MAYO CLINIC

The Use of Rituximab for IgG4-Related Sclerosing Mesenteritis

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Introduction

- Sclerosing mesenteritis (SM) is an uncommon fibro-inflammatory disease affecting the abdominal mesentery. Although some patients are asymptomatic, SM can present with complications (e.g., bowel obstruction, chylous ascites, mesenteric ischemia).[1]

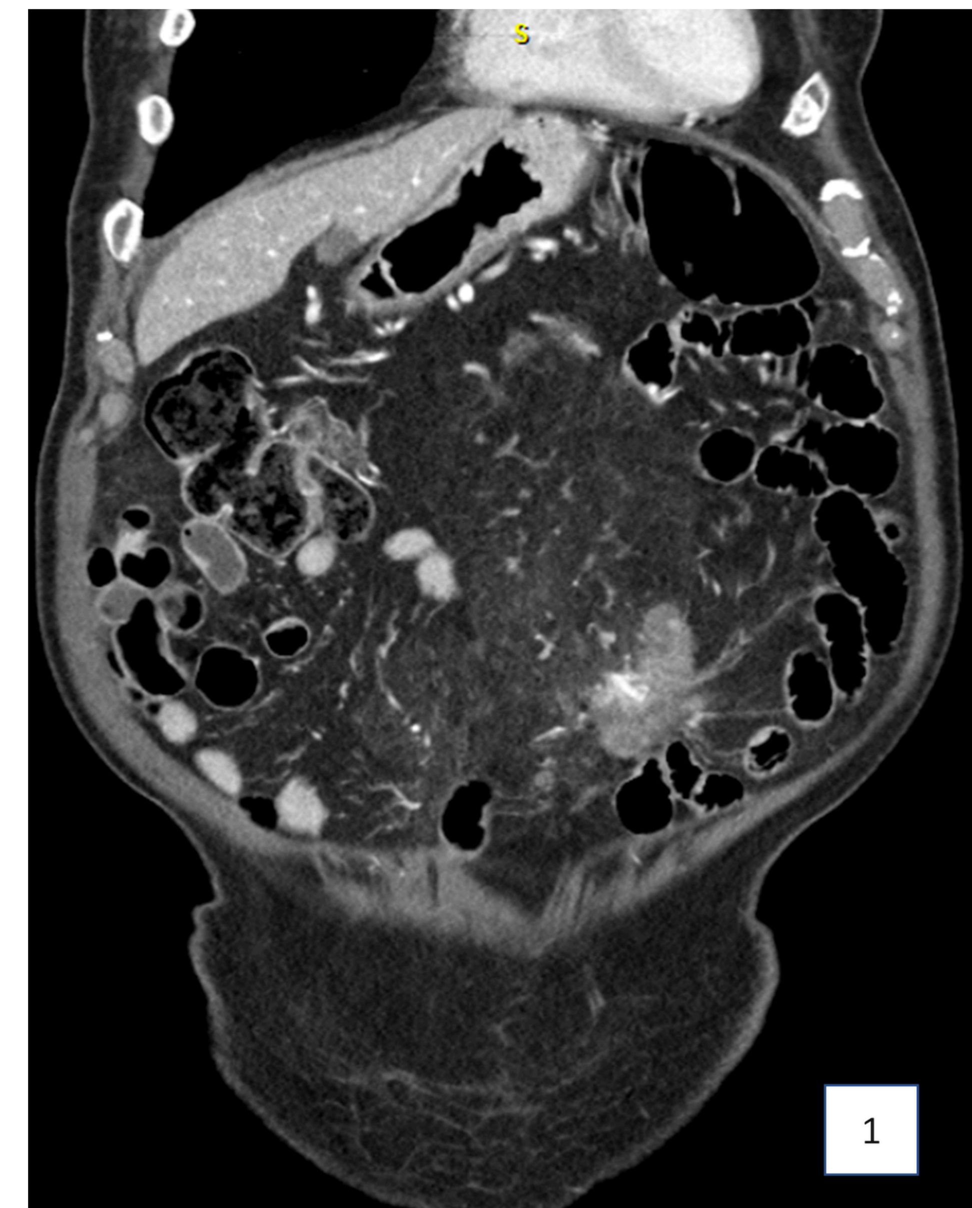
Case Description

- An 82-year-old man with a history of prostate cancer and melanoma in remission presented with 4-months of poor appetite and 40-pound unintentional weight loss.
- Computed tomography (CT) abdomen showed an 8.6 cm mesenteric mass with surrounding misty mesentery **(Figure 1)**. CT-guided biopsy showed fibro-adipose tissue with increased IgG4-positive plasma cells, supporting IgG4-related SM.[1-2]
- CT abdomen 6 months later demonstrated enlargement of the mass with new encasement of jejunal and ileal branches of the superior mesenteric artery and vein.
- He had contraindications to first-line therapy with glucocorticoids, given prior suicidal ideation while on budesonide for microscopic colitis.

Given impending mesenteric ischemia, he was treated with rituximab, a monoclonal anti-CD20 antibody, with two infusions two weeks apart without side-effects.[3]

Three months following treatment, his erythrocyte sedimentation rate improved from 52 to 25 (reference range, 3-28 mm/h) and IgG4 level from 851 to 267 (2.4-121 mg/dL).

CT abdomen demonstrated a 50% decrease in the volume of the mesenteric mass without significant vascular involvement **(Figure 2)** and he had regained 30 pounds.



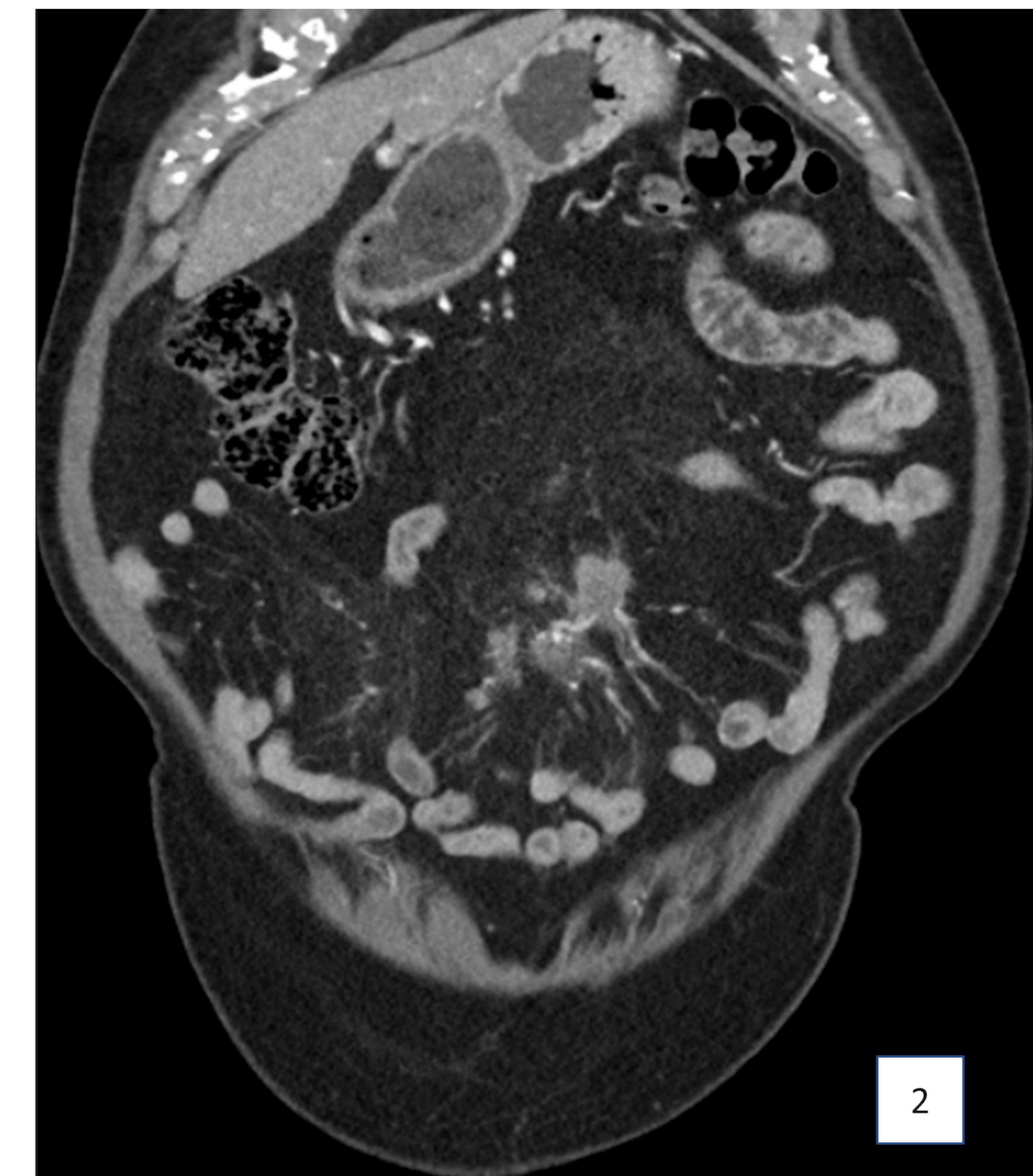


Figure 1: CT abdomen pelvis of sclerosing mesenteritis *prior* to rituximab treatment.
Figure 2: CT abdomen pelvis of sclerosing mesenteritis *after* rituximab treatment.

Discussion

- First-line therapy includes glucocorticoids with tamoxifen in symptomatic patients with SM. Although rituximab has been studied for IgG4-related disease in general, its use specifically for IgG4-related SM is not well known.[4-5]
- This case describes a patient with IgG4-related SM treated effectively with rituximab, suggesting this may be a suitable drug for those who have contraindications or do not respond to first-line therapy, especially if IgG4-related.
- Whether this medication would also work in patients with SM not related to IgG4 disease is unknown.
- Patients treated with rituximab should be closely monitored for infections, as well as allergic and infusion-related reactions.

References

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