Complication of the Jackson Esophageal Bougie*

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Jackson silk-woven bougies are effective and generally safe for dilation of esophageal strictures. However, when using older dilators, they should be carefully checked for cracks and weakness at the junction with the metal shaft and bougie as a moderate amount of bending in this area may cause separation which could lead to the complications described in this report.

The Jackson silk-woven bougies used to dilate esophageal strictures through an endoscope are effective and generally safe. However, with repeated use and age, these bougies may fracture at the connection with the metal shaft. The following report describes such an occurrence.

CASE REPORT

A 63-year-old white man was admitted to the hospital with symptoms of dysphagia and regurgitation. An upper gastrointestinal series revealed a distal esophageal stricture (Fig 1). The patient was taken to surgery and under general

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FIGURE 1. Barium swallow revealing a benign distal esophageal stricture.

FIGURE 2. Barium swallow showing the bougie in the stomach.
anesthesia a Jesberg esophagoscope was passed down to the site of the stricture. The mucosa proximal to the stricture appeared somewhat pale and corrugated. It was decided to dilate the stricture site to obtain adequate tissue for biopsy. Through the endoscope a No 18 Jackson bougie was passed without difficulty, although passage through the stricture site was snug. However, a No 22 dilator, which went in with some difficulty, could not be pulled back. With manipulation the metal stylet portion of the dilator was retrieved, but the tip was not visible through the scope. After futile attempts to pass forceps through the stricture site to grasp the dilator, the esophagoscopy procedure was terminated. The mucosa was biopsied and proved to show esophagitis.

The dilator was not visible on a routine postoperative film of the abdomen, but it was outlined by the contrast medium of a barium swallow (Fig 2). Because the dilator was small and malleable, it was felt that it would probably pass with time and the patient was allowed a full liquid diet and was observed in the hospital.

Eight days following the original endoscopy, an upper gastrointestinal series again revealed the dilator in the stomach and it was then removed through a gastroscopy incision (Fig 3). Postoperative Hurst dilations of the stricture were performed; the patient is well one year following endoscopy.

**DISCUSSION**

The Jackson bougie is indispensable for dilating

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**Editorial Expression**

The point made by Drs. Gazzaniga and Christian is well taken. Instruments made of woven silk, plastic, rubber, wood or other perishable material will deteriorate with time, and such equipment should be examined carefully and tested periodically. Otherwise, serious complications may result.

It should be pointed out, however, that the Jackson esophageal bougie has a very limited field of usefulness. Except for very simple, short strictures, the passage of these bougies, even through an esophagoscope, is "blind" bougienage and carries a significant risk of perforation. The passage of bougies over a previously swallowed thread is a much safer procedure and permits more adequate dilation of esophageal strictures than can ever be obtained with the Jackson bougie. In our endoscopic clinic the thread technique is likewise preferred to use of mercury-weighted dilators of the Hurst or Maloney type.

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