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Successful Treatment of Splenic Vein Thrombosis Induced Gastric Varices During Pregnancy

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INTRODUCTION

- Essential thrombocythemia (ET) is a type of myeloproliferative hematologic neoplasm which is characterized by excess platelet production.¹
- Thrombosis of the portal venous system has been a well-established complication of ET and can induce life-threatening situations.
- In pregnant females, ET alone has been associated with higher rates of fetal demise with limited options.¹
- We present a unique case in which a 28-week pregnant female with a history of ET complicated by splenic vein thrombosis was successfully treated for life-threatening bleeding gastric varices.

CASE PRESENTATION

- A 28-week pregnant, 38-year-old female with a medical history significant for ET with known splenic vein thrombosis with marked splenomegaly (on ASA therapy), and a history of prior obstetric complications (IUGR, HELLP Syndrome) who presented with melena x 3 days.
- Admission vitals were notable for tachycardia. Labs revealed a hemoglobin of 7.5g/dL (12-14g/dL pre-pregnancy), platelet count of 174, INR 1.1. Liver function panel appeared normal. Coffee-ground emesis was noted in the emergency department which progressed to frank hematemesis.
- Following stabilization, and multidisciplinary discussions, an urgent EGD was performed noting medium-sized gastric varices with stigmata of recent bleeding (Figure 1). Additional findings of small esophageal varices were noted.
- An MRI of her abdomen noted marked splenomegaly with a chronic-appearing splenic vein thrombosis with multiple collateral vessels (Figure 2).
- BRTO was deemed unfeasible due to absence of a significant portosystemic shunt by Interventional Radiology. However, after discussion with surgery, splenic artery embolization followed by open splenectomy was successfully performed.

- No complications were encountered, nor further episodes of GI bleeding post-operatively.
- Pathology reported a massive congested spleen weighing 879g (average 140g [40-300g] for females).
- Patient delivered a healthy baby girl at 37 weeks gestation via C-section.

DISCUSSION

- Porto-systemic thrombotic events have been a well-established complication in patients with essential thrombocytosis.
- Thrombosis of the splenic vein in particular, can progress to the formation of large gastric varices which can cause life-threatening bleeding.
- Splenectomy has been referred as the treatment of choice in these situations however it's role in pregnancy is not well established.²
- Previously considered a very high-risk procedure, given advancement in medical and neo-natal care, splenectomy during pregnancy outcomes have improved over the recent decades.³
- We present a successful case in which an open splenectomy w/ arterial embolization was successfully performed in pregnant patient in her 3rd trimester.
- This procedure should be considered for definitive treatment for pregnant females in similar situations after thorough multidisciplinary discussions.

REFERENCES

¹ Ashorobi D, Gohari P. Essential Thrombocytosis (Essential Thrombocythemia, ET) [Updated 2020 Jun 27]. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020. <https://www.ncbi.nlm.nih.gov/books/NBK539709/>

² Simpson WG, Schwartz RW, Strodel WE. Splenic vein thrombosis. *South Med J.* 1990;83(4):417-421. doi:10.1097/00007611-199004000-00014

³ Mahey R, Kaur SD, Chumber S, Kriplani A, Bhatla N. Splenectomy during pregnancy: treatment of refractory immune thrombocytopenic purpura. *BMJ Case Rep.* 2013; 2013: bcr2013201778. doi: 10.1136/bcr-2013-201778

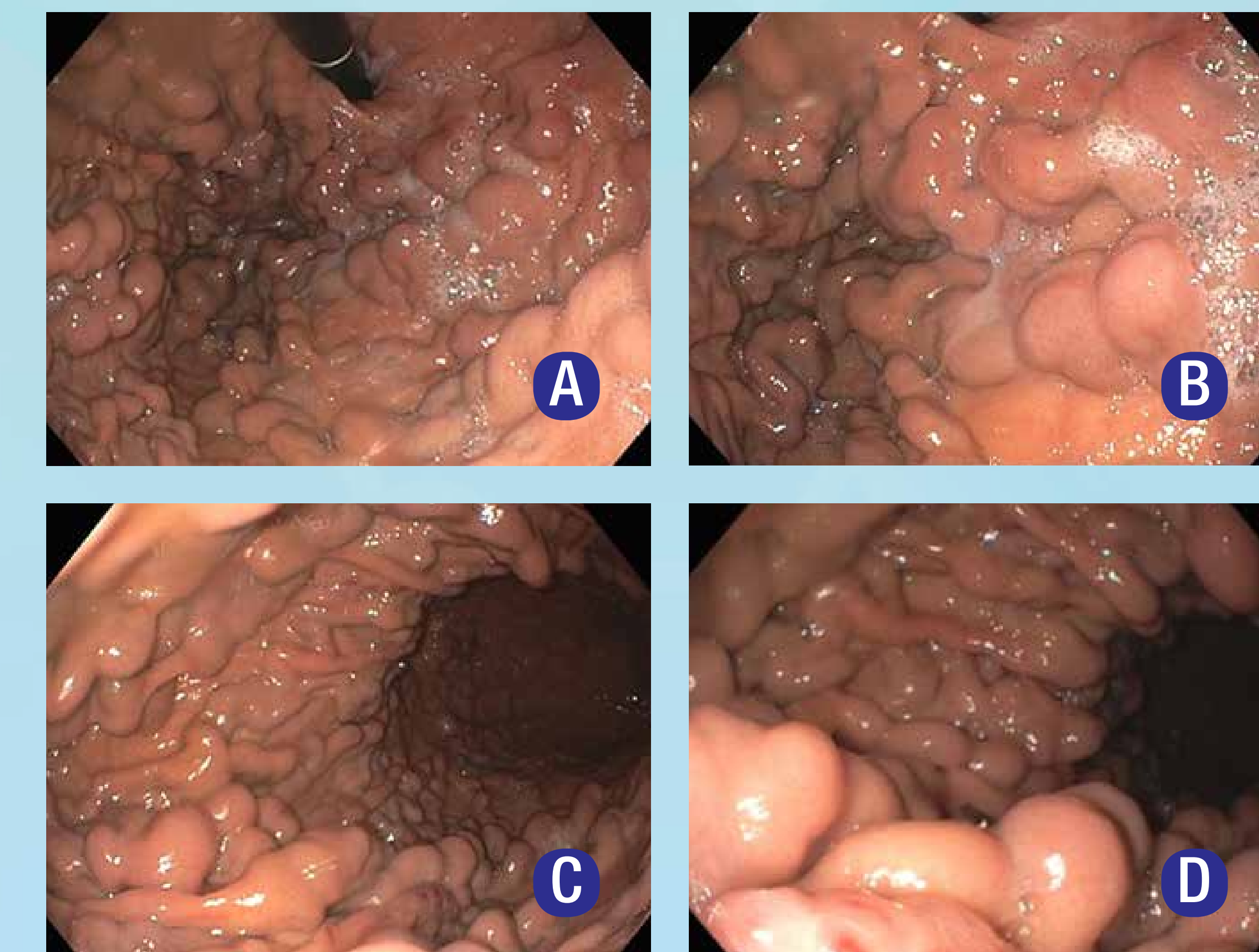


Figure 1. Endoscopic images of gastric varices. Image A & B are in retroflexed view of the cardia and fundus. Images C & D are in forward facing view of the proximal body. Red wale sign noted in Image D.

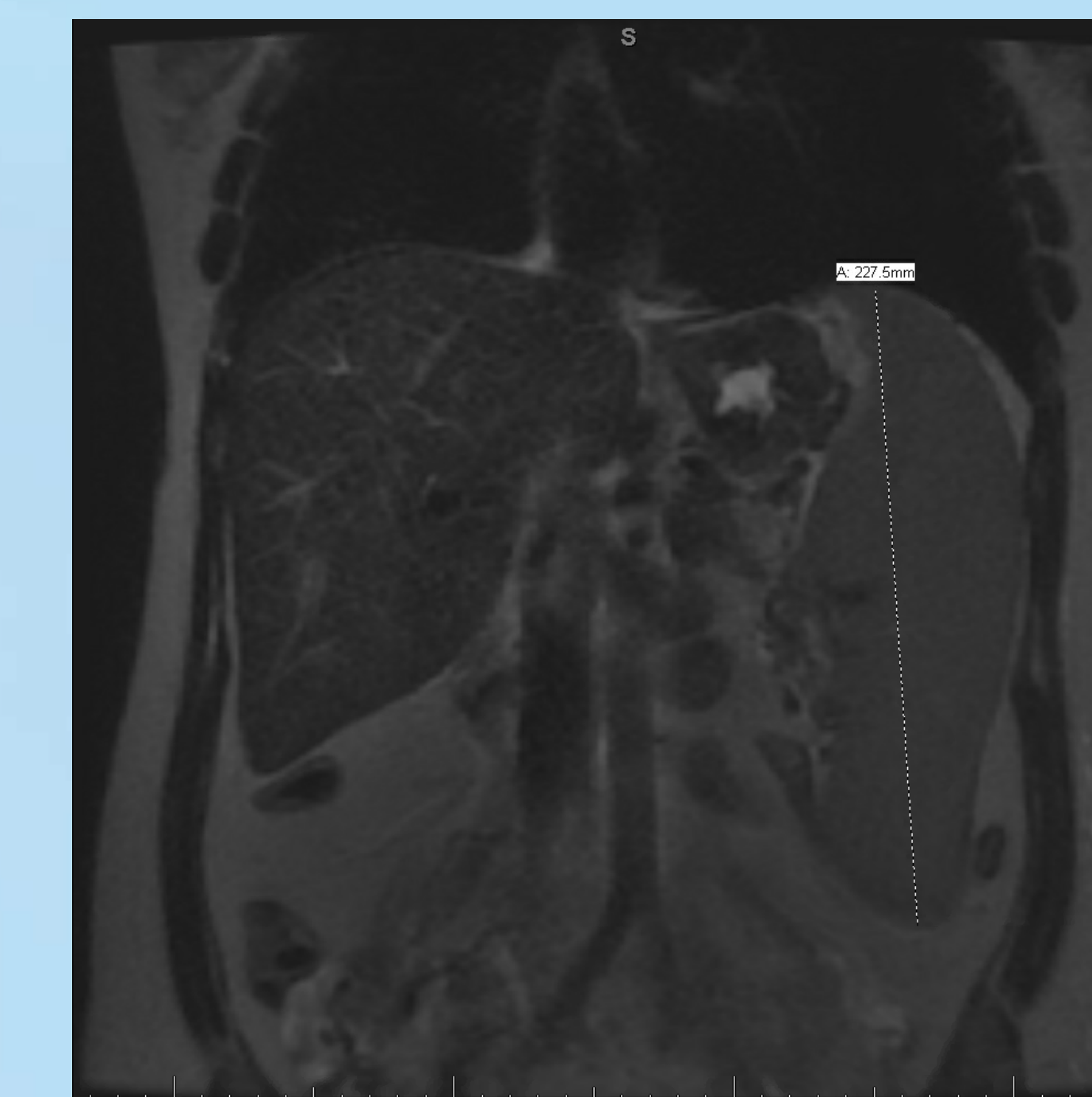


Figure 2. MRI of abdomen and pelvis in coronal view noting massive splenomegaly measuring 22.75cm crainocaudad.