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Endoscopic Fistulotomy (through the Scope and Freehand) as a Salvage Procedure for Recurrent Perianal Fistula with Abscess Postsurgery in Crohn's Disease

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Traditionally, a perianal fistula with abscess formation in patients with Crohn's disease (CD) is treated with surgical fistulotomy and/or seton placement. However, recurrent fistula and abscess formation after surgery are not uncommon and may require repeated surgeries and interrupt biologic therapy.

Earlier reports have described the feasibility of endoscopic fistulotomy with a clinical success in up to 75% cases.[1] The video article showcases two cases in which endoscopic fistulotomy was successfully performed using both through-the-scope and freehand techniques. This procedure served as a day care salvage option for recurrent perianal abscesses postsurgery, thereby avoiding the need for re-surgery.

The first case was a 42-year-old man with complex perianal fistula with ileoileal and vesicoileal fistula who had undergone surgical fistulotomy and seton placement with diversion ileostomy in the past. After restoration of bowel continuity, his perianal fistula worsened even though he was on stable therapy with combined immunosuppression (infliximab and azathioprine). There was recurrent pus discharge with tender perianal abscess formation. Endoscopic fistulotomy was done using a needle knife passed through an endoscopy with electrocautery settings of Endocut I (effect 3, cut duration 1, cut interval 3; ►**Fig. 1A–C**; ►**Video 1**). After the day care procedure, the patient was put on oral antibiotics for a week followed by re-initiation of biologic therapy. The patient did not require any re-intervention (endoscopic/surgical) over a follow-up of 6 months. The second case was a case of complex perianal fistula with a history of endoscopic seton followed by surgical seton placement. He was planned for ustekinumab therapy as he had secondary loss of response to infliximab. However, even after surgical seton and drainage, he developed recurrent new perianal abscesses with impending fistula, which did not improve with antibiotics and manual expression of pus. Endoscopic abscess drainage was done using a needle knife by the freehand technique to cut open each opening of the abscess. The through-the-scope technique was not possible due to indurated skin, thus making incisions through the scope difficult. Ustekinumab therapy could be started within a week of the procedure after treatment with oral antibiotics (►**Fig. 1D–F**). The patient has recently completed second dose of ustekinumab without any recurrence over 11 weeks of follow-up from the time of fistulotomy.

Video 1

Illustration of the endoscopic fistulotomy techniques (through the scope and freehand) for complex perianal fistulizing Crohn's disease as a salvage procedure after surgery. Online content including video sequences viewable at: https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0044-1789010.

The management of perianal fistulizing CD requires a multidisciplinary approach. Initially any abscess should be drained by surgical seton placement and/or fistulotomy. In those without rectal disease, rectal advancement flap is a good option. Other minimally invasive approaches for fistula include fistula laser closure (FiLaC), ligation of intersphincteric fistula tract (LIFT), and allogenic stem cell injection.[2]

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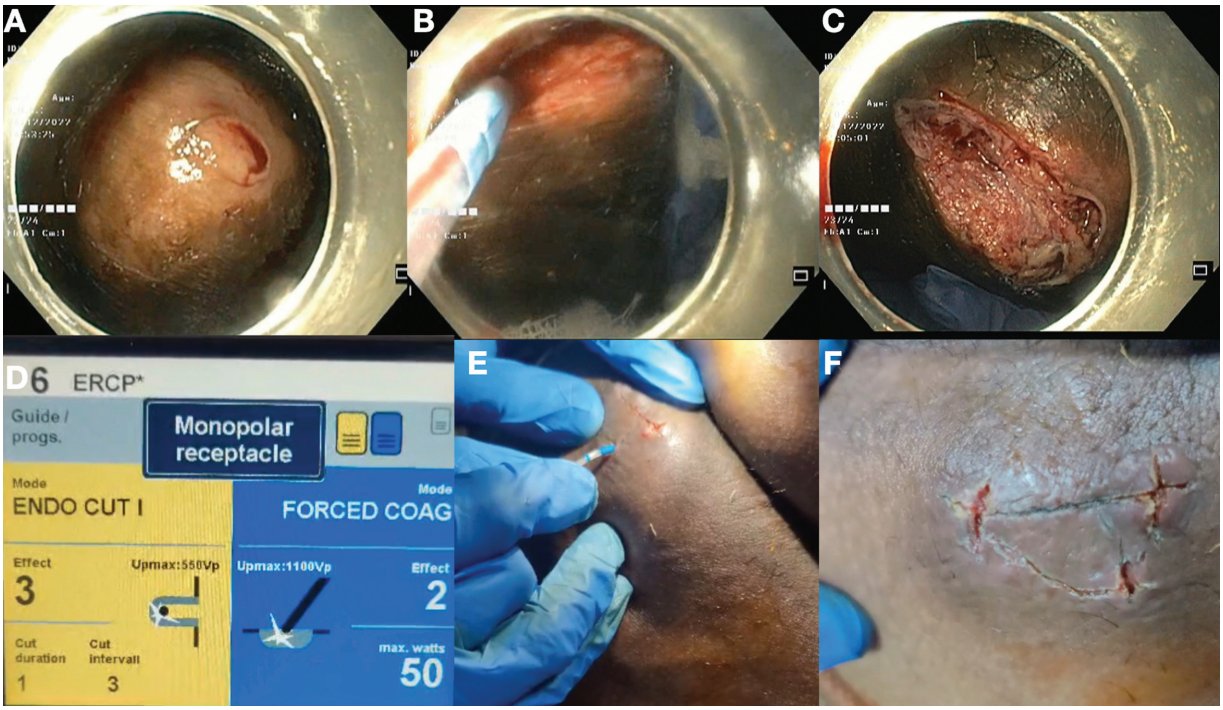

Fig. 1 Endoscopic fistulotomy. (**A**) Recurrent perianal abscess after surgical restoration of continuity in fistulizing Crohn's disease. (**B**) Through the scope endoscopic fistulotomy done along prior surgical fistulotomy site. (**C**) Post endoscopic fistulotomy. (**D**) Electrocautery settings for endoscopic fistulotomy. (**E**) Freehand endoscopic fistulotomy: stellate incisions made at all three ends of the abscess. (**F**) Final result after freehand endoscopic fistulotomy.

Endoscopic options include endoscopic seton placement, endoscopic ultrasound-guided drainage of pelvic abscess, and endoscopic fistulotomy.[3,4]

In conclusion, this video article demonstrates the feasibility and safety of endoscopic fistulotomy as a salvage procedure for short, superficial perianal fistulas in patients with CD. This approach offers the advantage of being a day care procedure, enabling early initiation of advanced therapy and avoiding the need for re-surgery.[1] However, caution must be exercised in long, deep fistulas to prevent damage to anal sphincters or anterior urogenital structures.

Consent

Written informed consent was taken from the patient for publication of the information and imaging.

Authors' Contribution

P.P. and P.R. were responsible for conceptualization, literature review, and writing the original draft. P.P. was also responsible for the illustrations and images. M.T., P.R., D.N.R., and R.G. proofread and critically reviewed the manuscript. P.P., P.R., D.N.R., M.T. approved the final version of the manuscript.

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Conflict of Interest

None declared.

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