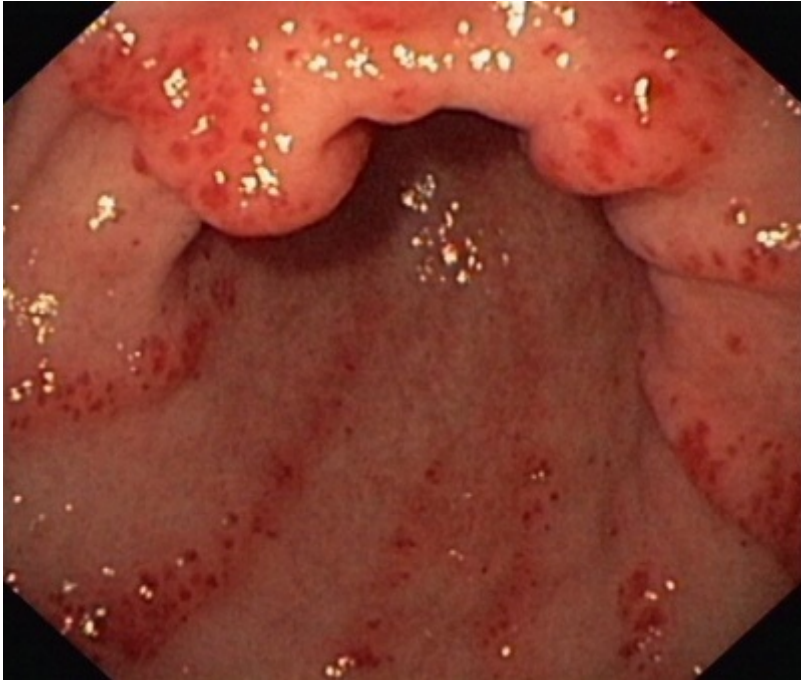


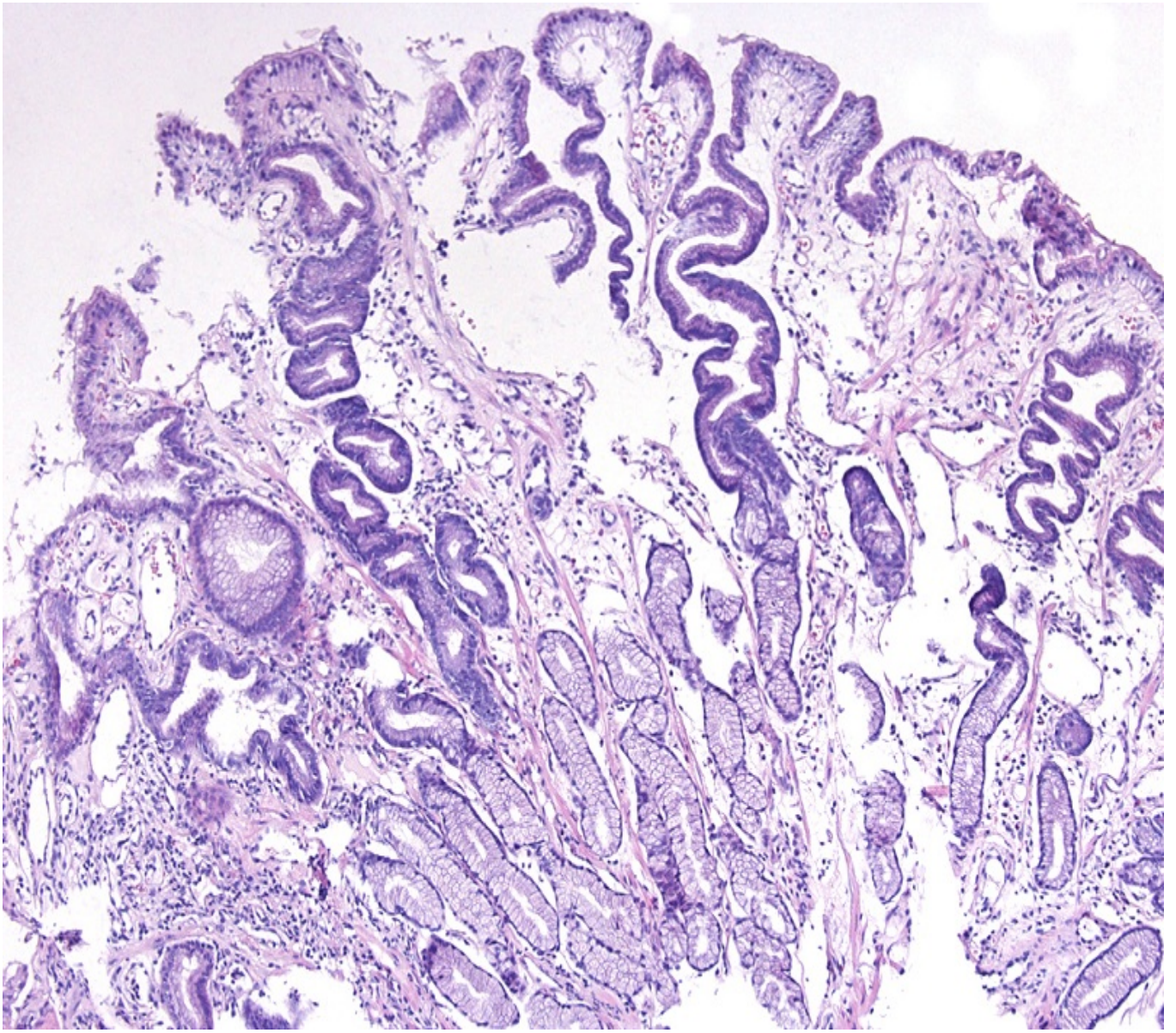
November 2012

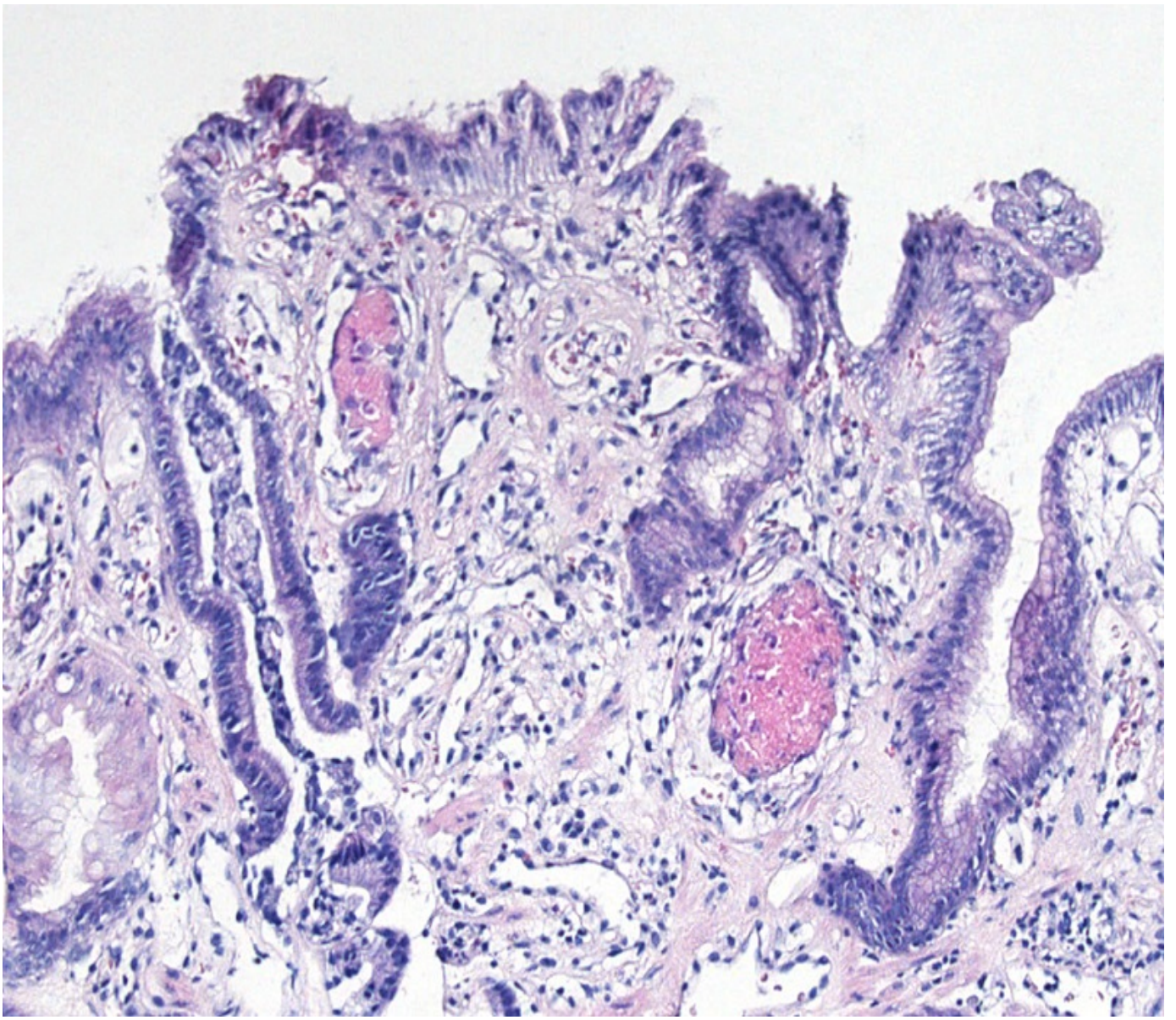
Gastroscopy in a 71-year-old male with anaemia.

What is your diagnosis?











Diagnosis

Gastric antral vascular ectasia (GAVE / water melon stomach).

The endoscopic pictures show the typical water melon appearance with raised red mucosal stripes converging on pylorus - before (panels A and B) and after (panel E) argon plasma coagulation.

Comment

Upon histology, GAVE is characterised by marked vascular ectasia, foveolar hyperplasia, and apical fibrosis of the tunica propria. Intravascular fibrin thrombi are present in approximately 50% of cases and are considered as definitive proof for diagnosis. In the absence of thrombi the diagnosis is made in connection with the typical endoscopic picture.

GAVE is often leading to anaemia due to repeated episodes of bleeding. Patients may need iron supplementation or blood transfusion. Therapeutic strategies aim to coagulate or ablate the affected areas. Treatments options include argon plasma coagulation and radio frequency ablation. In cases with severe blood loss that is incurable upon endoscopy surgical therapy (antrectomy) may be considered.

The etiology of GAVE is still somewhat unclear but the majority of patients suffer from different forms of liver disease, mainly cirrhosis, but cases without liver disease have also been reported. Please note, portal hypertension is not considered to be the key pathogenetic factor even if it would be logical. Other causes and/or associated diseases include autoimmune conditions, particularly in elder females, as well as renal failure, bone marrow transplantation, and scleroderma (CREST syndrome).

For further reading

- › Ripoll C, Garcia-Tsao G. Treatment of gastropathy and gastric antral vascular ectasia in patients with portal hypertension. *Curr Treat Options Gastroenterol.* 2007;10:483-94.
- › Nguyen H, Le C, Nguyen H. Gastric antral vascular ectasia (watermelon stomach). An enigmatic and often-overlooked cause of gastrointestinal bleeding in the elderly. *Perm J.* 2009;13:46-9.
- › Westerhoff M, Tretiakova M, Hovan L, Miller J, Noffsinger A, Hart J. CD61, CD31, and CD34 improve diagnostic accuracy in gastric antral vascular ectasia and portal hypertensive gastropathy: An immunohistochemical and digital morphometric study. *Am J Surg Pathol.* 2010;34:494-501.

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