

## 2019 SOLOMON SCHOLARS RESEARCH PROGRAM ABSTRACT FORM

TITLE OF PAPER: Colon Cancer presenting as A Rapidly Progressive Splenic Abscess

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**Bench /Translational Research**\_\_\_**Clinical Research/HSR**\_\_\_**Case Study** \_\_X\_\_ **QI/Med-Ed**\_\_\_

### ABSTRACT

**Introduction:** Splenic abscesses are an uncommon complication of endocarditis or other hematogenous infections seeding to the spleen. Interestingly, they can also present as a complication of colon cancer due to perforation. Although perforation in colon cancer is not uncommon, abscess formation occurs in only 0.3-4% of cases of colon cancer. Our case describes a patient that presented with a splenic abscess with fusobacteria bacteremia that lead to diagnosis of early colon cancer.

**Case Report:** 62 years old female with no significant past medical history presented to our facility with a new onset of left upper quadrant pain for five days, rating 10/10, worsened with inspiration and relieved with over the counter pain medication. She presented to an outside facility the day before with similar complaints where they did an abdominal CT that showed a small perisplenic fluid collection concerning for splenic hematoma vs infarction. In the ED she was found to be febrile of 103°F with BP of 90/51. Physical exam was remarkable for tenderness to palpation in the LUQ of abdomen without rigidity. CBC was significant for a Hgb of 10.2; elevated LDH of 416 and a CMP showing hypoalbuminemia; CXR revealed a left lower lobe pneumonia with a small pleural effusion. Blood cultures showed a gram negative bacteremia from *Fusobacterium mortiferum* and subsequently started on IV Zosyn 4.5G q6 hours with IV fluids, pain management, serial hemoglobin monitoring with further evaluation of the source of the bacteremia. Endocarditis being the most common source of splenic abscess, TTE was performed was negative for valvular vegetations or abnormalities. CT chest/abdomen was obtained for further analysis of the spleen which was significant for a subcapsular fluid collection measuring 10.8 x 7.4 x 9.7 cm at the superior pole and a 2.3 x 3.9 x 3.6 cm collection at the inferior pole abutting the splenocolonic flexure. Pulmonary hypertension was appreciated by a dilated pulmonary artery with a considerable left pleural effusion and LLL consolidation. CT aspiration and drainage of perisplenic collection grew enteric bacteria significant of *E.Coli*, *Streptococcus* group C Beta, and *Bacteroides fragilis*. US guided diagnostic thoracentesis showed exudative effusion with negative cultures. Diagnostic colonoscopy revealed a large mass in the distal transverse colon with a 5-cm ulcerated lesion and 2cm pedunculated polyp seen in the rectum that was completely removed. Biopsies taken during the colonoscopy showed tubular adenoma with high grade dysplasia and invasive adenocarcinoma. On the same admission, patient was taken to the OR for resection of the lesions by a left hemicolectomy, transverse colectomy and sigmoid colectomy with colocolonic anastomosis; however, the transverse colon was found to be adherent to the superior pole of the spleen with colosplenic fistula formation which was then determined as the source of the splenic abscess and subsequent bacteremia. Prior to discharge, the splenic fluid was found to have grown budding yeast and was subsequently discharged with Fluconazole 800mg daily for two weeks and follow up with oncology for adjuvant chemotherapy.

**Discussion:** Generally speaking, presenting with bacteremic splenic abscess is unusual with normal valvular heart anatomy. Clinicians should have a high index of suspicion of colon cancer if a patient presents with rapidly progressive splenic abscess with polymicrobial enterics as the etiology. Early diagnosis and management of colon cancer is known to have favorable outcomes of morbidity and mortality.