Hereditary transthyretin amyloidosis is associated with gastrointestinal symptoms which can have a negative impact on quality of life [1], with gastroparesis being a frequent complication of familial amyloidotic polyneuropathy (FAP) [2]. Interventions that target symptoms while liver transplantation is awaited can be of the utmost importance for improvement of nutritional status and optimization of surgical outcomes. Gastric peroral endoscopic myotomy (G-POEM) has been described as safe with high technical and clinical success rates, mainly for postoperative, diabetic, and idiopathic gastroparesis [3].

A 38-year-old man with a genetic diagnosis of FAP and a 10-year history of neuropathic manifestations who was receiving treatment with tafamidis presented with nausea, vomiting, post-prandial epigastric pain, and weight loss, with severe nausea and vomiting being significantly improved with tafamidis and the symptoms of gastroparesis being refractory to medical therapy. As liver transplantation was not feasible due to his high cardiovascular risk profile, he was referred for G-POEM, which was performed without complications. Postoperatively, the patient reported significant improvement of his symptoms and was discharged on day 2 with plans to receive further therapy with tafamidis.
gastroparesis on gastric emptying scintigraphy (GES; T50 of 50% at 120 minutes). He was started on combined prokinetic and antiemetic therapy, which was further optimized to maximum tolerated doses. Because of his continuing symptoms, with a Gastroparesis Cardinal Symptom Index (GCSI) of 26 points, and malnutrition risk, with a net weight loss of 20 kg over 2 years, G-POEM was proposed to the patient.

The procedure (▶ Video 1) followed the overall steps previously described [4]. A submucosal injection was performed on the greater curvature of the antrum, proximal to the pylorus, with a subsequent mucosotomy (▶ Fig. 1a) and submucosal tunneling dissection using a DualKnife (Olympus, Japan) (▶ Fig. 1b, c). After identification of the pyloric arch (▶ Fig. 1d), a pyloromyotomy (2 cm in length) was created with an ITknife2 (Olympus) (▶ Fig. 1e). The mucosal defect was then closed using endoclips (▶ Fig. 1f). After 24 hours, an esophagogastrroduodenography showed normal emptying of contrast into the duodenum, after which oral intake was resumed with no complications.

The patient continues to wait for a liver transplant but, 6 months later, he denies nausea and vomiting, tolerates normal-sized meals without using prokinetics, and scores 6 points on GCSI, with a T50 of 44% at 120 minutes on GES.

G-POEM seems feasible, beneficial, and safe in this particular subset of patients with gastroparesis.

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### Competing interests

None

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