OUTPATIENT TREATMENT OF PORTAL VEIN THROMBOSIS

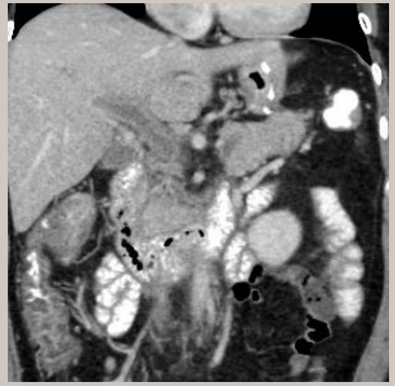
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Introduction

- Portal vein thrombosis (PVT) is an infrequent but potentially lethal complication of sleeve gastrectomy (SG).[1]
- Venous thromboembolism (VTE) may be the most common cause of postoperative mortality following bariatric surgery.
- PVT was seen in seven patients following sleeve gastrectomy.
- Patients with PVT are commonly admitted to the hospital, given intravenous antithrombotic therapy (ATT), and gradually converted to oral agents for discharge.



Superior mesenteric vein thrombosis



Portal vein thrombosis

Methods and Procedures

- PVT must be recognized early to limit potentially lethal gastrointestinal complications due to thrombosis of mesenteric vessels.
- The diagnosis often can be clinically difficult due to vague symptoms. Heightened awareness on the part of the surgeon is imperative.
- A computed tomography (CT) scan is the preferred diagnostic tool.
- Once the diagnosis is confirmed, antithrombotic therapy is begun in the stable patient.

Results

- In 4,127 sleeve gastrectomies done by a single surgeon in the last 14 years, seven cases of PVT were diagnosed.
- All seven cases of PVT were in African American females with body mass indexes (BMIs) in the 40s. The average BMI was 43.7. Ages ranged from 30–54, with an average age of 39.
- The last two cases were successfully treated entirely as outpatients using oral antithrombotic therapy. All cases were treated successfully without surgical intervention.

Conclusion

- The incidence of PVT after sleeve gastrectomy is most likely secondary to the disruption of native blood flow, including ligation of the short gastric vessels.
- Care must be taken to preserve collateral flow such as that through the epiploic vessels.
- PVT must be recognized early to be treated successfully.
- While traditionally patients with this diagnosis are hospitalized and anticoagulated prior to discharge, fast acting oral anticoagulant agents that do not require monitored blood levels can be used to therapeutically treat stable patients without hospitalization.
- These case reports may shed light on a treatment option for PVT in a stable patient.

Reference

1. Giannis, D., Geropoulos, G., Kakos, C., Lu, W., El Hadwe, S., Fornasiero, M., Robertson, A., Parmar, C. Portomesenteric vein thrombosis in patients undergoing sleeve gastrectomy: an updated systematic review and meta-analysis of 101,914 patients. *Obesity Surgery* 2023; 33: 2991-3007.