

# A RARE CASE OF APPENDICEAL GOBLET CELL ADENOCARCINOMA WITH PERITONEAL CARCINOMATOSIS

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## Introduction

- Primary appendiceal cancers are extremely rare representing approximately 1% of gastrointestinal malignancies
- Appendiceal goblet cell carcinoma (GCC) is one of the rarest subtypes with a reported incidence of 0.05 cases per 100,000 population per year in the United States
- Consists of both glandular and neuroendocrine elements containing goblet cells.
- We present a unique case of appendiceal GCC with peritoneal carcinomatosis presenting as a small bowel obstruction

## Case Presentation

### HPI:

- 43-year-old male presented with worsening, constant, and colicky abdominal pain
- 2 months history of diffuse intermittent abdominal pain

### PE:

- Afebrile with elevated blood pressure of 196/89 mmHg
- Distended and diffusely tender abdomen
- Sluggish bowel sounds

### CT Scan Abdomen:

- Small bowel obstruction and focal density in the right lower quadrant, abutting the small bowel loops, associated edema and omental infiltration (*figure 1, 2*)

### Colonoscopy:

- Revealed an extremely tortuous colon complicated by a serosal tear and internal hemorrhage requiring surgical intervention



*Figure 1:*  
CT abdomen showing a peritoneal carcinomatosis and focal density in right lower quadrant, as well as omental nodularity.

*Figure 2:*  
CT abdomen showing focal density in the right lower quadrant.

## Patient Course

### Intraoperative findings:

- Omental caking and carcinomatosis of the mesentery, peritoneal surfaces, distal jejunum, sigmoid colon, and terminal ileum were noted.

### Biopsy and immunohistochemistry:

- Consistent with a diagnosis of metastatic goblet cell adenocarcinoma with lymphovascular invasion

### Treatment:

- Once stabilized, he was started on FOLFOX chemotherapy regimen with outpatient heme/onc follow up

## Discussion

- Appendiceal GCC is one of the rarest GI malignancies documented - often asymptomatic and diagnosed incidentally
- Can also present as chronic abdominal pain, acute appendicitis, and even bowel obstruction
- Treatment consists of resection of the colon and chemotherapy in localized disease, and in cases of peritoneal carcinomatosis - cytoreductive therapy and heated intraperitoneal chemotherapy (HIPEC)
- More aggressive than other appendiceal cancers
- One study showed that the average survival rate of patients with peritoneal carcinomatosis treated with cytoreductive surgery and HIPEC was 18.5 months.
- In cases of acute appendicitis, it is crucial to biopsy the surgical specimen so this diagnosis is not missed.
- Our case highlights an interesting and complicated presentation of this rare disease.

## References

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