

# An Atypical Source of Thrombocytosis

Tyson Broadbent MD<sup>1</sup>, John Kelley MD<sup>1</sup>, Lancaster Weld DO<sup>1</sup>

1. Department of Medicine, Baylor Scott and White Medical Center

## Abstract

We report a 29-year-old pregnant female with a past medical history notable for poorly controlled ulcerative colitis, recurrent c.diff, and choledocholithiasis status post recent stent placement who was found to have a rare neuroendocrine adenocarcinoma with enteroblastic morphology following extensive workup for thrombocytosis.

## Introduction

- Thrombocytosis is often an incidental finding in primary care with a broad range of causes
- Studies have found a significant association between thrombocytosis and malignancy<sup>1</sup>
- Thrombocytosis and leukocytosis are known mechanisms by which malignancy promotes self-propagation
- This occurs as platelets and leukocytes produce cytokines and enzymes that are important for tumor growth, invasion, and propagation

## Case Report

Patient had cholecystectomy due to RUQ pain six months prior to admission. ERCP was performed with findings indicating choledocholithiasis for which she underwent stent placement. Due to lapse in insurance, stent removal was not performed. Patient began to experience increased abdominal pain and CTAP revealed a new soft tissue density involving the porta hepatis and gastrohepatic regions concerning for soft tissue mass, at which time she incidentally discovered she was pregnant. OSH elected to not remove stent or biopsy mass at that time due to pregnancy. She continued to experience abdominal pain with new radiation to back. She was initially transferred for evaluation of thrombocytosis with a platelet count of 1.2 million with multiple potential etiologies. Patient's ulcerative colitis was not treated so she underwent flexible sigmoidoscopy which demonstrated friable tissue in active ulcerative colitis flare. Other etiologies that were evaluated included retained biliary stent as well as infection as patient was found to be C diff positive without toxin and Campylobacter positive for which she underwent antibiotic treatment. Following initiation of ulcerative colitis therapy and exchange of biliary stent, patient had some improvement in right upper quadrant pain but continued to have thrombocytosis. Patient underwent biopsy of abdominal lymphadenopathy which showed signs concerning for hepatocellular carcinoma. A repeat biopsy was performed to clarify diagnosis which demonstrated findings concerning for neuroendocrine tumor with yolk sac features.

## Discussion

Patient was followed by multiple services including Heme/Onc, Gastroenterology, and Maternal-Fetal Medicine who initiated treatment with chemotherapy while the patient was still pregnant. She ultimately had a successful delivery of child but ended up passing away following progression of malignancy. This case helps to demonstrate the need for broad differential and the ability to re-examine assumed diagnosis in addition to constraints associated with socioeconomic factors impacting care.

## References

1. Gold LC, Macpherson I, Nobes JH, Dow E, Furrie E, Jamieson S, et al. (2022) Thrombocytosis and abnormal liver enzymes: A trigger for investigation of underlying malignancy. PLoS ONE 17(4): e0267124. <https://doi.org/10.1371/journal.pone.0267124>

**Disclosures:** None