# Debilitating Manifestation of a Disease with Multiple Names: A Case Report of Sclerosing Mesenteritis

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## Introduction

- **Sclerosing mesenteritis (SM)** also known as mesenteric panniculitis, mesenteric fibrosis, retractile mesenteritis, mesenteric lipodystrophy or misty mesentery is an idiopathic rare disorder, which characterized by an inflammation process in the mesenteric adipose tissue.
- The most common histologic findings are fibrosis, fat necrosis and chronic inflammation. The clinical course is usually benign but cases with debilitating abdominal pain have also been reported.
- SM is usually an incidental finding on abdominal imaging. As this condition is extremely rare, there are limited data about the clinical course and no standard guidelines for management as of now.

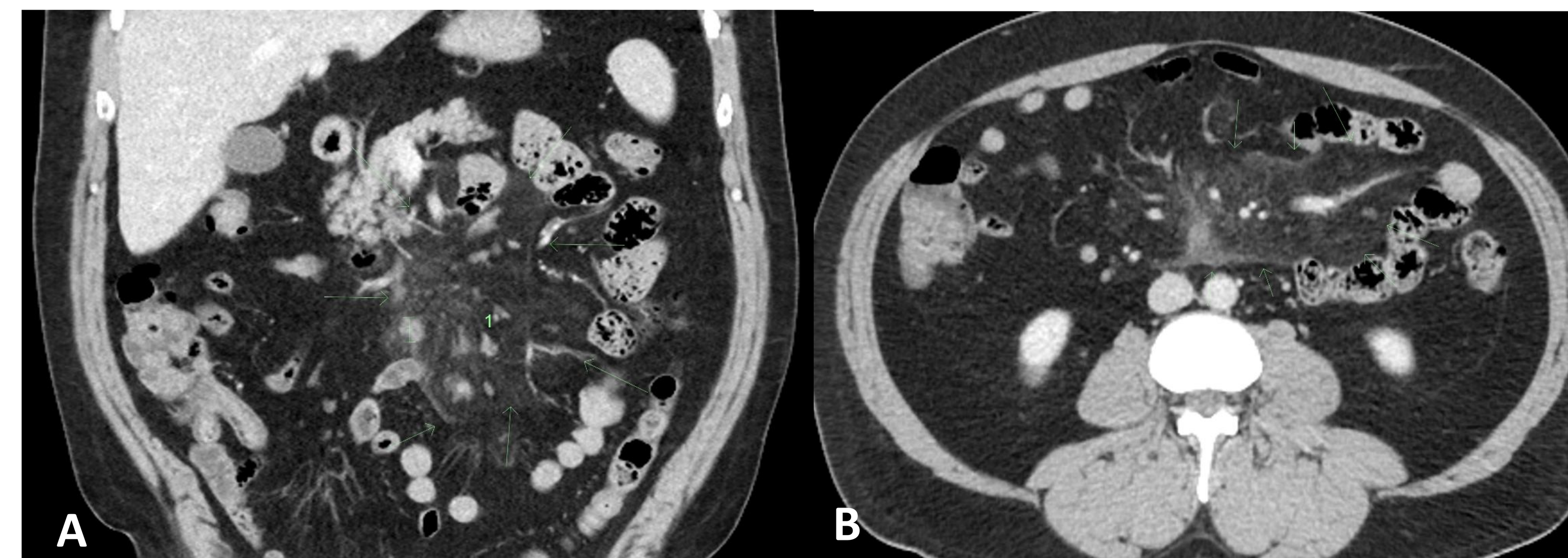
## Case Presentation

- **CC:** A 49-year-old man presented to the ED with diffuse abdominal pain, diarrhea, weight loss, night sweats and subjective fever.
- **HPI:** 3 weeks before admission he had a sudden onset of sharp, diffuse abdominal pain 10/10 in intensity, aggravated by eating and associated with non-bloody diarrhea, nausea, night sweats and 40 lb unintentional weight loss.
- **PMH:** HTN, HLD, PTSD, depression on lithium, gabapentin, mirtazapine, topiramate and venlafaxine.
- **FH:** Uncle died from colon cancer at the age of 62.
- **P/E:** Abdomen - diffuse tenderness on palpation without rebound tenderness or guarding.

- **Labs: WBC 12.2x10^3/mcL**, **ESR 20 mm/hr.**
- Electrolytes, LFTs, creatinine, lipase, C-reactive protein, lactic acid, lithium levels – normal levels.
- ANA, rheumatoid factor – non-detected.
- Stool examination: no ova/parasites were detective, guaiac test, c. diff toxin and culture were negative.

- **CT scan of abdomen/pelvis:** hazy infiltration with subcentimeter lymph nodes and mild splenomegaly.

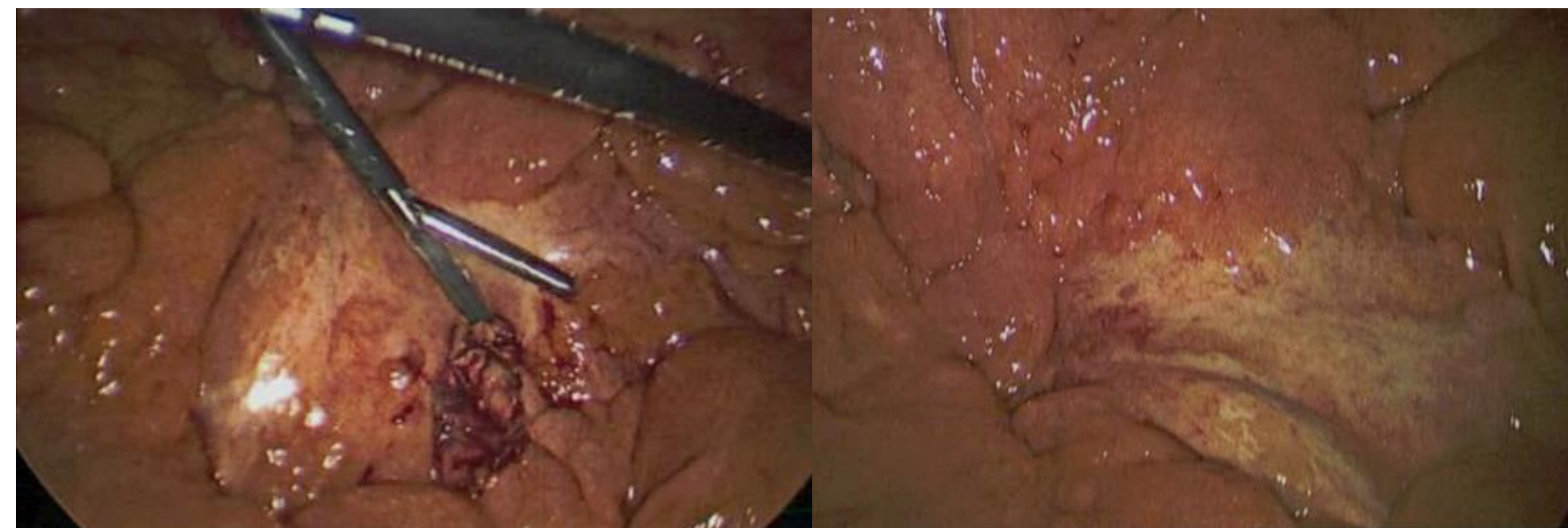
## CT Abdomen With Contrast




*A:Coronal view* *B: Axial view*

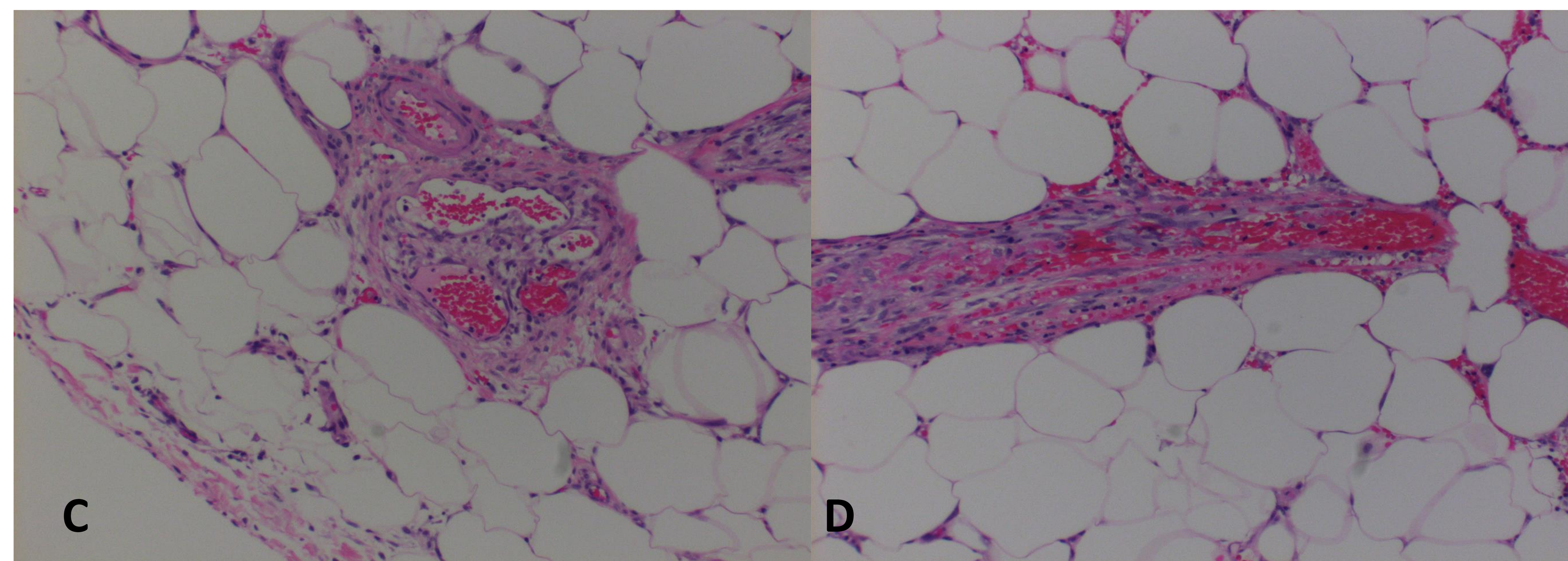
***CT abdomen w/contrast:*** *There is moderate "misty" infiltration of the root of the small bowel mesentery (arrows), where an increased number of subcentimeter normal size mesenteric lymph nodes are also identified.*

## Diagnostic Laparoscopy



***Laparoscopy:*** *Mosaic white stranding of the mesentery in the proximal aspect in the areas involved on CT imaging. The bowel was hyperemic but obviously viable.*

## Pathology




***Histopathologic findings of: C*** *Soft tissue, small bowel mesentery, biopsy: Mature adipose tissue with patchy chronic inflammation and fat necrosis.*
***D*** *Soft tissue, epiploic appendage, biopsy: Mature adipose tissue with focal acute and chronic inflammation. Focal small vessel vasculitis and foci of microthrombi.*

## Case Presentation

- **Diagnostic laparoscopy:** mosaic white stranding of proximal mesentery.
- **Biopsy of small bowel mesentery:** mature adipose tissue with patchy chronic inflammation and fat necrosis
- The patient suffered severe, debilitating abdominal pain despite treatment with prednisone, tamoxifen, narcotics, and was started on TNFα inhibitors, based on prior case reports.

## Discussion

- SM is diagnosis of exclusion, with conditions such as lymphoma, carcinoid tumor, carcinomatosis potentially presenting in a similar fashion.
- On CT the most specific features for SM are fat ring sign and tumor pseudo capsule. SM could also present as an increased attenuation of mesenteric fat without mass, which is called 'misty mesentery'.
- As this condition is extremely rare and further complicated by the use of multiple approaches to nomenclature in the past, our understanding of its pathophysiology, clinical course, and management are limited.

## Conclusion

- SM is a rare condition, and it is important for physicians to be open-minded about their diagnostic considerations in patients presenting with abdominal pain.
- It is vital to report SM cases to help establish a gold standard for treatment and for a better understanding its mechanism and clinical course.


**References:** 1. Sharma P, Yadav S, Needham CM, Feuerstadt P. Sclerosing mesenteritis: a systematic review of 192 cases. Clin J Gastroenterol. 2017;10(2):103-111. 2. Akram S, Pardi DS, Schaffner JA, Smyrk TC. Sclerosing Mesenteritis: Clinical Features, Treatment, and Outcome in Ninety-Two Patients. Clin Gastroenterol Hepatol. 2007;5(5):589-596. 3. Danford CJ, Lin SC, Smith MP, Wolf JL. Encapsulating peritoneal sclerosis. World J Gastroenterol. 2018;24(28):3101-3111.