

# Utility of a Plumber – HANARO stent in pyloric stenosis after circumferential ESD ▶

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▶ Fig. 1 Lesion



▶ Fig. 2 Post-ESD image



▶ Fig. 3 Stenosis

## Introduction

On endoscopy, a 71-year-old man suffering from chronic, severe atrophic gastropathy, with areas of massive complete intestinal metaplasia presented with a 35-mm stage IIa/b nongranular, laterally spreading tumor (▶ Fig. 1). It was narrow



▶ Video 1 Stenosis after ESD. Stent placement.

band imaging international colorectal endoscopic classification 2 and had a type VI pit pattern and affected 70% of the circumference of the pylorus and extended through the antrum towards the greater curvature. Biopsies of the lesion showed a tubular adenoma with low-grade dysplasia, which prompted the decision to perform DSE.

## Endoscopy

Endoscopic submucosal dissection (ESD) was performed and an en-bloc specimen measuring 52×38×5 mm was obtained (▶ Fig. 2). Histologic examination revealed chronic, moderate atrophic gastropathy with intestinal metaplasia and extensive areas of low- and high-grade intraepithelial neoplasia. The lateral and deep margins were disease-free (▶ Video 1).

At 3 weeks after ESD, the patient presented with symptoms of pyloric stenosis and the diagnosis was confirmed endoscopically by observation of a short, punctiform pyloric stenosis (10 mm) (▶ Fig. 3). Three sequential dilations were performed with a CRE balloon up to 18 mm

with early restenosis on all occasions and with a progressive weight loss up to 12 kg. Finally, a 16-×30-mm fully-covered metallic stent (Plumber HANAROS-TENT; M.I. Tech, Korea) was placed, which led to clinical resolution of the stenosis at 3-month follow-up and progressive weight gain in the patient. The stent later was removed and the patient's clinical course was positive.

## Conclusions

Extensive ESD is associated with a high risk of stenosis [1–3]. At the gastric level, high rates of stenosis are seen in patients who have undergone ESD that affects 75% or more of the circumference in the cardia or antrum/pylorus [2,3]. Because of this, prophylactic measures are recommended in these cases [1–4]. The type of stent described can be useful for treatment of a short stenosis that occurs after circumferential ESD and has failed to respond to conventional techniques such as balloon dilation.

## Competing interests

The authors declare that they have no conflict of interest.

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