Endoscopic Removal of an Angelchik Prosthesis after Migration through the Gastro-Oesophageal Junction

A 67-year-old woman with a long history of reflux oesophagitits underwent a Belsey-Mark IV operation in 1972. When this failed, an Angelchik prosthesis was inserted in 1979. Her symptoms recurred in 1981, and she was treated medically thereafter. In 1993 she was admitted with vomiting, and a barium meal showed a filling defect in the stomach (Figure 1). Endoscopy showed severe oesophagitis with a 5 cm sliding hiatus hernia. The Angelchik prosthesis was lying free within the stomach. This was snared but could not be retrieved intact due to its size. It was, therefore, divided it into pieces with the snare and removed piecemeal. A few small fragments passed with her stools. Her vomiting resolved.

A survey of 1013 cases of Angelchik prosthesis implantation in the U. K. over five years showed a 9% complication rate (1). Dysphagia, the commonest, necessitated removal of the device in 2.7% of patients. Erosion into the gastrointestinal tract occurred in 0.9% and migration into the mediastinum or the abdomen in 0.7% of patients. Disruption of the tapes occurred in 0.3% and sepsis in 0.2% of patients. Complications in 5.1% of patients necessitated removal of the prosthesis.

Erosion of the Angelchik prosthesis into the gastrointestinal tract is gradual and presents as a delayed complication occurring many years later (2). It can occur even in the absence of infection and is more likely in patients who have had multiple procedures at the gastro-oesophageal junction (3). Presenting symptoms include vomiting, abdominal discomfort, melaena, anaemia and coffee-ground vomiting (2). Peritonitis or abscess formation (2) is very uncommon. Although the dacron knot may be the leading point in erosion (1), in our case the dacron tape was not connected to the prosthesis and was not found.

Previously prostheses that had eroded into the stomach were retrieved by open surgery; there is only one other isolated report of endoscopic removal of an intact prosthesis from the stomach (4). In our case endoscopic retrieval was made simple by use of the snare as a cutting wire, and this allowed for removal of the prosthesis piecemeal. This simple procedure saved the patient from major surgery.

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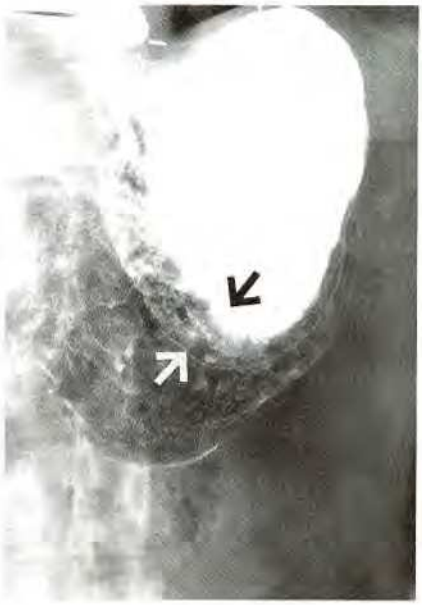

Figure 1: Barium meal showing the Angelchik prosthesis (shown by arrows) lying free in the stomach.

References

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