A MULTIDISCIPLINARY APPROACH FOR THE MANAGEMENT OF PORTAL VENOUS THROMBOSIS

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Case 1

HPI: 49-year-old F with PMH of HTN who presented with weakness and intermittent abdominal pain. She was diagnosed with portal vein thrombosis (PVT) at an OSH and was started on anticoagulation.

PE: HR 157, abdominal distention and rigidity with rebound tenderness consistent with peritonitis

Labs: WBC 11.3, Hgb 9.1, Lactate 2.9

Imaging: CT A/P showed portal vein occlusion, diffuse pneumoperitoneum, bowel wall thickening, and a large apple core lesion in the cecum

Hospital Course:

- Emergent exploratory laparotomy with right hemicolectomy and multiple small bowel resections
- Interventional Radiology (IR) performed TIPS with SMV stent and mechanical thrombectomy
- Prolonged recovery due to severe malnutrition and deconditioning
- Pathology showed cecal mass, stage IIIc colon adenocarcinoma
- Discharged on Eliquis with follow up with oncology and colorectal surgery

Case 2

HPI: 65-year-old F with a PMH of cerebral artery aneurysm, HTN, IBS, GERD, and diverticulosis who presented with severe abdominal pain associated with nausea and decreased appetite

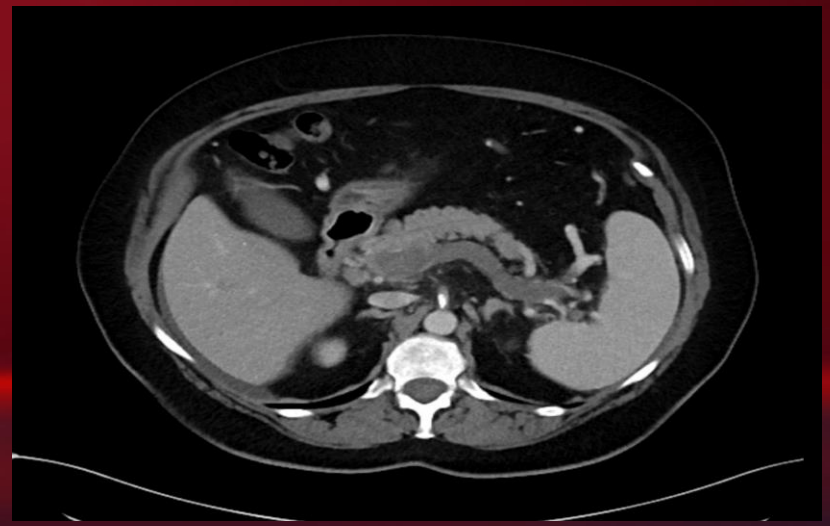
PE: Abdominal distension with diffuse tenderness. No rebound or guarding present

Labs: WBC 15.9 Hgb 13.3, Lactate 2.4

Imaging: CT A/P showed portal, splenic, and SMV thrombosis with bowel ischemia

Hospital Course:

- Heparin drip and systemic TPA
- Exploratory laparotomy with bowel resection, left in discontinuity
- IR performed TIPS and mechanical thrombectomy of SMV, portal, and splenic veins
- Takeback to restore continuity and close abdomen
- Repeat portal thrombectomy with SMV stent by IR
- Discharged on Eliquis to outpatient rehabilitation
- Found to have a Jak-2 mutation myeloproliferative neoplasm



Discussion

- Populations at increased risk for PVT are those with cirrhosis, malignancy, and prothrombotic states
- PVT is associated with high morbidity and mortality due to complications such as intestinal ischemia, portal HTN, pylephlebitis
- Anticoagulation is the mainstay of treatment for PVT – successful in ~1/3 of cases (1)
- IR can provide endovascular options such as TIPS, mechanical thrombectomy, or catheter-directed thrombolysis (2)

Conclusion

- Both patients presented with bowel ischemia secondary to PVT that required a multi-disciplinary approach including endovascular and surgical interventions
- The timing of endovascular intervention in patients with PVT not responsive to anticoagulation is not well established and needs to be further investigated

References

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