CASE REPORT

Mesentric Panniculitis : A Rare Clinical Entity

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Abstract
Mesenteric panniculitis is a rare, fibrosing inflammatory disease of the mesentery. Its presents with a variety of symptoms and is diagnosis is mostly by CT scan abdomen. We present a case report of a 48 years old gentleman with symptoms of mainly pain abdomen. He was treated conservatively and subsequently improved.

Key Words
Mesenteric panniculitis, CT Scan, Non- Operative Management

Introduction
Mesenteric panniculitis is a rare, benign and chronic fibrosing inflammatory disease that affects the adipose tissue of the mesentery of the small intestine and colon (1). The specific aetiology of the disease is unknown, although various causes such as infection, trauma or ischaemia of the mesentery have been proposed (2). The disease is often asymptomatic. When present, clinical symptoms vary greatly, and may include anorexia, abdominal pain, abdominal fullness, nausea, pyrexia, weight loss and palpable single or multiple masses (1).

We present this rare entity which presents in different ways.

Case Report
A 48 years old gentleman, chronic alcoholic, hepatitis B positive and compensated liver cirrhosis presented with history of pain abdomen and non-bilious vomiting for one day along with significant weight loss over the past six months. On clinical assessment, patient was found to have mild pallor. His vital signs were normal. Abdomen was minimally distended with generalized mild tenderness. Blood investigations revealed low hemoglobin and protein levels. Ultrasonography study of abdomen showed minimal interloop free fluid. CECT Abdomen done with oral and IV contrast showed an inflammatory mass, around the small gut mesentry measuring approximately 10 x 5 cms encasing the mesentric vessels as shown in figures 1 and 2 below. A diagnosis of Mesentric panniculitis was entertained. The patient was managed conservatively with intravenous anti-inflammatory drugs, fluids and prophylactic antibiotics. Patient responded well to conservative management and symptoms resolved on 2nd hospital day. He was then transferred under gastroenterology services for management of alcoholic liver disease.

Discussion
Mesenteric panniculitis is a rare disorder characterized by a tumor-like expansion of the mesentery due to variable degrees of fat necrosis, chronic inflammation and fibrosis. Approximately 200 cases of mesenteric panniculitis-fibrosis have been reported in the literature under several names, including isolated lipodystrophy of the mesentery, mesenteric-lipomatosis, lipogranuloma of the mesentery, mesenteric manifestations of Weber-Christian disease and sclerosing mesenteritis amongst others (2). It was first described by Jura in 1924 as "retractile mesenteritis" and then called "mesentric panniculitis" by Odgen in the 1960s (1).

It can be categorized to three pathological changes: chronic nonspecific inflammation, fat necrosis and fibrosis. The condition can be evaluated as a single disease
with two pathological subgroups. Mesenteric panniculitis when the inflammation and fat necrosis predominate over fibrosis, and retractile mesenteritis when fibrosis and retraction are more dominant. In over 90% of cases, mesenteric panniculitis involves the small-bowel mesentery. On rare occasions, it may involve the mesocolon, peripancreatic region, omentum, retroperitoneum or pelvis (1).

The condition predominantly occurs in males and is more frequent between the 6th and 7th decades of life (3). Although the specific aetiology is not clear, autoimmune responses to unknown insults and ischaemia of the mesentery have been proposed. An association of mesenteric panniculitis and malignancy, mainly lymphoma, has previously been indicated in the literature. It is suggested that mesenteric panniculitis was a non-specific response to an underlying abdominal malignancy (2).

Usually asymptomatic, a wide variety of gastrointestinal and systemic manifestations have been associated with this disorder; however, the most common presentations are abdominal pain, bloating and distension, diarrhea, abdominal mass and intestinal obstruction (2). Other reported symptoms include weight loss, constipation, anorexia and fever. Presentations such as fever of unknown origin and protein-losing enteropathy have also been described (3).

Abdominal CT is currently being proposed as an effective method for diagnosis (3). Even though findings of mesenteric panniculitis may be seen in patients undergoing abdominal scans for various other symptoms (6). CT findings are considered somewhat specific for this disorder include a "fat ring sign" that reflects the preservation of fat around the mesenteric vessels, and the presence of a "tumoral pseudocapsule," which is detected in 50% of patients as seen in our patient. The definite diagnosis of mesenteric panniculitis is established by biopsy.

Mesenteric panniculitis usually has an uneventful clinical course and resolves spontaneously (4). Nevertheless, in about 20% of patients, it is associated with significant morbidity and a chronic debilitating course (3). Such patients with a poor prognosis require a therapeutic approach. Chemotherapeutic agents, including steroids, colchicine, azathioprine, and progesterone, have been tried empirically, aimed at immunosuppressive and anti-inflammatory effects (4). Surgery may be attempted if medical therapy fails or in the presence of life threatening complications such as bowel obstruction or perforation (1).

References