CARDIOVASCULAR FLASHLIGHT

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Primary intracardiac gastrinoma causing Zollinger–Ellison syndrome

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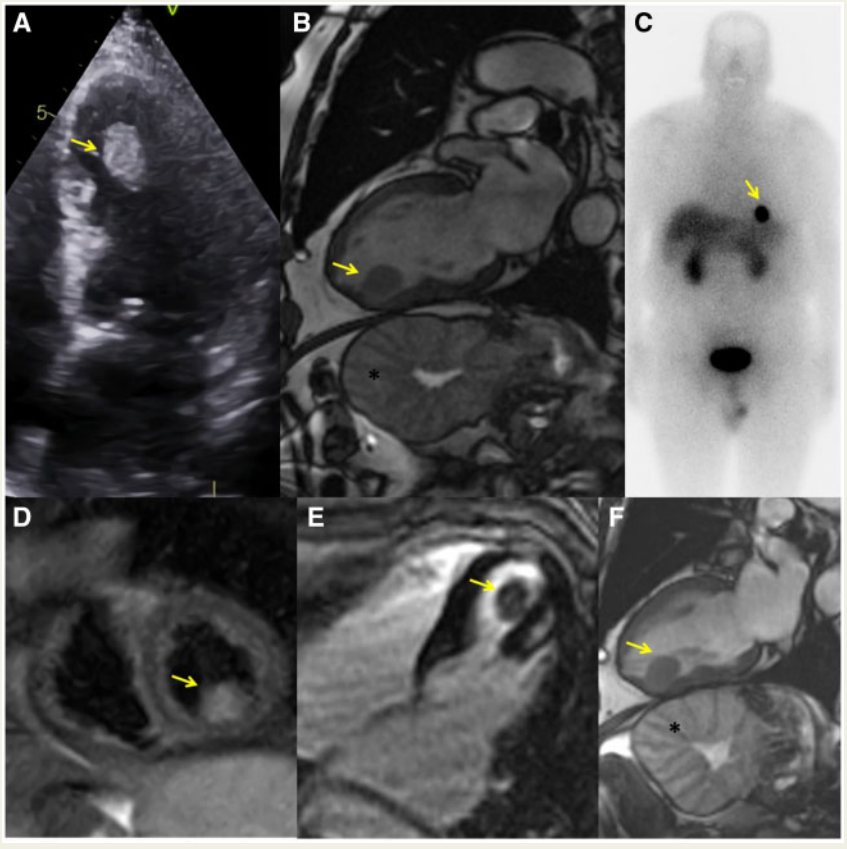

A 72-year-old male was referred for new-onset atrial fibrillation, hypomagnesaemia, and chronic diarrhoea. The gastrointestinal endoscopy found severe esophagitis and hypertrophic gastric folds. An echocardiogram was performed, showing a left intraventricular mass (*Panel A*) with preserved ejection fraction, normal wall motion, normal valves, and dilated left atrium. Cardiac magnetic resonance imaging showed a 24 × 17 mm oval lesion (*Panels B, D, E*) consistent with a benign cardiac tumour, as well as hypertrophy of the gastric mucosa (asterisk). An expectant attitude was adopted due to absence of symptoms, need of resection of papillary muscle and valve replacement and stability of the mass at follow-up. Three years later, the patient appeared at the emergency department with upper gastrointestinal bleeding. An upper gastrointestinal endoscopy showed multiple fibrin-covered duodenal ulcers without active bleeding and a hypersecretory state was suspected. A somatostatin receptor scintigraphy was performed showing high radiotracer accumulation close to the left ventricle (*Panel C*), suggestive of a neuroendocrine tumour, without any evidence of pancreas or duodenal uptake. The final diagnosis was Zollinger–Ellison Syndrome secondary to an intracardiac gastrinoma. As surgical therapy implied papillary muscle resection and valve replacement, close follow-up and medical treatment were decided. After treatment with high-dose proton pump inhibitors and somatostatin analogues, the gastrointestinal symptoms disappeared. At 7 years of follow-up, the patient remains asymptomatic without symptoms or readmissions. No evidence of an increase in tumour size has been observed (*Panel F*). Therefore, pharmacological treatment could be a feasible and safe option for small and stable intracardiac gastrinoma in patients without decreased ventricular function, heart failure, or arrhythmias.