

## Mesenteric inflammatory veno-occlusive disease: what is it and why it is important to know it?

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Madam, Mesenteric inflammatory veno-occlusive disease (MIVOD) is an unusual cause of mesenteric venous thrombosis. It is localized inflammation of the mesenteric veins and venules. The adjacent arteries are normal and spared from the inflammatory process. There is no evidence of systemic vasculitis or any other local bowel pathology. This focal inflammatory process leads to bowel ischaemia and necrosis. It is histopathological diagnosis showing lymphocytic infiltration of bowel wall, chronic inflammation in the mesenteric veins. There are also features intraluminal thrombosis and features of bowel ischaemia. It is important to know this condition as its treatment is different from other causes of mesenteric venous thrombosis. Unlike other causes, MIVOD is resistant to anticoagulation, steroids and other immunomodulatory medications. Resection of the involved bowel segment is usually curative.

First reported in 1994<sup>1</sup> and linked to certain viral infections (e.g. cytomegalovirus), drugs (e.g. rutoside, reserpine etc.) and allogeneic blood stem cell transplantation, the exact etiology is still unknown.

Incidence of this condition is unclear as very few cases have been reported so far. Perhaps mild cases have been missed, mostly due to the inaccessibility to get histopathological evidence.

Patient with MIVOD can present with a single or multiple episodes of incapacitating abdominal pain and can show as an acute abdomen. Systemic causes leading to intestinal vasculitis must be ruled out. Table gives the possible systemic causes that can lead to mesenteric vasculitis.

**Table-:** Systemic conditions as possible cause of mesenteric venous ischemia

### Systemic Conditions leading to Mesenteric venous Ischemia

1. Buerger's disease
2. Behcet's disease
3. Rheumatoid arthritis
4. Systemic lupus erythematosus
5. Crohn's disease

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Endoscopic findings are non-specific. CT scan can provide some clues to this condition. Mesenteric inflammatory veno-occlusive disease show more predilection for the left colon (particularly the proctosigmoid region) with prominent small pericolonic arteries and veins but tiny or absent inferior mesenteric veins. These along with other features of bowel ischaemia, suggest MIVOD<sup>2</sup>.

Mesenteric inflammatory veno-occlusive disease is mostly resilient to conventional medical therapy for mesenteric venous thrombosis. This includes the use of anticoagulation to stop the thrombotic process and use of steroids and immunoregulatory drugs to limit the inflammatory process<sup>2,3</sup>. It is suggested not to treat such patients with medications known to cause serious side effects.

Surgical resection of the involved segment is curative in most of the cases. Most of the patients recover smoothly with good prognosis. There is a rare chance of relapse<sup>4</sup>.

We have not come across a case of this condition. We believe as the diagnosis of MIVOD needs histopathology, most cases would have been missed. In our practice, we treat most of the venous mesenteric thrombosis patients conservatively until there is frank gangrene or peritonitis. Mild to moderate cases of recurrent MIVOD would have been overlooked by this approach. Better awareness about this condition among clinicians can improve the chances of detecting and treating these patients appropriately and preventing them from lifelong use of anticoagulants and/or steroids.

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