

A UNIQUE PRESENTATION OF ACTINOMYCES COMPLICATED DIVERTICULITIS IN A PATIENT WITH HIRSCHSPRUNG'S DISEASE

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Introduction

- Diverticular disease commonly affects patients with advanced age. The exact pathophysiology of the disease remains elusive. Multiple factors have been implicated in the pathophysiology of this disease. We are reporting a case of complicated diverticulitis affecting distal colon that was excluded since early days of life for Hirschsprung's disease

Case presentation

- This is a 27-year-old male with history of Hirschsprung disease treated with right colectomy and end ileostomy as a neonate. He was left with a defunctionalized left colon. He has no history of immunosuppression or any other chronic health issues. He developed recurrent left sided abdominal pain. This was previously diagnosed as diversion colitis. He had multiple attacks prior to presentation to our institute. Imaging demonstrated colitis of the left colon with a phlegmon adjacent to it. He was treated with bowel rest and intravenous antibiotics, however he failed non operative management. He underwent operative exploration and was found to have perforated diverticulitis with a pericolic abscess. A completion colectomy was performed. His postoperative course was uneventful. Pathologic examination of the resected specimen showed aganglionic segment of colon with diverticulosis, focal diverticulitis and pericolic abscess. The cultures from the abscess grew Actinomyces Meyeri. He was treated with a course of IV Piperacillin-Tazobactam. His postoperative course was uneventful and was discharged home.

Discussion

- Diverticular disease of the colon is a condition with multiple contributory factors. Genetic predisposition, diet, gut microbiome imbalance and altered colonic motility are among the risk factors implicated in the development of this condition. Hirschsprung's disease is characterized by the absence of ganglion cells within the myenteric and submucosal plexus in the colon. This leads to hypertrophied nerve trunks and muscle spasm. As a result of a contracted colon, one can extrapolate that there is increased intraluminal pressure that may lead to diverticular disease in our patient.
- Failure to recognize diverticulitis and its complication can result in significant morbidity and mortality.

Conclusion

- Complicated diverticular disease can develop in a defunctionalized segment of the colon. This diagnosis should be considered in patients with history of Hirschsprung disease who have a remnant segment of colon presenting with abdominal pain.



Figure 1: CT scan of the abdomen demonstrating pericolic phlegmon

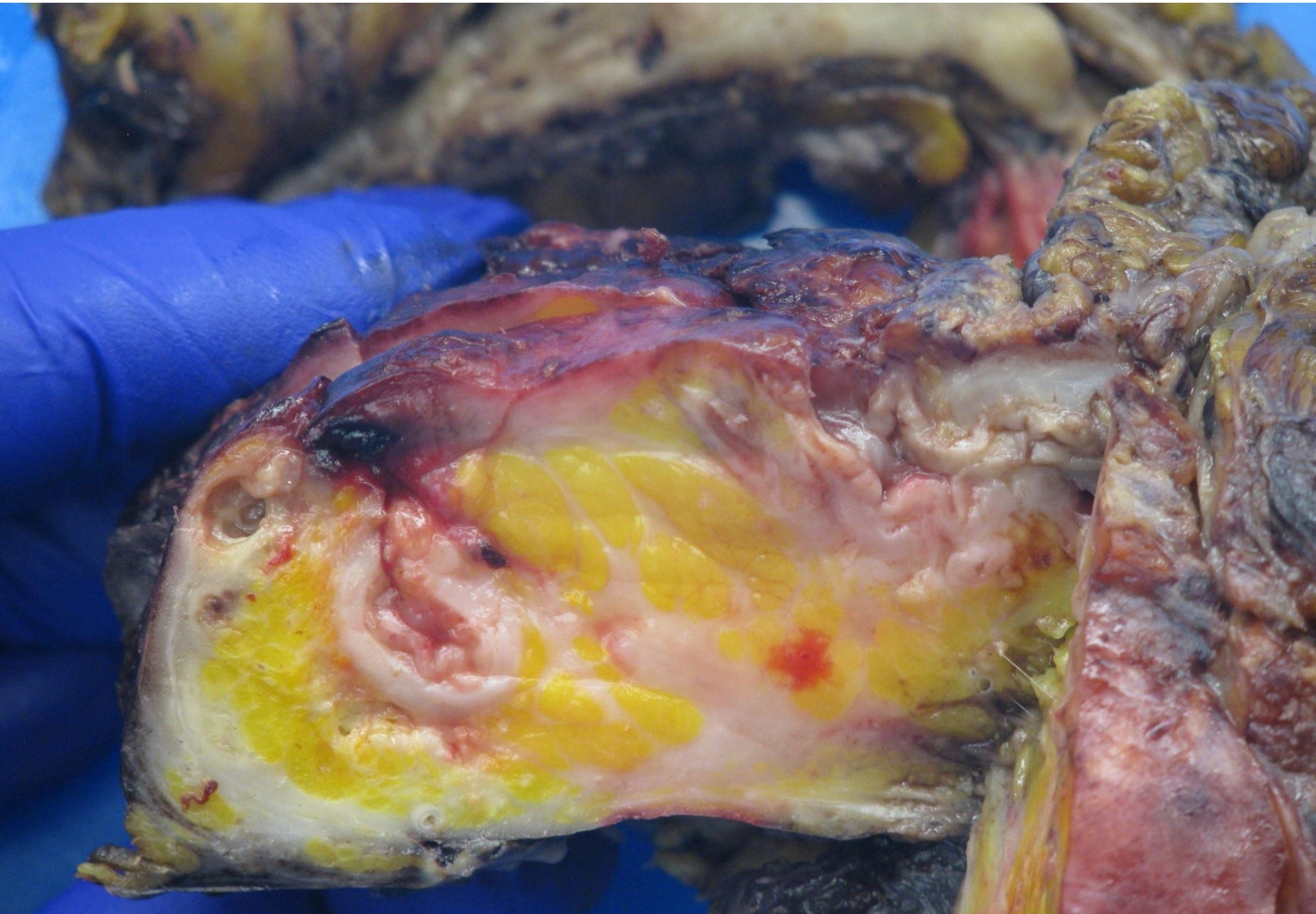


Figure 2: Gross specimen showing diverticulum embedded in Pericolic fat

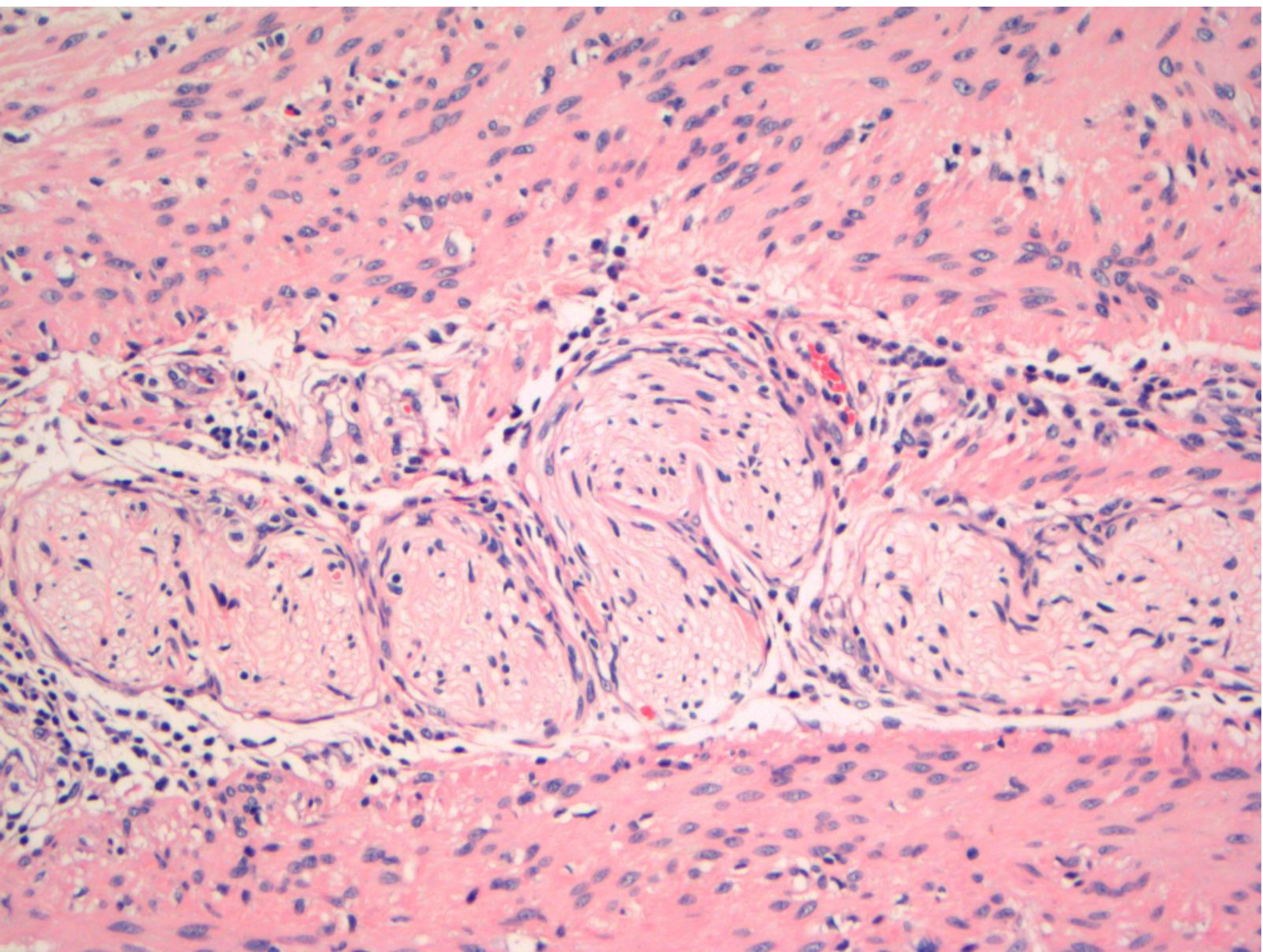


Figure 3: Hypertrophied Nerves with no ganglion cells present