

# Colon Adenocarcinoma Invading the Duodenum, Pancreas, and Superior Mesenteric Vein: A Case Series and Review of the Literature

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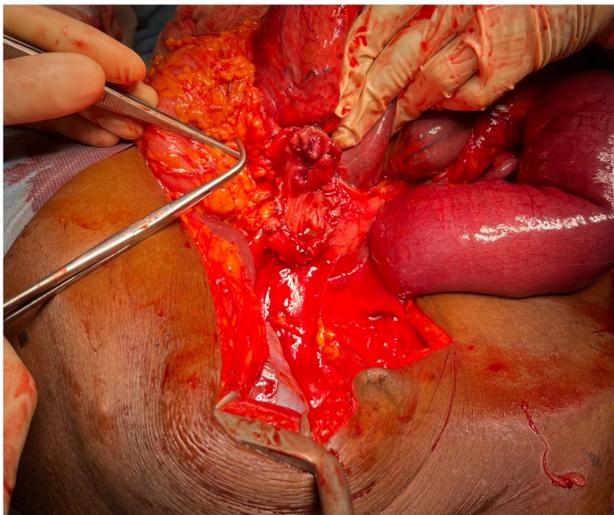
## INTRODUCTION

Locally advanced colon cancer accounts for approximately 10% of colorectal malignancies at diagnosis. Right-sided colon cancer with invasion of adjacent structures is rare (11-28% of cases), posing surgical challenges, especially in resource-limited settings where preoperative imaging is limited and patients present late. This study presents two cases of right-sided colon adenocarcinoma with adjacent organ invasion, highlighting surgical management and outcomes.

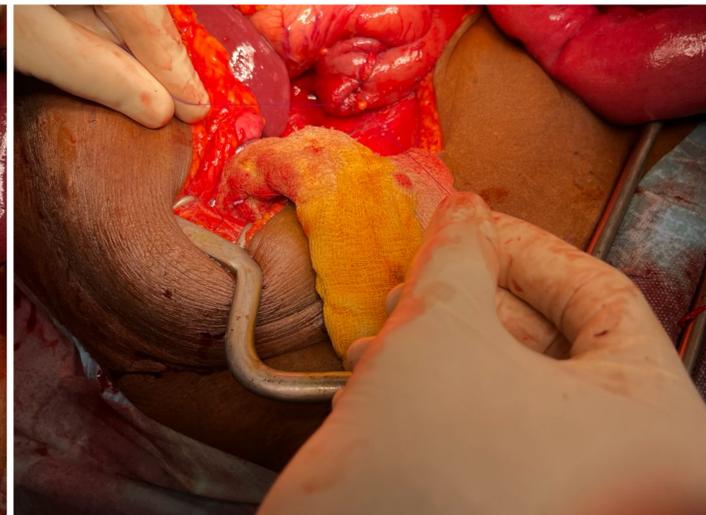
## METHODS

Two cases of locally advanced right colon adenocarcinoma requiring en bloc resection involving the duodenum, pancreas, and/or superior mesenteric vein were reviewed. Surgical management aimed to achieve negative margins while minimizing morbidity. We analyzed clinical presentation, imaging findings, intraoperative observations, histopathology, and postoperative outcomes, supplemented by a literature review.

## PROCEDURE



Duodenal resection



Duodenal closure

## RESULTS

### Case 1:

- Patient:** 63-year-old female, 10-kg weight loss, positive stool occult test
- Findings:** Cecal adenocarcinoma invading duodenum, pancreas, superior mesenteric vein
- Surgical Approach:** Extended right hemicolectomy, en bloc duodenal (D3) resection, resection of mid superior mesenteric vein, resection of 60 cm of distal ileum, primary duodenal closure, wedge pancreatic resection
- Outcome:** R0 resection; pT4a, N1b staging

### Case 2:

- Patient:** 68-year-old female, obstructive right-sided colon cancer
- Findings:** Tumor infiltrating duodenum, adherent to pancreatic head
- Surgical Approach:** Right hemicolectomy, partial duodenal (D2) resection, primary duodenal closure, pancreatic wedge resection
- Outcome:** R0 resection, pT4B, N0 staging

## CONCLUSION

Despite advances in preoperative imaging, adjacent organ invasion in locally advanced colon cancer is often discovered intraoperatively. In resource-limited settings, economic constraints delay imaging, creating challenges in surgical planning.

- Duodenal invasion:** Manageable with en bloc resection and primary duodenal repair.
- Pancreatic involvement:** Segmental resection if minimal; duodenopancreatectomy in extensive cases remains controversial.

These cases highlight the necessity of balancing oncologic principles with morbidity risks, emphasizing the importance of individualized surgical strategies in low-resource settings.

## REFERENCES

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