BACKGROUND:
Colonoscopy is the gold standard for colon cancer screening and colon polyp surveillance. Colon lesions range from mucosal lesions such as tubular adenomas, sessile serrated lesions, or colorectal malignancies to submucosa lesions such as leiomyomas, lipomas, duplication cysts, or sarcomas. However, during colonoscopy, some lesions may have normal appearing mucosa and biopsies can be a diagnostic or potentially therapeutic maneuver to assess lesions of unknown etiology. This case highlights a rare pathologic finding of Mulleraniosis found during routine surveillance colonoscopy.

CASE PRESENTATION:
A 72-year-old woman with a history of hypertension, anxiety, type-2 diabetes with nephropathy, chronic urinary tract infections, acid reflux disease, and history of a hysterectomy presented for surveillance colonoscopy given a personal history of colon polyps. During colonoscopy there was significant looping and tortuosity along the sigmoid colon with a 3 mm polypoid nodule noted along a questionable diverticulum. Mucosa overlying this area appeared normal and therefore deep biopsies were obtained. Tissue was examined with Pax-8, ER, PR and CD10 stains which demonstrated mullerianosis with surrounding normal colonic mucosa.

On discussion with patient after review of pathology she reported to have intermittent tolerable band-like lower abdominal pain for years. She reported no changes in bowel habits, denied any nausea, vomiting, diarrhea, constipation, weight loss, hematochezia, or melena. She had a total abdominal hysterectomy and salpingo-oophrectomy with extensive lysis of adhesions over 30 years ago for pelvic pain and endometriosis. The patient was evaluated by gynecology given her history of endometriosis and pelvic surgery. Given her extensive surgical history, the patient was not recommended for further surgical intervention which could be further complicated with further adhesions and fluid collections. The patient was doing well at follow up with no bleeding, obstruction, or worsening pain.

ENDOSCOPY:
![Colonoscopy with Nodule Noted]

DISCUSSION:
This case highlights a rare finding of mulleraniosis within a colonic polyp during routine colonoscopy. Mullerianosis is a rare histologic finding that contains mullerian-derived tissue. Mullerianosis within the colon is extremely rare with only one reported case found within a surgical specimen after resection of an appendiceal intussusception for a patient presenting with relapsing acute abdominal pain. Outside of this case, mulleraniosis has been reported within the bladder and ureters in patients with symptoms of endometriosis. Ectopic mullerian derived tissues, specially endometrial tissue, can produce inflammation via cytokines such as prostaglandin which can contribute to symptoms. Endometriosis is characterized by a chronic, cyclic, and progressive pain, fatigue, dysuria, or altered bowel habits. Regarding this patient, her history of gynecologic surgical procedure could have contributed to seeding of endometrial tissues to the colon. Additionally, the presence of endometrial tissue may be causing her intermittent low-grade symptoms for the past years. Management of her ectopic mullerian tissue in the colon is not well defined in the literature; however, since she is currently asymptomatic conservative management with routine observation appears to be appropriate. If symptoms such as bleeding or worsening pain do arise endoscopic or surgical excision could be considered.

TAKE HOME POINTS:
1. Mulleraniosis is a rare finding during colonoscopy
2. One should have a low threshold to biopsy nodules

REFERENCES: