



# Stenting as Salvage Therapy for Colonic Perforation

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## LEARNING OBJECTIVES

- Review increased mortality rates for surgical interventions in patients with cirrhosis.
- Present alternative therapy for colonic perforation for patients in which surgery is contraindicated.

## CASE PRESENTATION

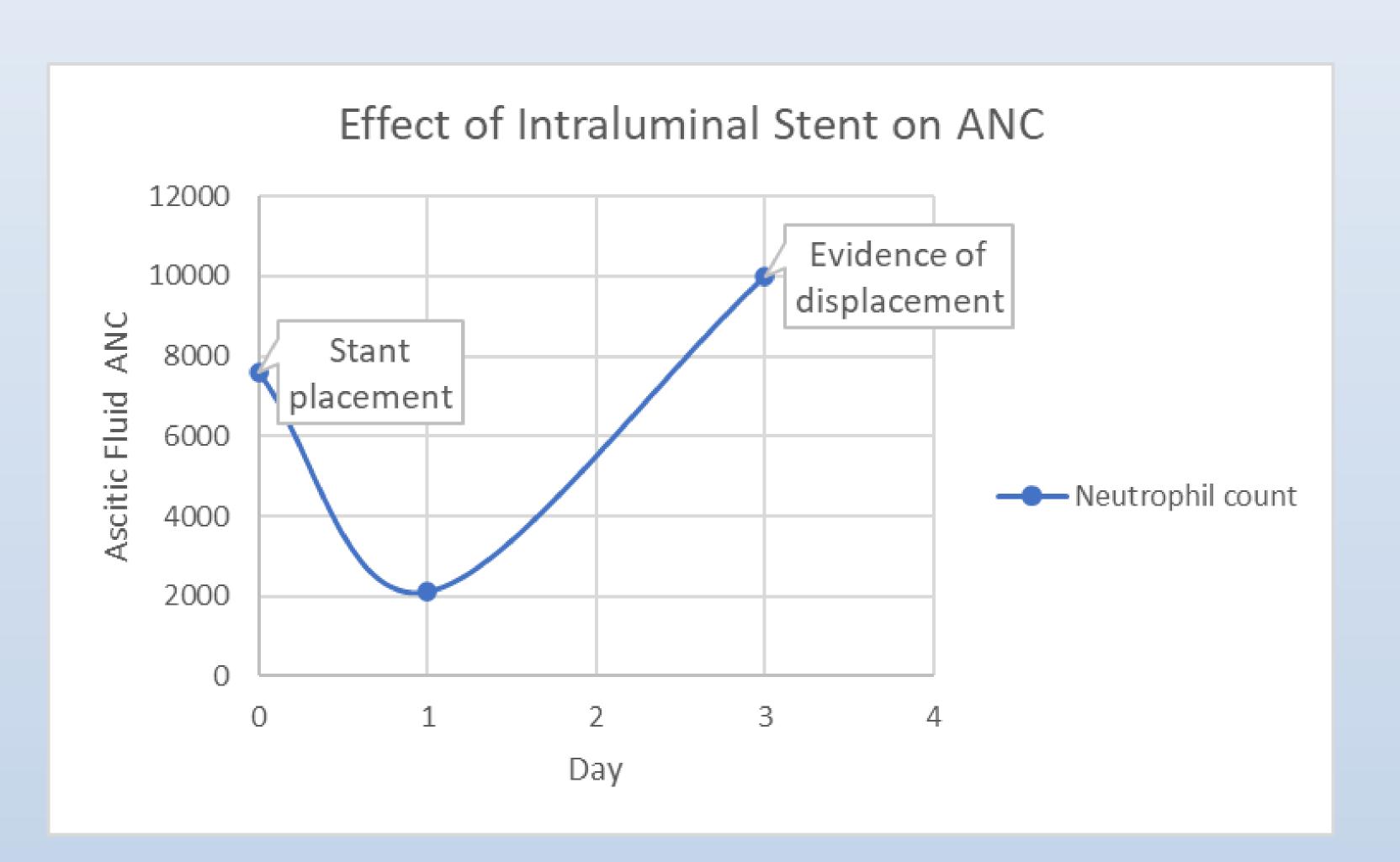
62-year-old female with a history of alcohol-related cirrhosis decompensated by variceal bleeding presented with 3 days of diffuse abdominal pain and abdominal distention.

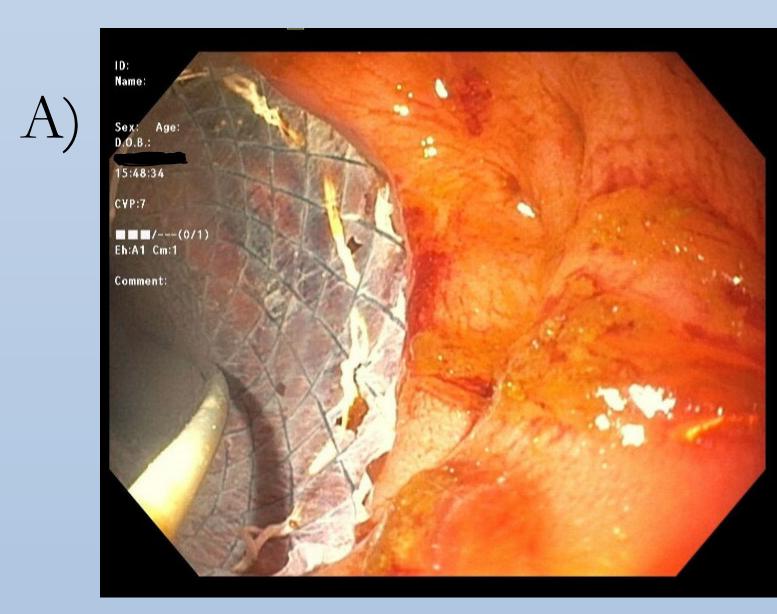
## CLNICAL COURSE

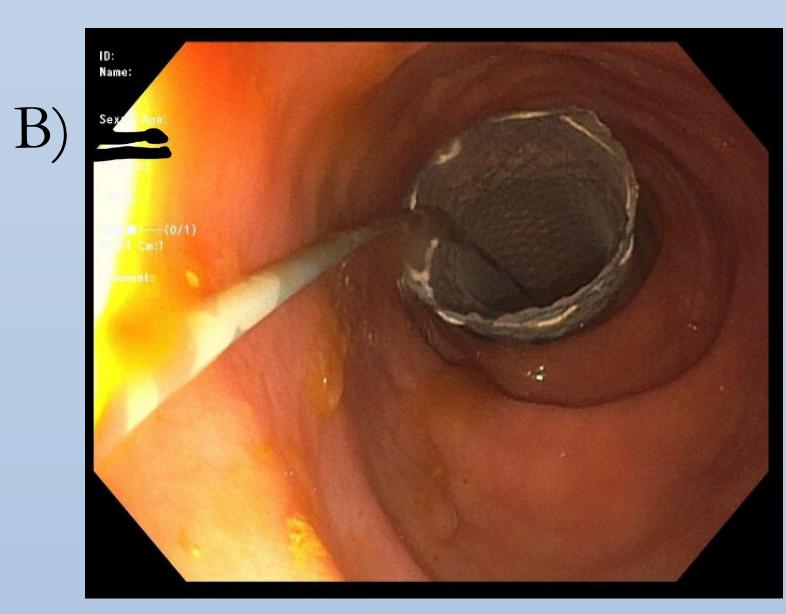
- CT abdomen/pelvis: contained micro-perforation in the sigmoid colon along with new onset ascites
- Paracentesis 

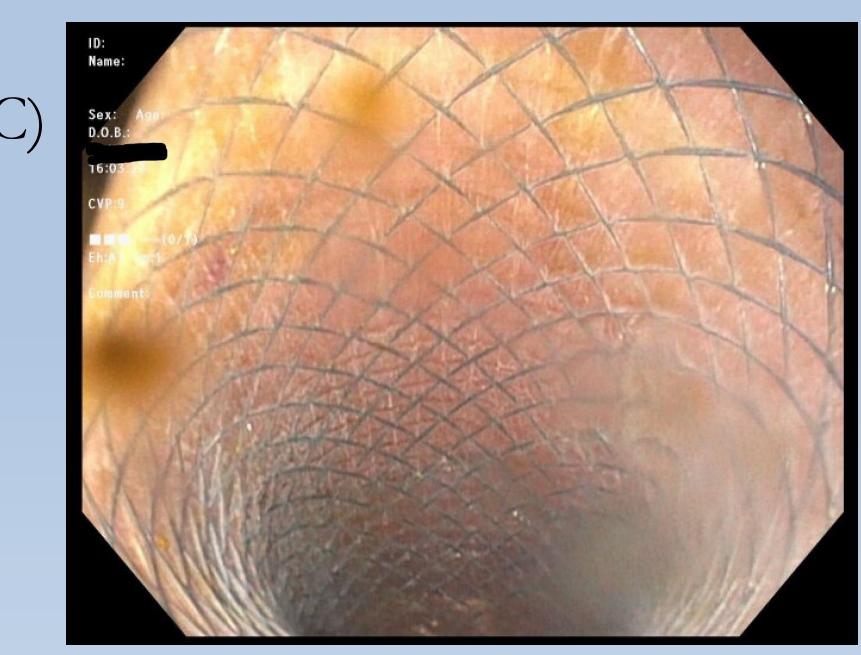
   secondary bacterial peritonitis
   (ScBP), patient is started on antimicrobial therapy
- Colorectal surgery evaluation → Conservative management given micro-perforation.
- Micro-perforation advances to frank perforation and septic shock
- Deemed not to be a surgical candidate given high intra-operative mortality in the setting of Child Pugh Category C Cirrhosis.
- Shock physiology resolved with antimicrobial therapy and TPN, but the patient continued to have ScBP on repeat paracentesis
- Three 20mm Taewoong fully covered stents were deployed, starting 10cm proximal to the presumed site of perforation and extended to the rectum
- A total of 45 cm in length was covered. The proximal and distal stents were each anchored with three 16mm Duraclips.

# COURSE/RESULTS









A and B) Stent placement in sigmoid colon. C) Patent stent with free-flowing stool through the stent.

#### DISCUSSION

- Colonic perforation is a dreaded complication of diverticular disease that has an annual incidence of 4/100,0000
- Mortality in patients undergoing an operative intervention is estimated at 12% to 36%
- The presence of decompensated cirrhosis greatly increases the risk of mortality during the intra-operative and postoperative periods
- CTP, MELD, VOCAL-Penn, and Mayo risk score are tools that estimate post-operative mortality risk in patients with cirrhosis
- When a surgical approach is contraindicated, endoluminal salvage therapy with colonic stents to bypass the perforation can be attempted

#### CONCLUSION

- Consider an endoluminal approach to salvage therapy for bowel perforation in which surgery is otherwise contraindicated
- Decompensated cirrhosis greatly increases the post-operative mortality risk