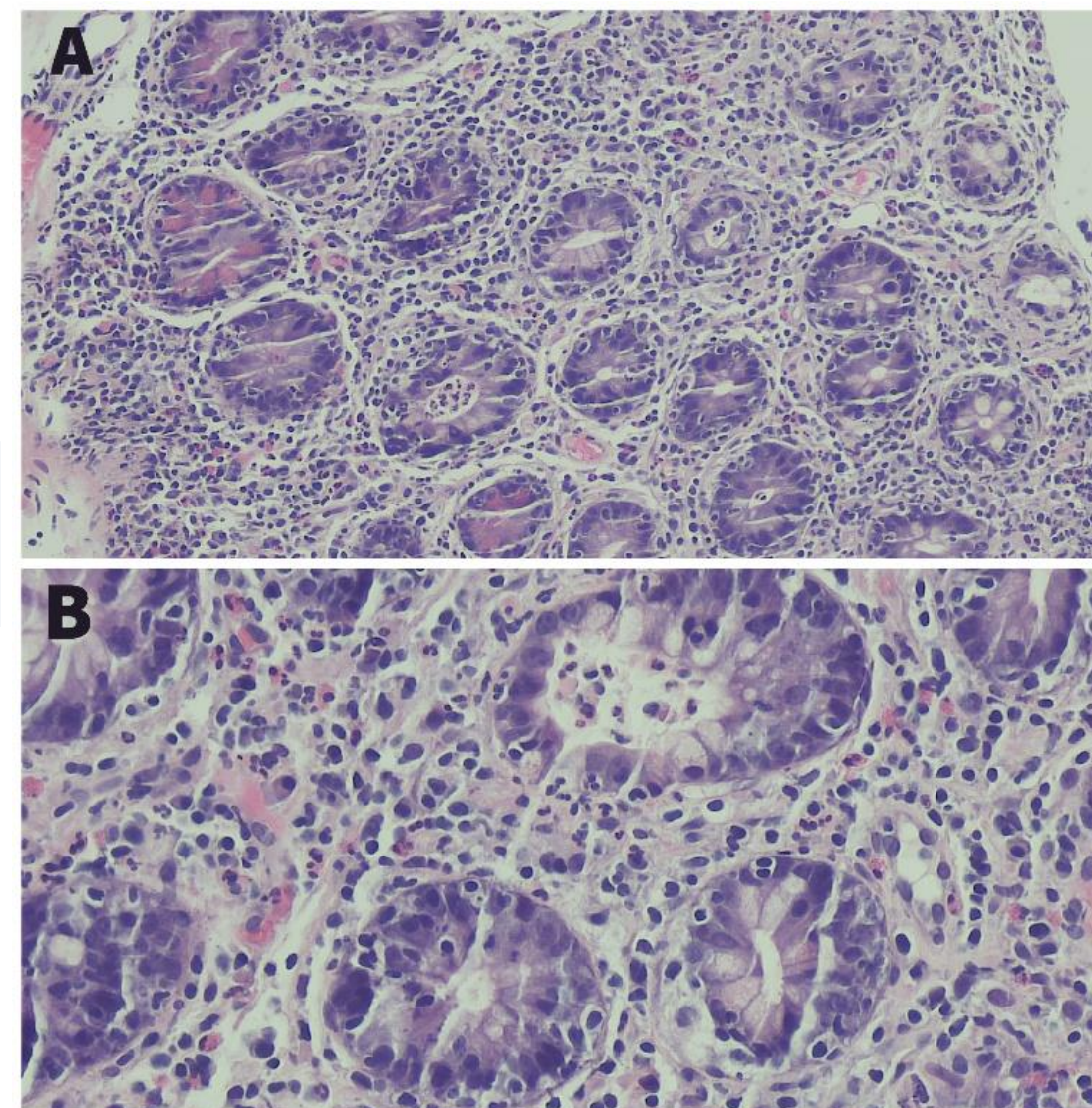


INTRODUCTION

- There is very limited published data regarding severe steroid-refractory isolated immune checkpoint inhibitor (ICI) enteritis.
- Vedolizumab seems to be effective in treating ICI colitis with better safety profile when compared to Infliximab. However, some insurance companies are not approving it for therapy.
- We present a case of severe isolated steroid refractory ICI enteritis successfully treated with Infliximab following an insurance denial for Vedolizumab coverage.

CASE REPORT

- A 59-year-old female with a history of metastatic renal cell carcinoma (RCC) status post left nephrectomy who has recently been treated with Axitinib and Pembrolizumab therapy, presented with acute abdominal pain and diarrhea.
- Immunotherapy was discontinued and she received high dose steroid therapy for 7 days for presumed ICI-induced diarrhea with no improvement.
- Abdominal exam was concerning for abdominal distention.
- Abdominal imaging showed extensive pneumatosis in mid-distal small bowel, moderate pneumoperitoneum, and diffuse small bowel perforation.
- She underwent an emergent exploratory laparotomy with distal ileal resection (22.5cm) and end-ileostomy.
- Her hospital course was complicated by intraabdominal abscesses and persistent high volume ostomy output (9-10L/day) despite a trial imodium, high dose steroids, tincture of opium, octreotide, and fiber.
- Infectious workup, fecal elastase, celiac screen, VIP, TSH, gastrin levels were normal.



Inflammatory cells in lamina propria, cryptitis, crypt abscesses, and apoptotic bodies

A: Small bowel biopsy Hematoxylin & Eosin (H&E) stain, 100X

B: Small bowel biopsy Hematoxylin & Eosin (H&E) stain, 200X

CLINICAL COURSE

- Ileoscopy was performed showing normal mucosa, however biopsies showed increase in lamina propria inflammatory cells, cryptitis, crypt abscesses, and apoptotic bodies, consistent with chronic active enteritis/immunotherapy-related changes (Fig 1)
- Vedolizumab was denied by insurance despite multiple appeals and therefore, Infliximab 5 mg/kg was started.
- A significant improvement was noticed following a one dose of Infliximab. The patient had complete resolution of symptoms and eventual ileostomy reversal.

CONCLUSION

- Infliximab is effective in treating severe isolated ICI enteritis.
- Although current literature favors Vedolizumab given its higher safety profile, especially given infection and malignancy in our case, the insurance company denied our request and appeal.
- Ongoing studies showing higher safety profile of Vedolizumab in treating ICI enteritis will likely change insurance approval processes in the coming years.

REFERENCES

- Dougan, Michael, Wang, Yinghong, Rubio-Tapia, Alberto & Lim, Joseph K.. AGA Clinical Practice Update on Diagnosis and Management of Immune Checkpoint Inhibitor Colitis and Hepatitis: Expert Review. *Gastroenterology* 160: 1384-1393 (2021)
- Zou, Fangwen MD et al. Comparative Study of Vedolizumab and Infliximab Treatment in Patients With Immune-Mediated Diarrhea and Colitis, *The American Journal of Gastroenterology*: 115 , S68 (2020)
- Abu-Sbeih, H., Ali, F.S., Alsaadi, D. et al. Outcomes of vedolizumab therapy in patients with immune checkpoint inhibitor-induced colitis: a multi-center study. *j. immunotherapy cancer* 6, 142 (2018)