

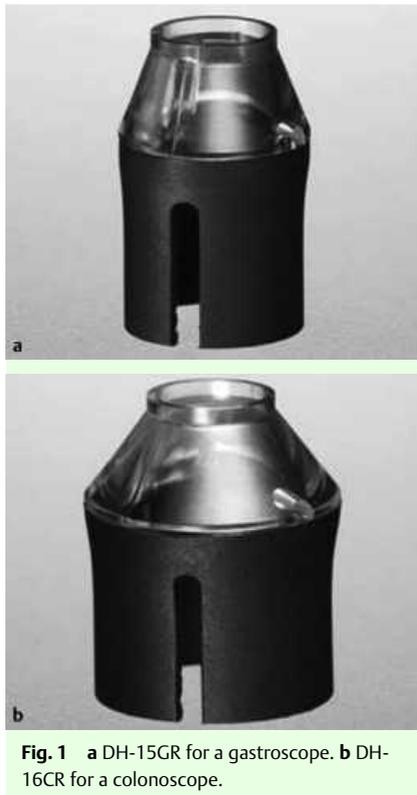
## Endoscopic bougienage for a recurrent esophageal web using a small-caliber-tip transparent hood

Cervical esophageal web is a postcricoid thin membrane causing mechanical dysphagia [1]. Though Savary-Gilliard dilatation, balloon dilatation, or surgical myectomy have been reported as effective for dilatation of an esophageal web [1–3], there is no standard procedure for dilatation of this condition. We describe a patient with recurrent esophageal web who underwent repeated bougienage with a small-caliber-tip transparent hood (ST hood, DH-15GR or DH-16CR, Fujinon Corp) (● Fig. 1 a, b).

A 79-year-old woman presented with a longstanding history of progressive dysphagia of solid food. Upper gastrointestinal endoscopy revealed an annular stricture caused by a smooth diaphragm in the cervical esophagus. Balloon dilatation was performed under fluoroscopic guidance. However, follow-up endoscopy revealed the recurrence of the stricture. Next, we used a small-caliber-tip transparent hood for the bougienage. The tip of the hood attached to an endoscope was positioned at the center of the stricture (● Fig. 2). The stricture was then passed through with a push of the endoscope. The mucosal tear was carefully observed after passage of the endoscope to ensure that no perforation had occurred (● Fig. 3). Repeat bougienage was performed every 3 months to maintain swallow function.

Originally designed for submucosal dissection in endoscopic submucosal dissection, the small-caliber-tip transparent hood is a tapered transparent hood attached to the tip of an endoscope [4]. Bougienage with such a hood has four advantages. 1) Direct observation of stenosis is safer than a blind maneuver. 2) It is difficult to observe a postcricoid area by endoscopy. Observation of a mucosal tear after bougienage with a small-caliber-tip transparent hood is easier than without, as shown in ● Fig. 3. 3) Fluoroscopic guidance is not needed. 4) The cost of the hood is one-tenth that of a dilatation balloon in Japan. Thus, this procedure was shown to be effective for repeat bougienage of a cervical esophageal web.

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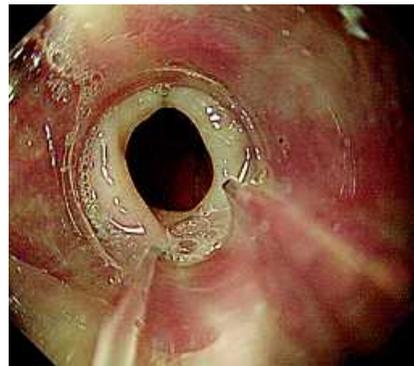
**Fig. 1** a DH-15GR for a gastroscope. b DH-16CR for a colonoscope.

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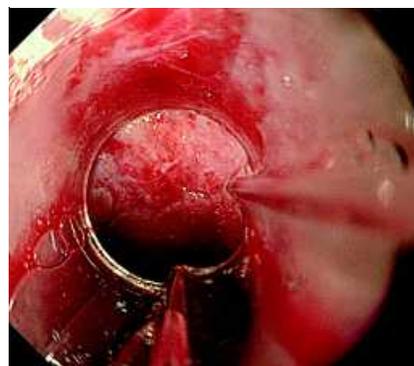
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### References

- 1 Sreenivas DV, Kumar A, Mannar KV et al. Results of Savary-Gilliard dilatation in the management of cervical web of esophagus. *Hepatogastroenterology* 2002; 49: 188–190
- 2 Lindgren S. Endoscopic dilatation and surgical myectomy of symptomatic cervical esophageal webs. *Dysphagia* 1991; 6: 235–238
- 3 Enomoto M, Kohmoto M, Arafa UA et al. Plummer-Vinson syndrome successfully treated by endoscopic dilatation. *J Gastroenterol Hepatol* 2007; 22: 2348–2351
- 4 Yamamoto H. Technology insight: endoscopic submucosal dissection of gastrointestinal neoplasms. *Nat Clin Gastroenterol Hepatol* 2007; 4: 511–520



**Fig. 2** Upper gastrointestinal endoscopy reveals a cervical esophageal web through the small-caliber-tip transparent hood. The tip of the hood attached to an endoscope is positioned at the center of the stricture.



**Fig. 3** The mucosal tear was carefully observed after passage of the endoscope to ensure that no perforation had occurred.

### Bibliography

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