

Duodenal Vascular Spider's Web: Radiofrequency Ablation to the Rescue!

Rui Morais, Margarida Marques, Rosa Coelho, Hélder Cardoso, Guilherme Macedo

Gastroenterology Department, Hospital de São João, Porto, Portugal



A 20-year-old male patient with a personal history of neonatal portal vein thrombosis was evaluated in the emergency department due to melena. He underwent esophagogastroduodenoscopy (EGD) that did not reveal blood or presence of esophagogastric varices. A spider's web-shaped vascular lesion with 25 mm was observed in the anterior portion of the duodenal bulb (Fig. 1). During the procedure, active oozing bleeding from the lesion was evident (Fig. 2). Initially, treatment with argon plasma coagulation (APC) was tried, but the bleeding could not be stopped, so therefore radiofrequency ablation (RFA) was performed (Halo® system, Halo90 focal ablation device). The procedure was hampered by the unstable position and difficulty to make contact with the lesion, but it was possible to stop the bleeding and treat the entire lesion (Fig. 3). The patient received proton-pump inhibitor therapy and had no bleeding recurrence, being discharged one week after admission. EGD was repeated one month later, showing complete eradication of the vascular lesion. The patient remains asymptomatic one year after the procedure.

Few literature reports focus on the endoscopic features of portal hypertensive duodenopathy (PHD). A previous study reported a prevalence of PHD lesions in 51.4% of patients, including erythema, ulcers, varices and telangiectasias [1]. Considering the potential risk of bleeding from these lesions, endoscopic treatment should be considered, according to the characteristics of the lesion and the devices available. RFA was initially studied for the treatment of dysplastic Barrett's esophagus but its indications within the gastrointestinal

tract continue to evolve [2]. Regarding its potential use for gastrointestinal hemostasis, RFA has been previously validated for hemostasis in gastric antral vascular ectasia (GAVE) [3].

Nevertheless, to our knowledge, no previous study has reported the use of RFA for the treatment of bleeding duodenal vascular lesions. This case highlights the potential and expanding role of RFA for the treatment of duodenal vascular lesions, including refractory to APC cases.

Corresponding author: Rui Morais, ruimorais20@gmail.com

Conflicts of interest: None to declare.

REFERENCES

1. Barakat M, Mostafa M, Mahran Z, Soliman AG. Portal hypertensive duodenopathy: Clinical, endoscopic, and histopathologic profiles. *Am J Gastroenterol* 2007;102:2793–2802.
2. ASGE Technology Committee, Navaneethan U, Thosani N, et al. Radiofrequency ablation devices. *VideoGIE* 2017;2:252–259. doi:[10.1016/j.vgie.2017.06.002](https://doi.org/10.1016/j.vgie.2017.06.002)
3. St Romain P, Boyd A, Zheng J, Chow SC, Burbridge R, Wild D. Radiofrequency ablation (RFA) vs. argon plasma coagulation (APC) for the management of gastric antral vascular ectasia (GAVE) in patients with and without cirrhosis: results from a retrospective analysis of a large cohort of patients treated at a single center. *Endosc Int Open* 2018;6:E266–E270. doi:[10.1055/s-0043-123187](https://doi.org/10.1055/s-0043-123187)