

PICTURES IN DIGESTIVE PATHOLOGY

Endoscopic radiofrequency ablation for APC refractory gastric antral vascular ectasia using the HALO90 system in a kidney transplant candidate

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INTRODUCTION

Gastric antral vascular ectasia (GAVE) is a rare but important cause of gastrointestinal bleeding and anemia. Endoscopic ablation, such as argon plasma coagulation (APC), is usually successful, but treatment-refractory cases do occur (1). Recently, radiofrequency ablation (RFA) has been described as an alternative therapeutic option for GAVE, or actinic proctitis, with positive results and minor complications (2-5).

CASE REPORT

A 60-year-old man with chronic renal failure in hemodialysis, liver cirrhosis, and chronic iron-deficiency anemia (hemoglobin 7.5 g/dL) with transfusion requirements. GAVE was diagnosed after upper endoscopy, without evidence of portal hypertensive gastropathy (Fig. 1A). In the preceding four years his transfusion requirements had increased (2 packed-red-cells monthly) although he underwent 17 APC sessions. An endoscopic ablation of antral lesions with RFA was considered.

The radiofrequency device was inserted at the gastroscope end. The vascular antral anomalies were treated using the HALO90 system (BARRX Medical, Sunnyvale, CA). In the first session, GAVE lesions received 31 ablations (at 12 Joules/cm²/40 watts), twice per area, with direct and retroverted view (Fig. 2 A-C) for 29 minutes with good patient tolerance. A second session was scheduled at 4 weeks, and 68 ablations were applied for 36 minutes (Fig. 3 A and B). No complications were reported in either session.

Three months later, the majority of antral lesions had disappeared (Fig. 1B). Hemoglobin increased to 12 g/dL without any further transfusion requirement, and the patient could be included in a kidney transplant waiting list.

DISCUSSION

RFA is popular in the context of Barrett's esophagus dysplasia treatment. Only four published case series have reported the utility of RFA in GAVE lesions (2,3).

This clinical case suggests that RFA using the HALO90 system is a real and safe option for chronic bleeding related to

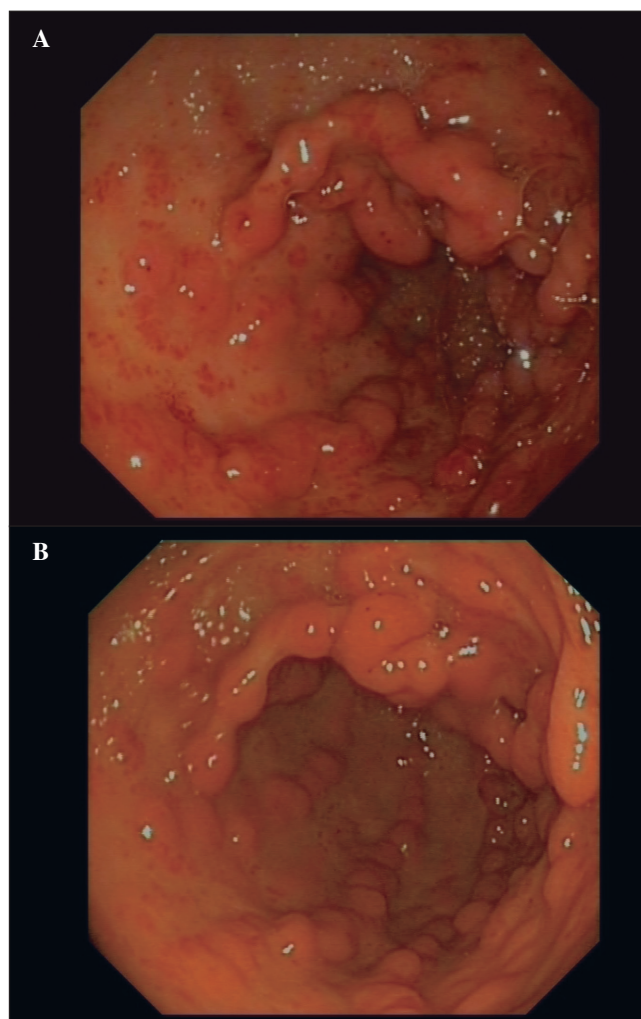


Fig. 1. Endoscopic images of the refractory gastric antral vascular ectasia before treatment using HALO90 system (A), and after 2 sessions of radiofrequency ablation (RFA) (B). Eight weeks after the last session, the majority of ectasia lesions have disappeared.

refractory GAVE after attempted APC in patients with chronic renal failure and awaiting kidney transplantation.

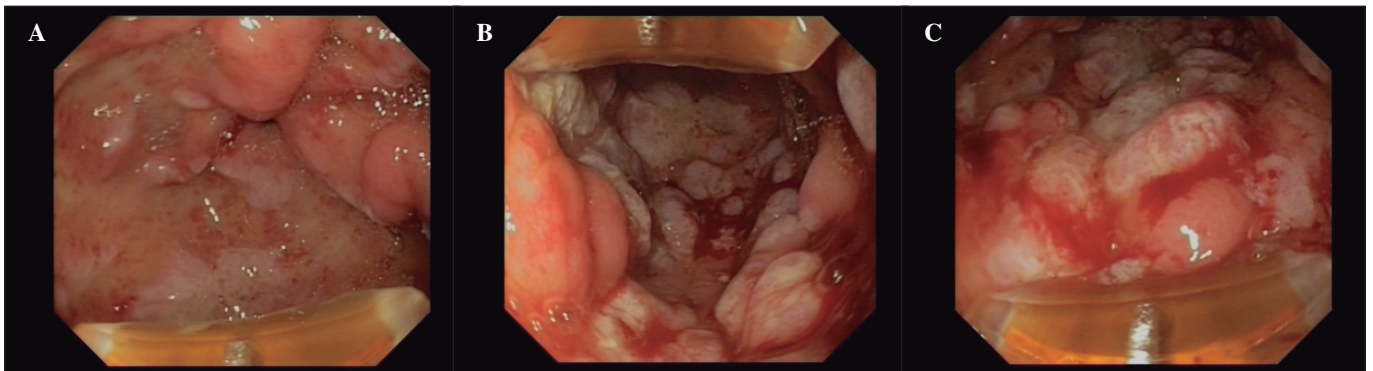


Fig. 2. First session of RFA. The radiofrequency is applied in a systematic manner (from pyloric area to proximal antrum) and turning up/down the HALO90 cap to assure that all the vascular ectasia lesions are treated (A, B). The mucosa that receive RFA tend to bleed and change appearance to a characteristic white colour (C).

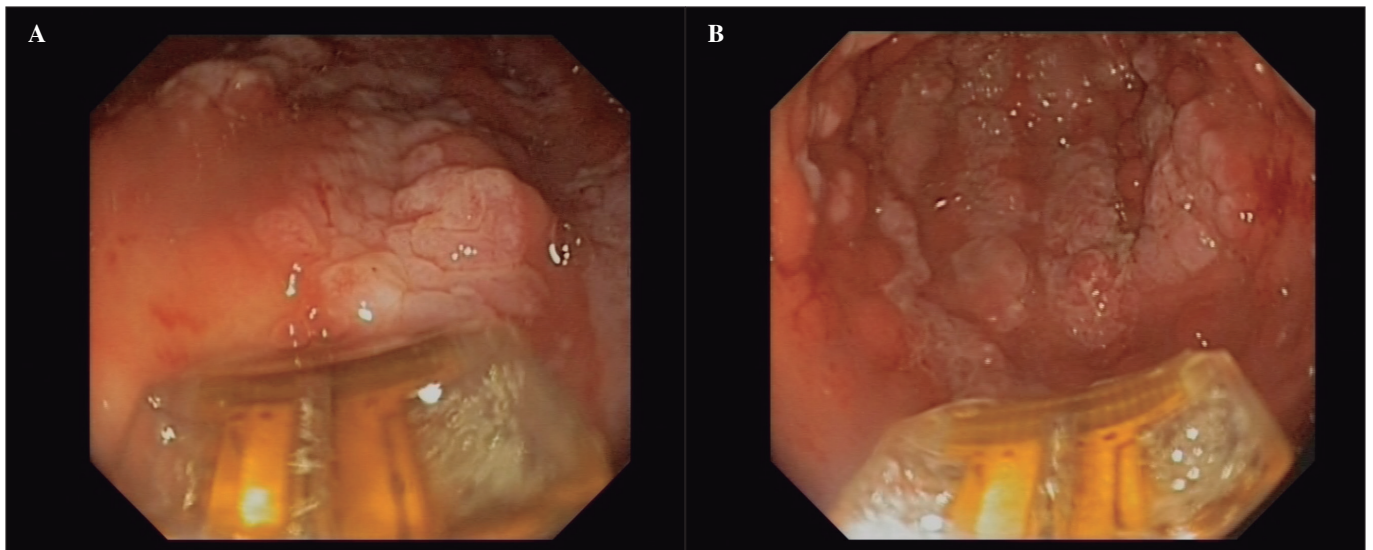


Fig. 3. Second session of RFA. After 4 weeks following the first session, the gastric mucosa that receive RFA do not tend to bleed (A, B).

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