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Sequential Imaging of a Rapidly Progressive Rheumatoid Vasculitis: A Unique Depiction

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Rheumatoid vasculitis is a clinically heterogenous complication of rheumatoid arthritis (RA), primarily affecting small- and medium-sized vessels.¹

A 63-year-old man with long-standing seropositive erosive RA presented to our emergency department with abdominal pain and diarrhea. Contrast-enhanced computed tomography (CT) scan revealed a new occlusion of the common hepatic artery, initially deemed incidental. The patient re-presented 5 days later with identical symptoms, and a contrast-enhanced CT showed new dilatation and mural thickening of the inferior mesenteric artery, with a new pseudoaneurysm at the margin of the occluded common hepatic artery. Follow-up CT for ongoing symptoms was performed at day 18. The Figure displays the rapid progression of his medium vessel vasculitis during this brief span. He was admitted for expedited laboratory testing, and given the

lack of a target lesion suitable for biopsy, the patient was initiated on empiric cyclophosphamide and corticosteroids, with a subsequent halt in disease progression.

This case offers a unique insight into the changes brought on by this entity over a span of \sim 3 weeks, exemplified here through the inferior mesenteric artery. The rapidly progressive inflammation documented by this case highlights the importance of rapid diagnosis of rheumatoid vasculitis, as well as early treatment, of which high-dose corticosteroids and cyclophosphamide are the cornerstone.¹

REFERENCE

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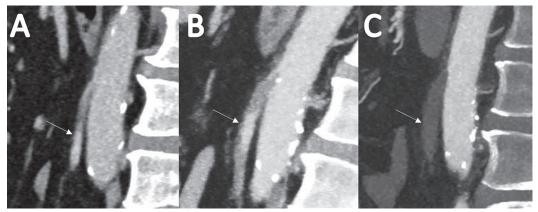


Figure. Serial sagittal imaging of the inferior mesenteric artery (IMA) at its origin. (A) Day 0 with normal IMA and newly occluded common hepatic artery (not visualized). (B) Day 5 showing new fusiform dilatation and mural thickening of the IMA. (C) Day 18 showing further dilatation of the IMA with complete occlusion and diffuse soft-tissue infiltrate.