

# A Case Report of Synchronous Primary Malignancies

## Retroperitoneal Liposarcoma and Incidental Terminal Ileum Adenocarcinoma in the Context of Crohn's Disease

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### INTRODUCTION

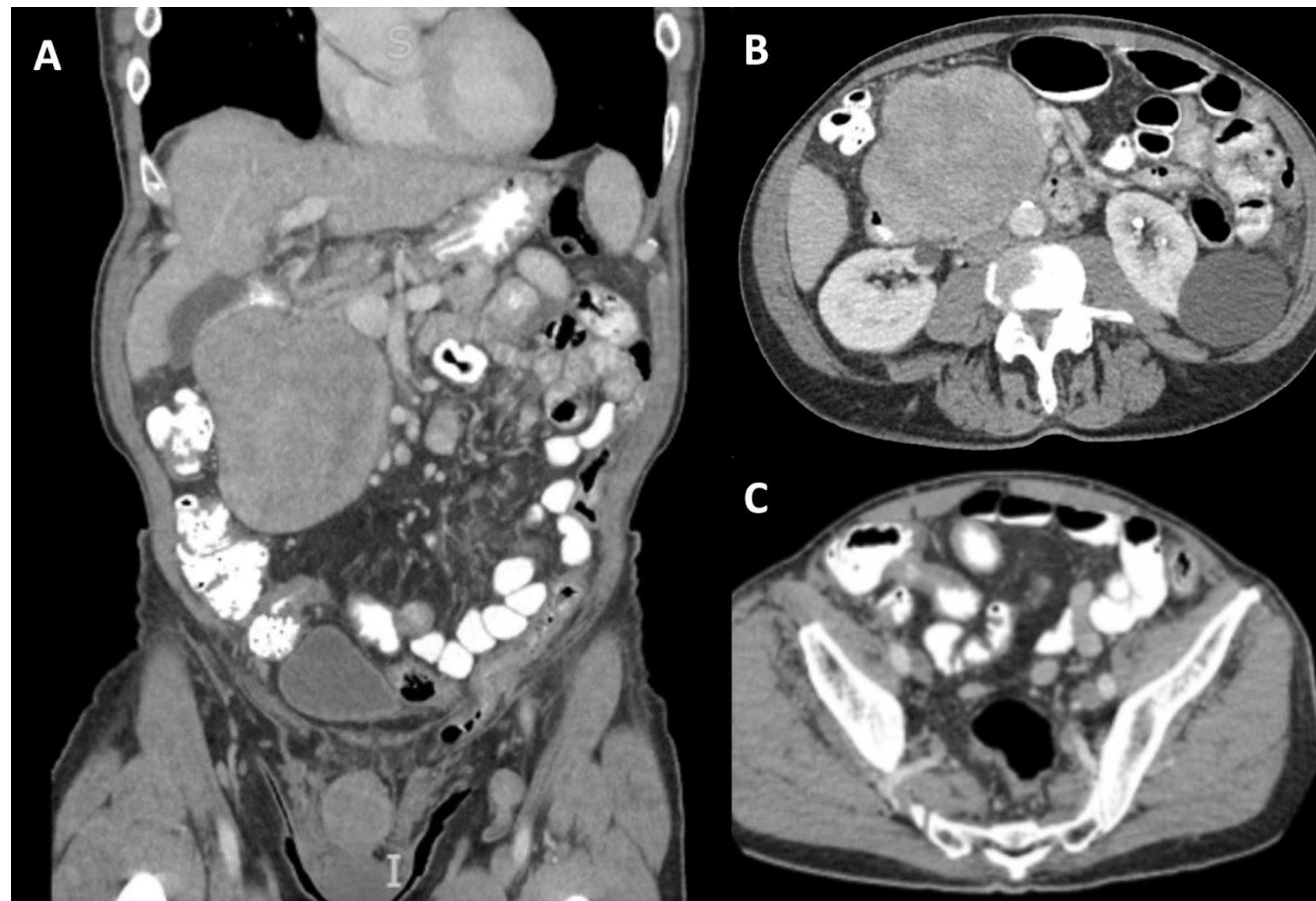
Soft tissue sarcomas constitute only one percent of adult malignancies. In addition, some low grade appearing adenocarcinomas in the setting of inflammatory bowel disease may be difficult to identify grossly or distinguish from benign entities. In this report, we present a unique case of two synchronous primary malignancies, a retroperitoneal liposarcoma and an incidental low grade tubuloglandular adenocarcinoma (LGTGA) of the terminal ileum.

### CASE PRESENTATION

A 75 year old male with a history of Crohn's disease, previously managed with steroids and currently on Stelara (Ustekinumab), initially presented with abdominal pain and weight loss. A computed tomography scan of the abdomen and pelvis revealed a 12.5 cm exophytic periduodenal mass, suggestive of a gastrointestinal stromal tumor (GIST). Subsequent endoscopic ultrasound identified a retroperitoneal mass, causing extrinsic compression of the duodenal bulb and the first portion without obstruction (Figure 1). Fine needle aspiration demonstrated enlarged hyperchromatic pleomorphic spindle cells with atypical features with workup negative for a spindle cell carcinoma, GIST, or schwannoma. The core needle biopsy revealed similar features with additional immunostains positive for MDM2 and CDK4, supportive of a dedifferentiated liposarcoma. A chest computed tomography ruled out metastasis. Preoperative assessment and preparation involved evaluating the patient's nutritional status, revealing an albumin level of 3.8 g/dL and no evidence of preoperative anemia (Hgb 15.4 g/dL). Additionally, the last administration of Stelara was approximately 2 months before the surgical procedure.

### IMAGING

**Figure 1:** CT scan of the abdominopelvis. A, B: Reveals a heterogeneous mass in the right upper quadrant, contiguous with the pancreaticoduodenal groove, extending to the descending duodenum, pancreatic head and transverse colon, measuring up to 12.5 cm. C: Indicates thickening of the mucosa in the distal ileum.

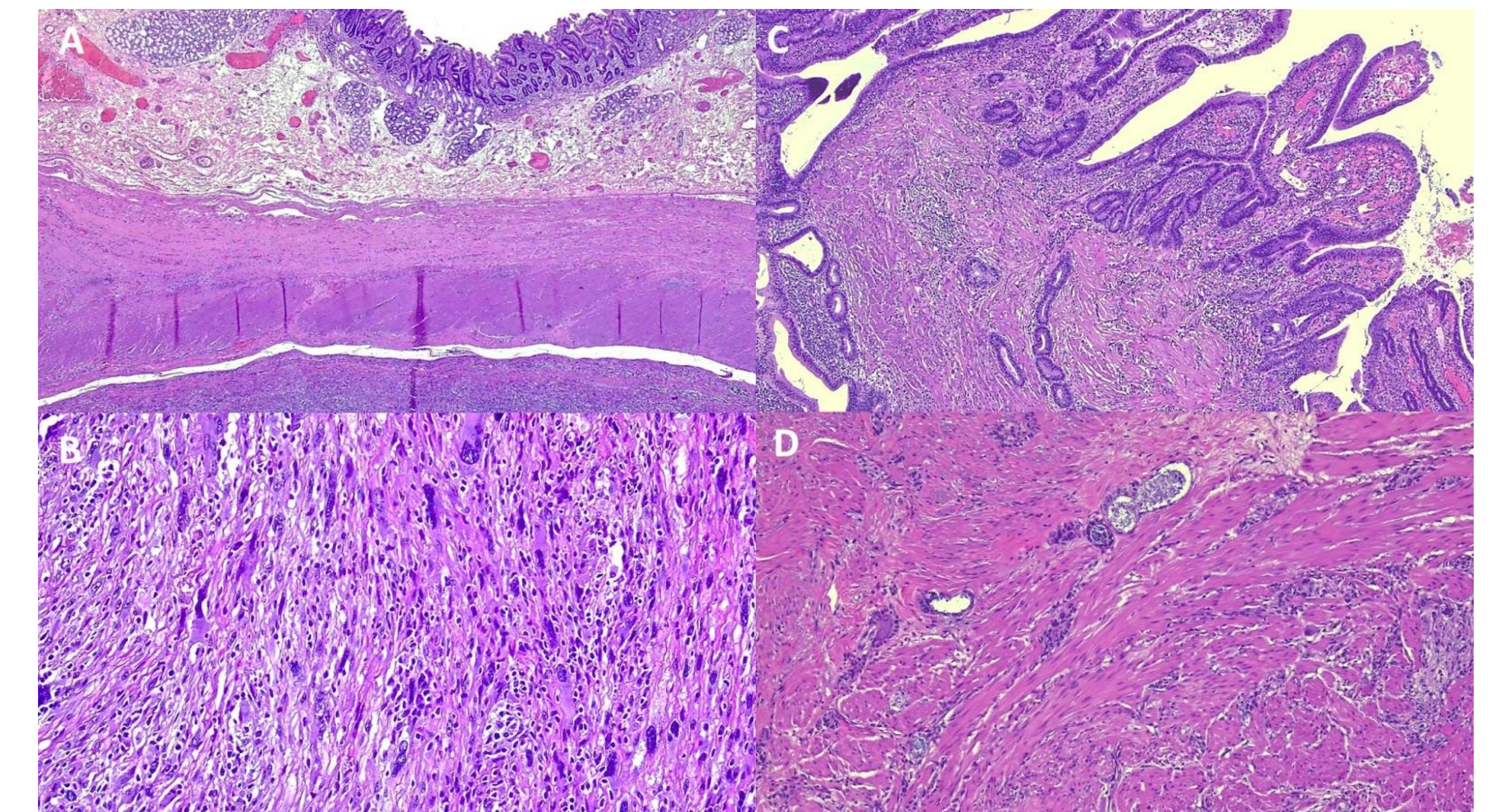


### SURGICAL RESECTION

The patient underwent an explorative laparotomy, revealing an approximately 14 cm retroperitoneal mass involving the second portion of the duodenum, the head of the pancreas and the proximal transverse mesocolon. Following meticulous dissection of the superior mesenteric vein (SMV) from the tumor, a Whipple procedure and en-bloc resection of the retroperitoneal tumor, transverse colon, mesocolon, and distal gastric antrum were performed. Due to the mass in the terminal ileum and the known Crohn's disease, right hemicolectomy including the distal terminal ileal mass with ileocolic anastomosis were performed. Reconstruction was accomplished with a retrocolic Roux-en-Y pancreatic duct to jejunal mucosa, along with hepaticojejunostomy and antecolic gastrojejunostomy.

### PATHOLOGY

Final pathology showed a 14.2 cm dedifferentiated liposarcoma, FNCLCC grade 2, of the retroperitoneum adherent to the duodenum (Figure 2A, 2B), pancreas, transverse colon, and omentum. Margins appeared uninvolved. Lymph nodes were not involved. Overall stage was pT3N0. The ileocolic resection revealed findings compatible with Crohn's ileitis with low grade dysplasia on the overlying epithelium (Figure 2C). This was associated with a 9 mm LGTGA invading through the small bowel wall (Figure 2D) into the mesentery. Lymph nodes were not involved. Overall stage was pT3N0. Margins were uninvolved by the liposarcoma and LGTGA.



**Figure 2:** A. Duodenal wall with adherent spindle cell neoplasm. B. High-grade spindle cell neoplasm, compatible with dedifferentiated liposarcoma. C. Terminal ileum with low-grade dysplasia on the surface. D. Muscularis propria of terminal ileum infiltrated by small-sized glands with round and tubular shape, compatible with LGTGA

### CONCLUSION

This case underscores the intricate diagnostic and management challenges posed by retroperitoneal sarcoma and concurrent primary malignancies within the abdominal viscera amidst Crohn's disease.

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