layer of mesothelium overlying the tumor. Spindle-shaped cells resembling fibroblasts and a variable amount of hyalinized collagen compose the tumor.\(^1\) Other differential diagnoses include lymphomas, metastasis and soft tissue sarcomas.

Surgical resection is curative for this condition although steroid therapy has been tried for cases in whom diagnosis is made preoperatively.\(^4\) Recurrences are documented in 18-40% of the cases and appear to be more frequent in the extrapulmonary lesions, which are larger than 8 cm and locally invasive.\(^3\)

ACKNOWLEDGMENT

I thank Dr. Vani Ravikumar, Assistant Professor, Dept of Pathology, Bangalore Medical College, for reviewing the slides and giving her valuable opinion.

REFERENCES