



A Rare Case of Sclerosing Mesenteritis Presenting As Small Bowel Obstruction Requiring Surgery

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ABSTRACT

Sclerosing mesenteritis (SM) is considered to be of diagnostic challenge as it can be mistaken for malignancy, poorer understanding of the disease due to its rarity and its inconsistent terminology widely used across the literature. Computed Tomography (CT) found to be modality of choice in aiding diagnosis of SM with a histopathological confirmation. Definitive treatment is still controversial but surgical intervention should be attempted in cases of intestinal obstruction and when ischemia of bowel occurs. In this case study we report a case of SM in a 66 old year male presented with symptoms of intestinal obstruction requiring an emergency surgery.

Keywords: Mesenteritis, fat necrosis, fibrosis, intestinal obstruction

INTRODUCTION

Sclerosing mesenteritis (SM) is a rare non – neoplastic inflammatory disease of unknown etiology typically affecting the small bowel mesentery. It is considered to be of diagnostic challenge as it can be mistaken for malignancy, poorer understanding of the disease due to its rarity and its inconsistent terminology widely used across the literature such as mesenteric Weber –Christian disease, mesenteric lipodystrophy, liposclerotic mesenteritis [1]. Since the disease is of unknown etiology there is a wide array of difference in clinical presentation and laboratory findings which are non specific hence computed tomography (CT) found to be modality of choice in aiding diagnosis of SM with a histopathological confirmation. Jura in 1924 published first case series report on this entity in which he described the condition as “retractile sclerosing mesenteritis” which was further modified as “mesenteric panniculitis” by Odgen [2,3]. Definitive treatment is still controversial but surgical

intervention should be attempted in cases of intestinal obstruction and when ischemia of bowel occurs

CASE REPORT

A 66 year old male was admitted in our department with complaints of three days history of abdominal pain, distension, nausea, constipation. The patient also gives similar history in the past with abdominal pain, on and off constipation and loose stools for 6 months for which he was treated conservatively at various centres. No other relevant medical history present. There were no abnormal findings noted in physical examination and laboratory workup. Abdominal CT as seen in **figure 1** showed a soft tissue mass of 4.1x 3.2x 4 cm with thickening of mesentery of jejunal loop and surrounding fat tissue. Patient underwent exploratory laprotomy which showed approximately 40cm of distal jejunum in ischemic condition with partial necrosis and thickening of jejunal mesentery with ischemic appearance as seen in **figure 4**. Biopsy of the

pathological specimen showed fat necrosis, Sclerosing fibrosis, with inflammatory cells in mesentery as seen in **figure 2, 3**. Post operative period was uneventful and patient was discharged 10days after surgery. No recurrence of sclerosing mesenteritis was observed in 15 months of follow up.

DISCUSSION

Sclerosing mesenteritis (SM) is more commonly seen in men with male: female ratio of 2/3:1. The incidence increases with age most common age group of presentation being sixth decade of life [4]. Suggested possible causative factors include trauma, malignancy, autoimmunity, pancreatitis, avitaminosis, use of drugs and previous abdominal surgeries. In our case study no such associated condition could be identified [5]. Clinical manifestations of SM are non specific. Laboratory findings are unhelpful. The inconsistent terminology widely used describes the different histological features whereas the clinical entity is the same. Diagnosis of SM is complex can be misdiagnosed easily not only by surgeons and radiologist but also by pathologist. Kipfer et al reported three patterns of lesion on CT : type 1 with diffuse mesenteric thickening, type 2 with single discrete mass, type 3 with multiple mass lesion [6]. Emory et al based on histological features classified into different stages initial stage of adipocyte necrosis and infiltration by lipid laden macrophage, second stage of chronic inflammation with lymphocytic infiltration and fat necrosis, final stage of diffuse fibrosis and shrinkage of mesentery [7]. Definitive treatment is still controversial and no recognized standard regimen therapy exists. Treatment is empiric and should be individualized. Immunomodulating therapy such as glucocorticoids, colchicine and tamoxifen have been reported to be beneficial in patients with non-obstructive symptoms [8]. Surgical intervention is necessary in cases of intestinal obstruction and if ischemia of bowel occurs.

CONCLUSION

Prompt diagnosis and timely intervention plays an important role in the progression of the disease and the condition of the patient. Delayed diagnosis could result in a fatal outcome. Hence sclerosing mesenteritis must be kept not only in the minds of treating surgeon but also by diagnosing radiologist and pathologist for a better outcome of the patients with chronic undiagnosed persistent abdominal pain.

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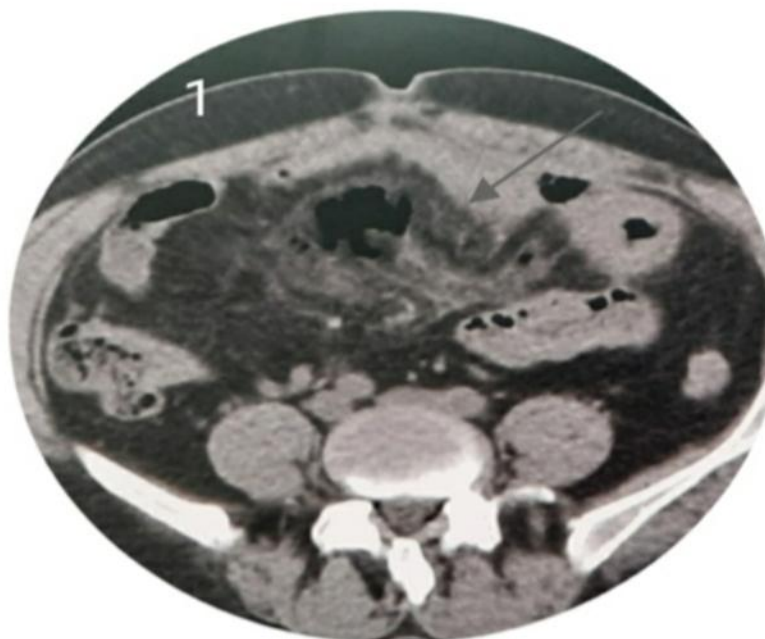


Fig 1 Axial CT scan showing soft tissue mass involving small bowel mesentery.

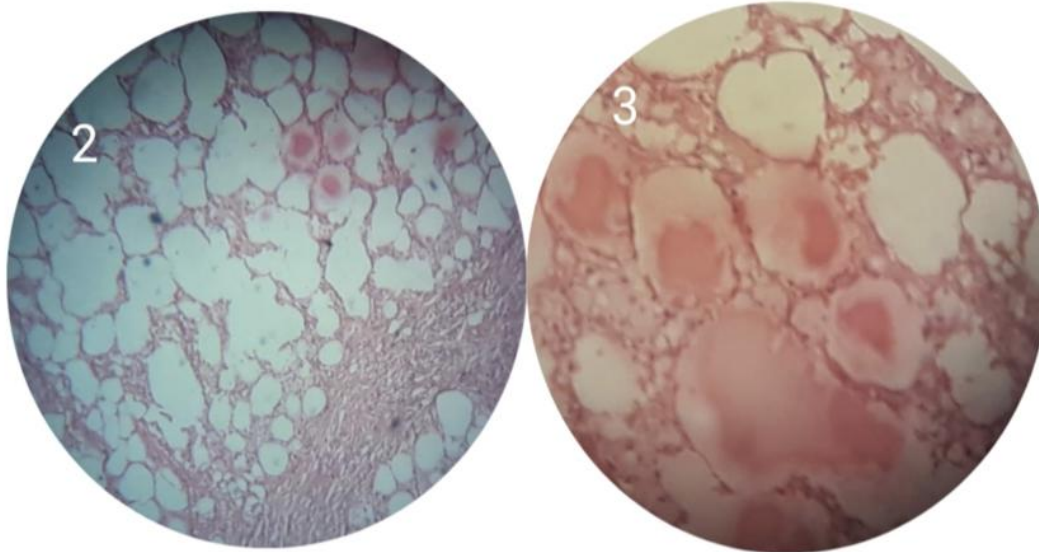


Fig 2, 3 showing fat necrosis, inflammation and sclerosing fibrosis



Fig 4 showing resected specimen of small bowel (jejunum)