

Technique for Endoscopic Balloon Dilatation in Benign Gastric Outlet Obstruction

*Angsuwatcharakon P
Rerknimitr R*

Endoscopic balloon dilatation (EBD) is the treatment of choice in patients with benign gastric outlet obstruction (GOO), because it provides a high success rate⁽¹⁾. The most common causes of benign GOO including peptic ulcer, post gastrectomy and post corrosive ingestion. The benefit of EBD in post peptic stricture is quite clear. In addition, there also had been a study demonstrated the benefit of EBD in patient with GOO from caustic ingestion, although mean number of dilatation is higher than benign GOO from peptic causes.⁽²⁾

We herein demonstrate a technique for EBD dilatation of benign gastric outlet obstruction caused by caustic ingestion.

A 51 year-old female patient who had a history of caustic ingestion in previous 2 months came with the complaint of postprandial vomiting. Her upper gas-

trointestinal endoscopy revealed evidence of gastric outlet obstruction with small amount of contrast passing through the duodenum, subsequently she underwent gastroscopy that demonstrated prepyloric stricture (Figure 1). The guided-wire (0.035 inch straight tip jagwire, Boston Scientific, Natick MA) was inserted through the luminal stricture without fluoroscopy was performed, followed by a radial expansion balloon catheter (CRE, Boston Scientific Corp, Cork, Ireland) that inserted over the wire to achieve the suitable location (Figure 2). Then, the balloon was inflated to 20 mm with air and kept in place for 2-3 minutes (Figure 3). After withdrawal of the guided-wire and the catheter, the dilated lumen was more patent (Figure 4). Finally, the scope was able to pass through the stricture to duodenum and demonstrated normal duodenal mucosa. The patient's symptoms improved and able to tolerate

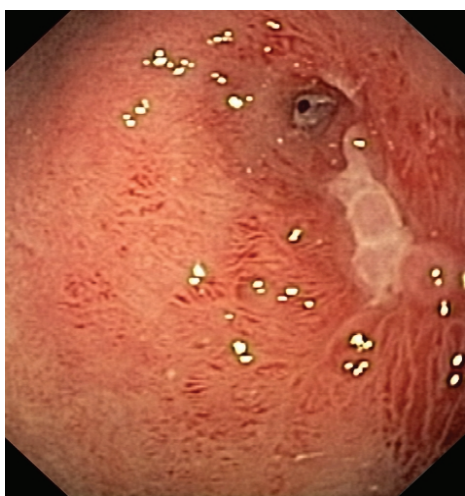


Figure 1 Gastroscopy was revealed prepyloric stricture



Figure 2 CRE balloon catheter was inserted over the guided-wire.

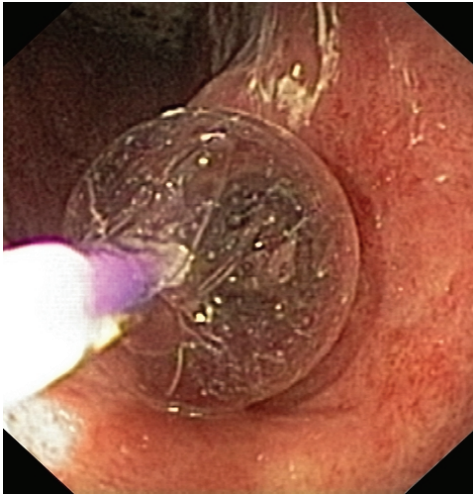


Figure 3 After optimal location of balloon placement, CRE balloon was inflated to 20 mm with air and kept in place for 2-3 minutes.

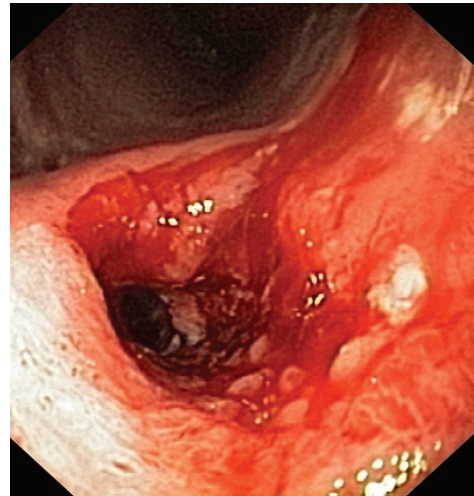


Figure 4 Endoscopic view after dilatation.

soft diet without further vomiting and she was discharged in a few days. No complication was observed.

This technique of balloon dilation of the stricture has been used in many other areas such as esophagus, colon and small bowel. The effectiveness of EBD in GOO is well accepted however the endoscopist has to keep in mind that this area is vulnerable to perforate.

REFERENCES

1. Yusuf TE, Brugge WR. Endoscopic therapy of benign pyloric stenosis and gastric outlet obstruction. *Curr Opin Gastroenterol* 2006;22:570-3.
2. Kochhar R, Sethy PK, Nagi B, *et al.* Endoscopic balloon dilatation of benign gastric outlet obstruction. *J Gastroenterol Hepatol* 2004;19:418-22.