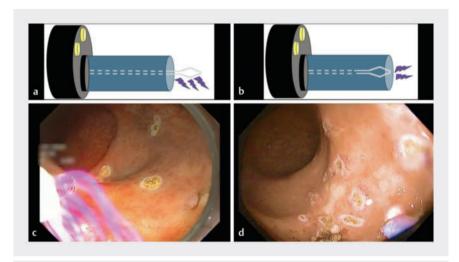
A novel treatment for radiation proctopathy using monopolar spray coagulation with a polypectomy snare tip





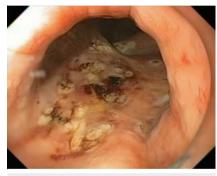
▶ Fig. 1 Different beam spreads according to snare-tip exposure. a, c Minimal snare-tip exposure (1–2 mm) with lateral beam spreading. b, d Snare tip under the sheath with forward beam spreading.



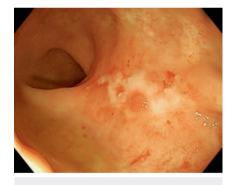
▶ Video 1 Treatment for radiation proctopathy using monopolar spray coagulation with a polypectomy snare tip.



► Fig. 2 Oozing bleeding due to radiation proctopathy.



► Fig. 3 Final aspect after snare-tip spray coagulation of rectal angioectasia.



► Fig. 4 Follow-up colonoscopy after 4 weeks of spray coagulation hemostasis.

Radiation proctopathy (RP) is recognized as injury to the rectum due to pelvic radiotherapy [1]. A variety of endoscopic therapies have been used for the management of bleeding from chronic RP, and argon plasma coagulation (APC) is probably the most widely used technique [2]. Spray coagulation (SC) is a novel, non-contact technique for treating vascular lesions. Like APC, SC uses monopolar diathermy to achieve precise, superficial tissue penetration through the tip of a conventional polypectomy snare [3].

However, SC offers several advantages, such as eliminating the need for argon gas, specialized catheters, and dedicated generators, making it more accessible and easier to perform [1].

During APC, bowel distension and catheter malfunction can occur. The snare-tip SC technique addresses these challenges by providing comparable thermal effects using only a polypectomy snare and spray-mode coagulation (Effect 1, 40 watts). Preclinical data suggest that SC achieves tissue penetration like APC,

ensuring effective hemostasis while maintaining a high level of safety profile [4].

This technique reduces equipment dependency and procedural costs, making it an attractive option, especially in resource-limited settings. The snare-tip SC technique requires a 2–3 mm distance from the lesion. Two configurations are possible: exposing 1–2 mm of the snare tip, so the beam spreads laterally (▶ Fig. 1 a, c), or keeping the snare tip inside the sheath, so the beam spreads forward (▶ Fig. 1 b, d) [5].

The next video (**Video 1**) shows a male patient with rectal bleeding after radiotherapy (**Fig. 2**) due to prostate cancer and aims to show the snare-tip SC technique for treating RP (**Fig. 3**). Follow-up colonoscopy after 4 weeks shows healing ulcers with adequate endoscopic and clinical response (**Fig. 4**). More clinical studies are needed to establish its safety and efficacy.

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Conflict of Interest

F.M.F. reports consulting fees from Olympus, Boston Scientific, Medtronic, and Cook. The other authors have no conflicts of interest to declare.

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References

- [1] Lee JE, Agrawal D, Thosani N et al. ASGE guideline on the role of endoscopy for bleeding from chronic radiation proctopathy. Gastrointest Endosc 2019; 90: 171–182 e1
- [2] Lenz L, Rohr R, Nakao F et al. Chronic radiation proctopathy: A practical review of endoscopic treatment. World J Gastrointest Surg 2016; 8: 151–160. doi:10.4240/wjgs.v8.i2.151
- [3] Parsi MA, Schulman AR, Aslanian H et al. Devices for endoscopic hemostasis of nonvariceal GI bleeding (with videos). VideoGIE 2019; 4: 285–299
- [4] Fetz A, Farnell D, Irani S et al. Spray coagulation with snare-tip versus argon plasma coagulation: An ex vivo study evaluating tissue effects. Endosc Int Open 2021; 9: E790–E795
- [5] Alburquerque M, Vargas A, Ledezma C et al. Use of spray coagulation in first-space endoscopy: a case series. iGIE 2024; 3: 182– 185

Bibliography

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