Colonoscopy Splenic Injury: A Case Report of a Less Commonly Discussed but Feared Complication of

INTRODUCTION: Splenic injury is a rare complication of colonoscopy that was first reported by Wherry et al in 1974. The true incidence remains unknown; however, it is estimated to be at 0.004%. It requires a high degree of suspicion and should be considered in patients having out of proportion abdominal pain, especially in the left upper abdomen or left shoulder, after colonoscopy.

CASE DESCRIPTION/METHODS: A 58-year-old relatively healthy female underwent a screening colonoscopy. Following the procedure, she started having left upper quadrant abdominal pain, which did not improve after passing gas and walking around. The pain was positional and was relieved by leaning forward. Her vitals were stable, and abdomen was soft without any rebound or guarding. Due to no improvement over the next few hours, a CT abdomen with contrast was ordered which showed a small volume of peri-splenic-predominant, a small volume of hemoperitoneum; without splenic parenchymal abnormality or pneumoperitoneum. Her symptoms remained unchanged and she was observed for a few hours. She was discharged home without any surgical intervention. Her pain persisted for a month. A repeat CT abdomen after a month showed complete resolution of the peri-splenic bleed. The abdominal pain resolved completely after a month.

DISCUSSION: Splenic injury as a complication of colonoscopy is underdiagnosed and under-reported. It occurs more often in women. Risk factors include inappropriate intestinal preparation, antplatelet/anticoagulant use, older age, previous splenic disease, redundant colon, intra-abdominal adhesions, excess traction, and deep sedation from propofol. Passage of endoscope through the splenic flexure causing direct trauma, traction on the spleno-colic ligament and traction on adhesion between spleen and colon causing rupture of the capsule are the major mechanisms of injury. The splenic injury can remain asymptomatic, however, the splenic rupture has significant morbidity and mortality. Patients can present early (within 48 hours) or late up to 2–10 days after the procedure. CT scan of the abdomen is the gold standard diagnostic tool, however, ultrasound can be useful in an emergency condition. Management depends on the extent of the injury and hemodynamic status of the patient and can involve surgical splenectomy, radiology guided selective splenic artery embolization or conservative. The suggested ways to minimize splenic injury are to keep the patient in the left lateral position, avoid supine position and avoid external pressure.

S2069 Presidential Poster Award

The First Reported Case of Diffuse Colonic Lipomatosis in a Patient With Lynch Syndrome

INTRODUCTION: Benign lipomatous lesions of the colon may be either lipomas or lipomatosis. Though they are second most common benign tumours of the colon, they are uncommon in clinical practice. We report the first case of such diffuse lipomatosis in a patient with Lynch syndrome.

CASE DESCRIPTION/METHODS: A 21-year-old female with MLH-1 mutated Lynch syndrome and prior history of diverticulitis presented with abdominal pain and chronic constipation. The physical exam and lab results were unremarkable. CT scan demonstrated extensive sigmoid diverticulosis, redundant sigmoid, and submucosal fat deposition within the sigmoid colon. A sigmoidoscopy showed atypical narrow appearing sigmoid colon. Subsequent colonoscopy revealed extensive sigmoid diverticulosis with significant luminal deformity and patchy erythema and distal rectal nodularity. The pathology from rectal nodularity showed prominent submucosal lymphoid aggregate suggesting likely lymphoma. Eventually prophylactic hemicolecetomy was performed and two segments of large intestine, including sigmoid and upper rectum, were removed, the pathology from which reveal a diffuse yellow-tan lobulated mucosal surface with loss of mucosal folds and
multiple yellow-tan sessile nodules. Cross-section of the colon showed infiltration and destruction of the muscularis propria by adipose tissue. Histology showed adipose replacement of submucosa and subserosa with the fatty replacement of muscularis propria. Colonic lipomatosis was also present in the colorectal tissue at the anastomotic site.

**DISCUSSION:** Lipomas may either be solitary or multiple. Diffuse colonic lipomatosis of colon is a rare entity and can frequently mimic malignancy particularly in patients like ours who have underlying Lynch syndrome. Histopathology is the gold standard for diagnosis. An association has been found between segmental or diffuse lipomatosis with diverticula of colon or neurofibromatosis or cutaneous, epiploic, small bowel lipomas. Our patient underwent hemicolectomy and recovered well with improvement in her symptoms after the surgery.

**S2071**

Severe Methemoglobinemia After Benzocaine Spray Use During Endoscopy

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**INTRODUCTION:** The use of topical pharyngeal anesthesia causing methemoglobinemia (MHb) was first reported in 1977 and has been rampantly debated ever since. Most centers continue to use them routinely for the comfort of both the patient and endoscopist despite adequate sedation. We describe a case of MHb in a patient who presented with cyanosis after endoscopy.

**CASE DESCRIPTION/METHODS:** A 29-year-old morbidly obese female with asthma and anxiety, presented to us 1 month after an uneventful laparoscopic gastric bypass surgery with persistent nausea and abdominal pain. She was planned for routine upper endoscopy and informed consent was obtained. Patient was comfortable with stable vitals on the day of the procedure. Benzocaine 20% spray was used for topical pharyngeal anesthesia and she was sedated with Fentanyl and Midazolam, prior to introducing the endoscope. The procedure was short, uneventful and she was moved to the recovery unit; 15 mins later, the patient became tachypneic, appeared cyanosed and her oxygen saturation (Sats) dropped to 86%. She was initially placed on a nasal cannula and switched to non-rebreather 15L however her Sats did not improve. Patient appeared more fatigued, confused, and cyanotic. Labs revealed hemoglobin of 12.3g/dl, and arterial blood gas on the non-rebreather was pH 7.43, pCO2 38.6mmHg, pO2 455mmHg and HCO3 23.8mEq/L while her pulse oximetry was still showing Sats of 83%. Chest x-ray revealed linear atelectasis at the medial left base. Methemoglobin level was markedly elevated at 38.1%. Methylene blue was immediately administered at 2mg/kg over 5 minutes together with Vitamin C infusion. Within 30 minutes, her cyanosis and Sats improved. Repeat Methemoglobin level in 30 minutes was 10.7% and at 6 hours was 0.3%. She was admitted for observation overnight and discharged home well the next day.

**DISCUSSION:** MHb is an underrecognized, fatal condition that can be caused by commonly used drugs like dapsone, nitrates, acetaminophen, and benzocaine. A large retrospective study about benzocaine products found 93.2% of MHb cases were due to benzocaine spray usage with a fatality rate of 1.5%. Another study later reported that benzocaine-containing topical anesthetics were 3.7-fold more likely to be associated with MHb than products not containing benzocaine. Many have questioned the use of topical agents altogether given its possible fatal adverse effect, however, a large prospective study is required to support this notion.

**S2072**

Hematemesis Caused by Migrated Coil - A Rare Complication of Splenic Artery Coil Embolization

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**INTRODUCTION:** Coil migration is an uncommon but serious complication of trans-arterial embolization that leads to gastrointestinal(GI)bleeding. The following vignette highlights a case of endovascular coil migrated into GI lumen causing recurrent hematemesis.

**CASE DESCRIPTION/METHODS:** A 36-year-old African American male presented with three episodes of hematemesis. Past medical histories are alcohol use disorder, dilated cardiomyopathy with reduced ejection fraction, chronic pancreatitis, and splenic artery pseudoaneurysm(PA)status post surgery.

Our patient underwent hemicolectomy and recovered well with improvement in her symptoms after the surgery.