



# Glucagon-Like Peptide-1 Receptor Agonist-Associated Colonic Ischemia and Portal Vein Thrombosis: A Case Report

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## Introduction

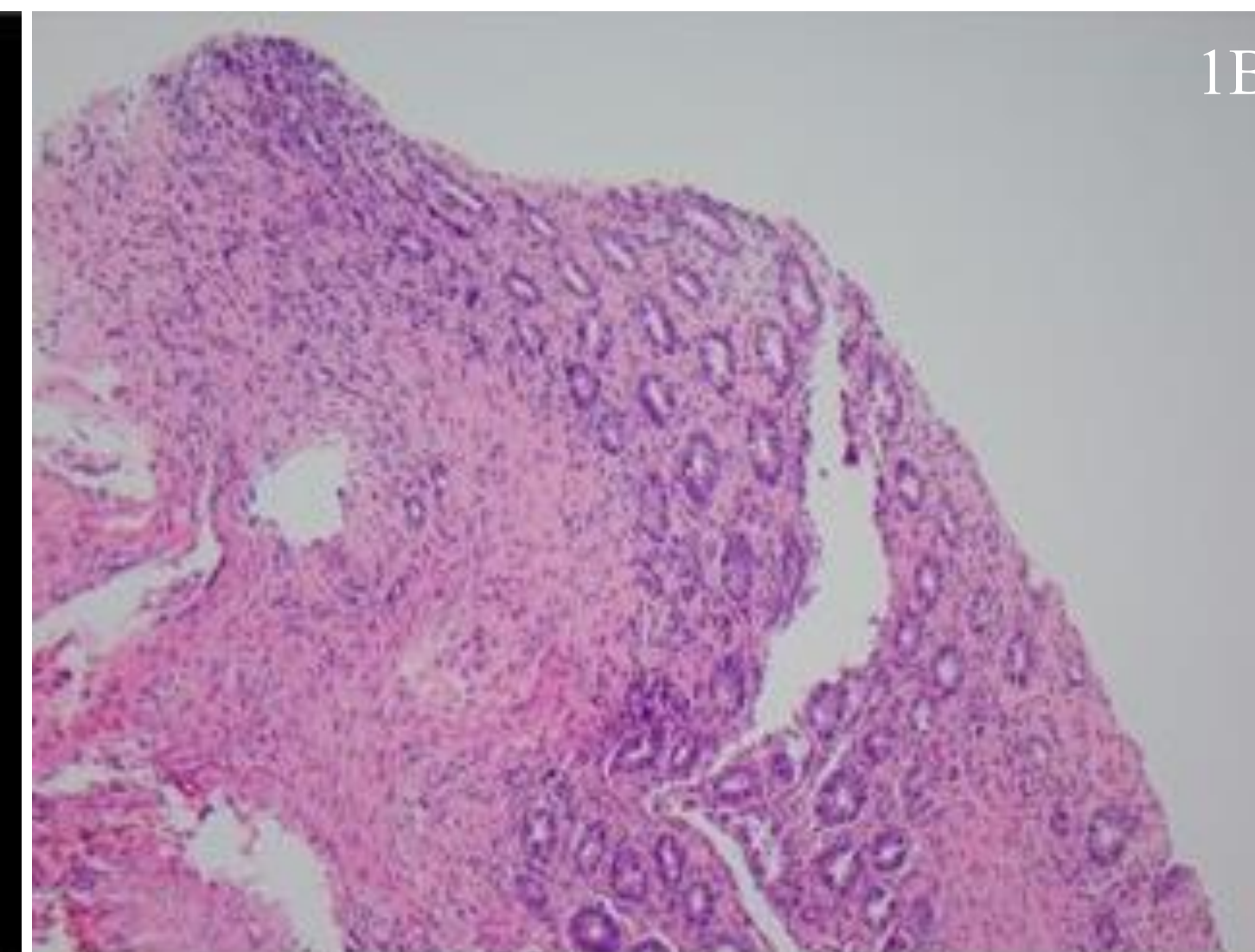
- Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are used for the treatment of diabetes mellitus and weight loss.<sup>1, 2</sup>
- The most common gastrointestinal side effects associated with GLP-1 RAs include nausea, delayed gastric emptying, intestinal obstruction, and pancreatitis.<sup>3</sup>
- Despite a known association between GLP-1 RAs and constipation, there have been no case reports linking GLP-1 RAs and colonic ischemia to date.

## Case Description

- A 56 year-old female presented with 10 days of bright red blood per rectum, tenesmus, and upper abdominal pain.
- Two months prior, the patient was started on weekly semaglutide for weight loss. Following semaglutide, the patient experienced decreased appetite and thirst. No vomiting or constipation were reported.
- Other long-term medications: lisinopril and hydrochlorothiazide
- Last colonoscopy was 2 years prior and unremarkable.

## Case Description, cont'd

- Vital signs were stable without documented hypotension. BMI was 27 kg/m<sup>2</sup>.
- Physical exam and serologic workup were unremarkable, including normal lactic acid. Infectious stool studies were negative.
- CT abdomen pelvis with IV contrast showed **isolated acute sigmoid colitis** and **portal vein thrombosis**, which was confirmed by MRI. Mesenteric duplex was negative for thrombus.
- Coagulopathy workup was unrevealing and anticoagulation was started.
- Flexible sigmoidoscopy and biopsies were suggestive of ischemic colitis (Image 1A/1B).
- The patient improved with intravenous fluids and antibiotics.
- No additional bleeding occurred. On day 3, the patient was discharged home and semaglutide was discontinued.



## Discussion

- **1st reported case** of a GLP-1-RA associated with portal vein thrombosis and colonic ischemia in a patient with limited risk factors
- Naranjo score of **6** points indicates a "probable" interaction.<sup>4</sup>
- Highlights the importance of continued post-market surveillance of GLP-1 RAs
- Further investigation into the safety of GLP-1 RAs for weight loss is also recommended.

## References

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## Questions?

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