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S4001

**A Bowel Invader: Endometriosis Causing Partial Colon Obstruction**

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**Introduction:** Endometriosis is a chronic disease characterized by presence of ectopic lesions predominantly in the pelvis, which can lead to pain, gastrointestinal or urinary symptoms, and infertility.<sup>1</sup> The prevalence of colorectal involvement in women with endometriosis is estimated to be between 3%-37%.<sup>2</sup> While the rectosigmoid region is the most affected site in the bowel, cases of intestinal occlusion due to endometriosis foci on the bowel are rare, with a reported prevalence of 0.1%-0.7%.<sup>2</sup> This is a unique case of partial colon obstruction secondary to bowel-infiltrating endometriosis.

**Case Description/Methods:** A 52-year-old woman with history of colon polyps and diverticulosis presented with subacute rectal bleeding, occasional bloating and cramping, and variable stool consistency. Initial colonoscopy revealed a severe sigmoid stricture, with inability to advance the colonoscope beyond the point of stricture. Computed tomography scan revealed a thickened and narrowed area of the distal sigmoid colon which raised concern for an underlying mass. A repeat colonoscopy was performed confirming the stricture, although no obvious mass was seen. She underwent a laparoscopic sigmoid colectomy, with pathology of sigmoid colon biopsies revealing endometriosis involving the colon wall. She developed postsurgical *C. difficile*, which was treated with antibiotics. Upon re-evaluation in clinic, the patient was asymptomatic and no longer had abdominal pain, rectal bleeding, or change in bowel habits.

**Discussion:** Endometriosis commonly involves the gastrointestinal tract with a predilection for the rectosigmoid region. In rare cases, it can lead to strictures and bowel obstruction. In women patients with changes in bowel habits which present in a cyclical manner, endometriosis should be considered on the differential diagnosis. Endometriosis should be considered as a multi-system disorder which may affect one or multiple regions of the gastrointestinal tract, either superficially or in an infiltrative manner. A thorough gynecologic history should be taken as a history of endometriosis or chronic pelvic pain may also support the diagnosis.

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S4002

**Between a Tumor and a Hard Place: Post-Colonoscopy Bowel Perforation in a Patient With Peritoneal Carcinomatosis**

Anjali Herekar, MD\*, Shoujit Banerjee, MD, Christopher Soriano, MD, Joshua Kwon, MD, Nicholas Garcia, MD, Nicholas N. Totah, MD, Peter Nguyen, MD, Gregory Albers, MD, FACC

**Introduction:** Post-colonoscopy perforation is an uncommon occurrence, with an incidence of less than one per thousand for diagnostic colonoscopy.<sup>1</sup> The use of carbon dioxide insufflation rather than air is one of many strategies to reduce barotrauma and risk of perforation.<sup>2</sup> Both water immersion and carbon dioxide insufflation are generally considered safe.<sup>3</sup> This is a case of post-colonoscopy colon perforation after use of water immersion to proceed past a sigmoid stricture caused by extrinsic carcinomatosis.

**Case Description/Methods:** A 49-year-old woman with history of invasive left lobular breast carcinoma and prior small bowel obstruction (SBO) presented with abdominal pain with imaging revealing a transition point in the terminal ileum and thickening of the terminal ileum and colon. A severe 8 mm stricture was noted in the sigmoid colon on prior flexible sigmoidoscopy. The patient underwent colonoscopy to rule out Crohn's disease, which revealed a non-traversable stricture in the descending/sigmoid colon with lumen of approximately 2.5 mm at the narrowest point. Water immersion was used to open the lumen and advance past the stricture point but was unsuccessful. The patient then developed severe abdominal pain requiring emergency exploratory laparotomy. A transverse colon perforation was identified, and the patient underwent diverting loop ileostomy. There were findings of omental caking consistent with metastatic breast cancer. The patient was discharged after a prolonged recovery.

**Discussion:** Water immersion is often used to open the lumen and transverse strictures. However, in cases where the lumen is severely narrowed, water may not flow out of the stricture which causes air and fluid to be trapped in the proximal segment of the colon, creating a water seal. This patient had a transition point at the terminal ileum as well as sigmoid stricture, leaving the transverse colon susceptible to perforation if subjected to distension. In cases of stricture, carbon dioxide insufflation should be considered first to traverse the stricture, as the molecule absorbs quickly through the large bowel epithelium compared to water and thus carries a lower risk of bowel perforation.

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S4003

**Unmasking the Rarity: A Case of Primary Signet-Ring Cell Carcinoma of the Colon in a Young Female**

Susan Kais, MD\*, Matthew Soliman, Addie Schumacher, MD, Madison Lange, ANPC

**Introduction:** Primary signet-ring-cell carcinoma of the colon and rectum (PSRCCR) is a rare and aggressive subtype of colorectal cancer, accounting for 0.1%-1% of cases. It is associated with poor prognosis, advanced disease at diagnosis, high rates of peritoneal metastasis, and lower survival rates compared to other colorectal cancers. First identified in 1951, PSRCCR is classified as a variant of mucinous adenocarcinoma, typically presenting as diffuse, circumferential bowel wall thickening that can mimic inflammatory bowel disease, leading to delayed diagnosis. Its aggressive nature often results in high rates of lymphovascular invasion and peritoneal dissemination, occurring in over 50% of cases. Although most cases occur in older adults, primary cases in younger individuals are exceptionally rare. Here, we report an unusual case of PSRCCR in a 29-year-old woman.

**Case Description/Methods:** A 29-year-old woman with a medical history of organ transplantation, hypertension, type 2 diabetes, and recent cholecystectomy presented with severe abdominal pain, obstipation, and vomiting. Computed tomography revealed a small bowel obstruction and an 8 cm cecal mass involving the ileocecal valve, with pericecal soft tissue infiltration and lymphadenopathy. Differential diagnoses included a primary colonic neoplasm or lymphoproliferative neoplasia. The patient underwent exploratory laparotomy for mass resection and right hemicolectomy. Biopsies indicated poorly differentiated grade 3 signet-ring cell carcinoma with mucinous features, classified as pT4a pN2b cM1c due to peritoneal metastasis. There was no loss of mismatch repair proteins, and the probability of microsatellite instability was low. Positron emission tomography scan suggested possible peritoneal carcinomatosis, and chemotherapy was initiated.

**Discussion:** PSRCCR is particularly uncommon in younger populations, with limited case reports highlighting the challenges in diagnosis and management. The rarity in individuals under 30 is likely due to the typical age distribution of colorectal cancer, which predominantly affects older adults. The distinct histological features of PSRCCR contribute to delayed diagnosis, as symptoms may mimic other gastrointestinal conditions. Increased awareness among clinicians is essential for timely identification of PSRCCR in younger patients presenting with gastrointestinal symptoms. This case underscores the need for prompt evaluation and appropriate diagnostic imaging to facilitate early diagnosis and intervention, ultimately improving outcomes for affected individuals.

S4004

**Rising Concerns: A Case of YO-CRC in a 24-Year-Old Male**

Susan Kais, MD\*, Matthew Soliman, Addie Schumacher, MD, Madison Lange, ANPC

**Introduction:** Colorectal cancer (CRC) is the third most commonly diagnosed cancer and the second leading cause of cancer-related deaths worldwide. CRC incidence has stabilized or declined in high-income countries due to screening in individuals aged 45 and older, there has been a concerning rise in younger populations, termed young-onset colorectal cancer (YO-CRC), which refers to cases diagnosed before age 50. By 2030, YO-CRC is projected to comprise 11% of colon cancer and 23% of rectal cancer diagnoses. This trend suggests a strong birth cohort effect, implicating environmental and lifestyle changes as key contributors. This case report highlights the importance of maintaining a high index of suspicion for CRC in younger patients.

**Case Description/Methods:** We present a 24-year-old man with no significant prior medical history who presented to the Emergency Department with unintentional weight loss, abdominal pain, nausea, vomiting, constipation, and malaise over 3 months. Computed tomography revealed a large cecal mass with extensive mesenteric adenopathy. No family history of CRC. Lab studies showed iron-deficiency anemia and elevated CRP, while tumor markers were unremarkable. Colonoscopy found a partially obstructing cecal mass, and biopsy indicated moderately differentiated invasive adenocarcinoma. Immunostaining revealed loss of *MLH1* and *PMS2* proteins, suggestive of mismatch repair deficiency. Genetic analysis showed no mutations in *NRAS* or *BRAF*, indicating a diagnosis of Lynch Syndrome (LS).

**Discussion:** LS, resulting from mutations in DNA mismatch repair genes, typically presents CRC at ages 44 to 61. Our patient's diagnosis at age 24 is notably early. Absence of *BRAF* mutations and loss of *MLH1* and *PMS2* support this diagnosis. Emerging evidence suggests that environmental factors and dietary patterns may contribute to the rising incidence of YO-CRC, including high red meat consumption, low fiber intake, and early-life exposures. Disparities in incidence rates have also been observed among different ethnic groups. The increasing rates of YO-CRC have prompted guideline changes, recommending average-risk screening starting at age 45. However, many YO-CRC patients are diagnosed earlier, necessitating tailored even earlier screening strategies. Our case emphasizes the need for heightened clinical suspicion in young patients presenting with GI symptoms and highlights the importance of earlier diagnostic workup and further research into YO-CRC's molecular mechanisms for improved patient outcomes. As well as the rise of YO-CRC which may again support the need to start CRC earlier than 45.

**S4005 Presidential Poster Award****Primary Gastrointestinal Plasmablastic Lymphoma in an Immunocompetent Patient Presenting With Chronic Intermittent Diarrhea**

Nicholas P. Valle, MD\*, Timothy Zaki, MD, Michelle Guan, MD, Jeffrey Li, BA, Bitu Naini, MD, Jonathan Said, MD, Guy A. Weiss, MD

**Introduction:** We report a case of an immunocompetent adult man with a 2-year history of episodic diarrhea fulfilling Rome IV criteria for functional diarrhea. However, rising fecal calprotectin prompted further evaluation, ultimately revealing primary plasmablastic lymphoma (PBL) of the terminal ileum and ileocecal valve. PBL is a rare, aggressive variant of diffuse large B-cell lymphoma.