



## Case Presentation

- A 67-year-old female patient with a history of celiac disease and Crohn's disease presented with recurrent nausea, vomiting, diarrhea, and abdominal pain.
- Physical examination was unremarkable. Laboratory tests showed leukocytosis with white blood cell count of  $22.3 \times 10^3/\text{mL}$ . Abdominal contrast-enhanced CT revealed thrombotic occlusion in the distal segment of the superior mesenteric artery and the superior mesenteric vein, with no evidence of bowel ischemia.
- The patient was initiated on a heparin drip and later switched to Eliquis. Empiric antibiotics, including piperacillin, tazobactam, and ciprofloxacin, were administered. The patient's condition improved significantly after receiving the prescribed treatment.

## Literature review

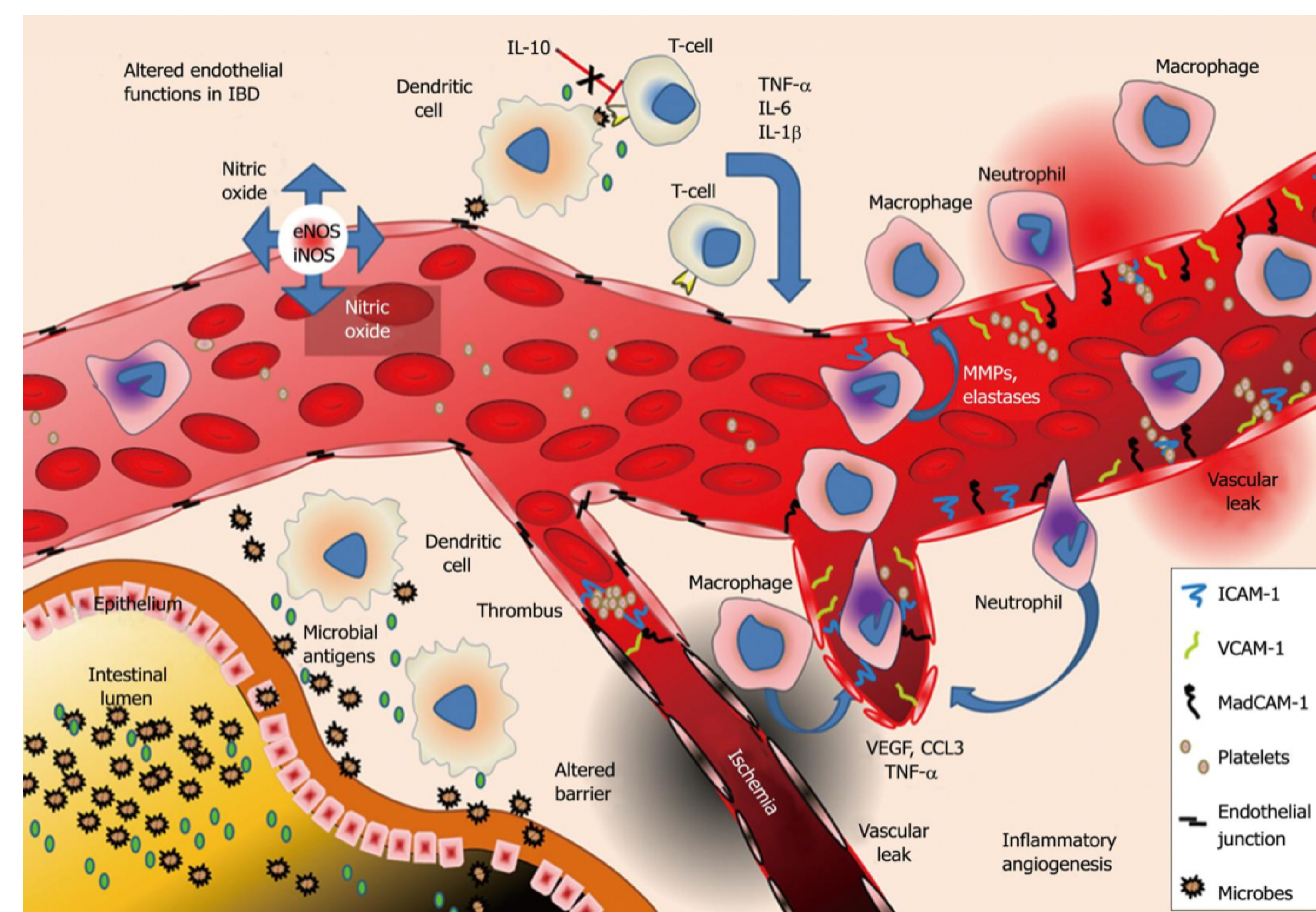
- Inflammatory bowel disease (IBD) comprises ulcerative colitis and Crohn's disease, involves chronic inflammation of the gastrointestinal tract.
- Between 20 and 30% of IBD patients exhibit manifestations in other organs, including arterial thromboembolism (ATE) and venous thromboembolism (VTE). While ATE is less frequent than VTE, the latter is a common extra-intestinal consequence of IBD.
- Some theories suggest that chronic inflammation in Crohn's disease could increase the risk of thrombosis by impairing hemostasis and disrupting the vascular endothelial lining [1,2].

## Unique Aspect

- The simultaneous ATE and VTE in patients with underlying Crohn's disease is uncommon and challenging in management.
- Anticoagulation with unfractionated or low molecular weight heparin is the preferred treatment for patients without significant bleeding. Direct oral anticoagulants offer advantages over vitamin K antagonists, including lower bleeding risk, no need for INR monitoring or heparin bridging, and earlier treatment at home for stable patients [3].
- Lifelong anticoagulation should be considered in irreversible systemic conditions like Crohn's disease (4).

## Conclusions

- The simultaneous occurrence of both ATE and VTE is rare. Computed tomography is favorable in diagnosing and assessing the severity of ATE and VTE.
- Treatment strategies should be tailored to each individual, considering their specific clinical circumstances and medical history.



Inflammation affects vascular endothelial lining in IBD

## References

- Stadnicki A, Stadnicka I. Venous and arterial thromboembolism in patients with inflammatory bowel diseases. *World J Gastroenterol.* 2021 Oct 28;27(40):6757-6774. doi: 10.3748/wjg.v27.i40.6757. PMID: 34790006; PMCID: PMC8567469.
- Hmoud B, Singal AK, Kamath PS. Mesenteric venous thrombosis. *J Clin Exp Hepatol.* 2014 Sep;4(3):257-63. doi: 10.1016/j.jceh.2014.03.052. Epub 2014 Apr 13. PMID: 25755568; PMCID: PMC4284291.
- Stadnicki A, Stadnicka I. Venous and arterial thromboembolism in patients with inflammatory bowel diseases. *World J Gastroenterol.* 2021 Oct 28;27(40):6757-6774. doi: 10.3748/wjg.v27.i40.6757. PMID: 34790006; PMCID: PMC8567469
- Sulger E, Dhaliwal HS, Goyal A, et al. Mesenteric Venous Thrombosis. [Updated 2022 Jul 18]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-.