# Radiofrequency ablation of gastric antral vascular ectasia of the gastric cardia

A 63-year-old woman was referred for iron-deficiency anemia and melena that was requiring multiple blood transfusions. She had undergone multiple uninformative upper endoscopies and colonoscopies that had been performed by two different gastroenterologists. The patient had undergone a capsule endoscopy that had shown a questionable vascular ectasia in the distal ileum. She therefore underwent retrograde single-balloon enteroscopy; this showed melena from the terminal ileum to the middle jejunum. Given this finding, indicating a more proximal gastrointestinal bleed, an upper endoscopy was performed that showed a prominent erythematous ring of vascular ectasias in the gastric cardia just below the gastroesophageal junction; this was consistent with gastric antral vascular ectasia (GAVE) of the gastric cardia ( Fig. 1, Video 1). Given the circular distribution of the ectasias, the lesion appeared ideal for ablation with a focal radiofrequency ablation (RFA) catheter (> Fig. 2, > Video 1). The patient underwent three sessions of RFA, each 2 months apart. By the fourth endoscopy, 6 months after the first endoscopy, the GAVE had resolved ( Fig. 3, Video 1). Despite its name, GAVE can occur in other areas of the gastrointestinal tract besides the antrum of the stomach. GAVE can occur in the gastric cardia of the stomach, and in the duodenum, jejunum, and rectum [1,2]. GAVE can be seen in the gastric cardia as an erythematous ring, extending just below the gastroesophageal junction [1]. As the present case demonstrates, it is important to recognize this, as GAVE in the cardia can easily be missed.

Historically, GAVE has been treated endoscopically with argon plasma coagulation or by band ligation [2,3]. However, more recently RFA has been shown to be effective and safe in treating GAVE, especially in cases refractory to argon plasma coagulation [4,5]. Given the circular distribution of the GAVE in the gastric cardia in this patient, the RFA focal ablation device was chosen to ablate the GAVE in a 360° fashion.

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**Fig. 1** In a 63-year-old woman, referred for iron-deficiency anemia and melena requiring multiple blood transfusions, an upper endoscopy showed an erythematous ring of vascular ectasias in the gastric cardia just below the gastroesophageal junction, that was consistent with qastric antral vascular ectasia (GAVE).



**Fig. 2** Gastric antral vascular ectasia (GAVE) of the gastric cardia after the first session of radiofrequency ablation (RFA).



**Fig. 3** The gastric cardia after three sessions of RFA: the GAVE has resolved.



Gastric antral vascular ectasia (GAVE) of the gastric cardia treated using a focal radiofrequency ablation (RFA) device, and subsequent resolution of the GAVE.