

## BACKGROUND

- Anal stricture burden:** Up to one-third of Crohn's patients develop fibrotic strictures; when these form in the anorectal canal they severely impact continence and quality of life
- Current gaps:** Surgery often means a permanent ostomy, while balloon dilation carries high perforation and recurrence rates
- Rationale for study:** Endoscopic stricturotomy (ESt) shows high success in other GI sites, but data for anal strictures are sparse—prompting our evaluation of its safety and durability in IBD

## MATERIAL & METHODS

- Design:** Retrospective case-series, single tertiary care center (Jan 2020 – Jan 2024)
- Population:** 13 adult IBD patients with symptomatic anal strictures
- Procedure:** Endoscopic stricturotomy using needle-knife; hemostasis with clips if needed.
- Variables captured:** Demographics, IBD subtype, prior EBD, biologic/targeted therapy, stricture length/width, passability, fistula presence.
- Outcomes:** *Primary*—technical success, 30-day complications; *Secondary*—reinterventions, time to surgery.
- Analysis:** Descriptive statistics in MS Excel; results as mean ± SD or n (%).

## RESULTS

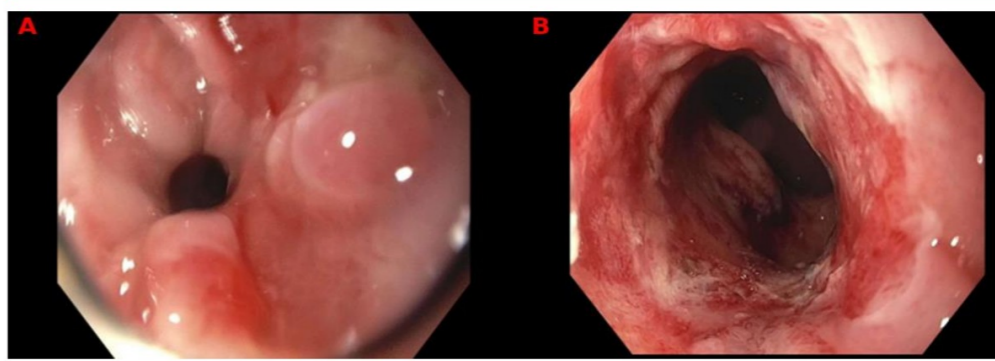
- Baseline:** Mean age 55 ± 15 y; 62 % female; 77 % Crohn's; BMI 27 ± 5 kg/m<sup>2</sup>; fistula 54 %.
- Stricture morphology:** Passable 92 %; length 1.8 ± 1.6 cm; width 6.2 ± 2.4 mm.

**In expert hands, ESt delivers safe, durable relief for IBD-related anal strictures**

Patient	Knife used	Technical success	Hybrid procedure (EBD)	EBD done prior (0) or after ES (1)	EBD dilation diameter (mm)	Clinical success	Immediate post-procedure complications	30 day post-procedure complications	Reintervention	Time to first re-intervention (months)	Perianal fistula	Duration of follow up	Surgery
1	IT knife	Yes	Yes	1		No	No	No	No		No	7 months	No
2	IT knife	Yes	No			Yes	No	No	Yes	1	Yes	1 month	No
3	IT knife	Yes	Yes	1	16-17-18 mm	No	No	No	No		No	1 month	No
4	IT knife	Yes	No			Yes	No	No	No		No	2 months	Yes
5	IT knife	Yes	Yes	0	12-13.5-15 mm	Yes	No	No	Yes	3	Yes	5 months	No
6	IT knife	Yes	Yes	0	15-16.5-18 mm	Yes	No	No	Yes	5	No	3 months	No
7	IT knife	Yes	No			No	No	No	Lost to follow up		No	3 months*	No
8	IT knife	Yes	No			Yes	No	No	No		No	1 month	No
9	IT knife	Yes	No			Yes	No	No	Yes	12	No	7 months	No
10	IT knife	Yes	Yes	0	15-16.5-18 mm	Yes	No	No	Yes	1	No	13 months	No
11	IT knife	Yes	No			Yes	No	No	Yes	3	No	1 week	No
12	IT knife	Yes	No			Yes	No	No	Yes	20	Yes	3 months	No
13	IT knife	Yes	No			No	No	No	Yes	11	No	7 months	No

## RESULTS

- Technical success:** 13/13 (100 %)
- Clinical success:** 9/13 (70%)
- 30-day complications:** 0
- Follow-up (6.5 ± 4.3 months):**
  - 1st re-intervention 67 % (median 4 months)
  - 2nd re-intervention 31 %
  - 3rd re-intervention 15 %
- Surgery:** Needed in 1/13 (7.7 %)



**Figure 1:** Endoscopic images showing an anal stricture before (A) and after (B) endoscopic stricturotomy in a patient with Inflammatory Bowel Disease

## CONCLUSION

- ESt is an effective and safe option for managing IBD-related anal strictures, offering high technical success with low rate of complications.
- ESt provides viable alternative to EBD, with significant number able to avoid surgery for a long period of time.
- Larger, prospective studies needed to refine patient selection and optimal interval for follow-up.

## CONTACT INFORMATION

**Himsikhar Khataniar, MD**  
Internal Medicine Resident, PGY-2  
Allegheny General Hospital, Pittsburgh  
Department of Internal Medicine  
[himsikhar.khataniar@ahn.org](mailto:himsikhar.khataniar@ahn.org)

