Antireflux Device Erosion and Minimally Invasive Retrieval >30 Years Later

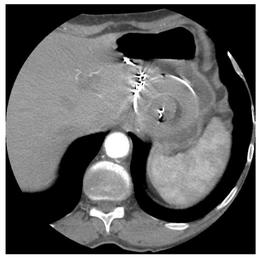
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Case Presentation

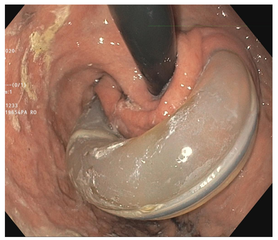
83yo M p/w 6mo of dysphagia to both solids and liquids, early satiety with occasional non-bilious emesis, and postprandial epigastric pain.

- PMH: Parkinson's disease
- PSH: open appendectomy 1940s; lap hiatal hernia repair late 1980s



Initial workup included unremarkable routine blood tests and a CT scan, which revealed a foreign body at the diaphragmatic hiatus.

Subsequent EGD and fluoroscopy revealed partial erosion of a foreign body into the stomach and device malposition below the GEJ.





Although operative records for his remote operation could not be obtained, the foreign body was at this point determined to likely be an Angelchik antireflux device implanted during his hiatal hernia repair.

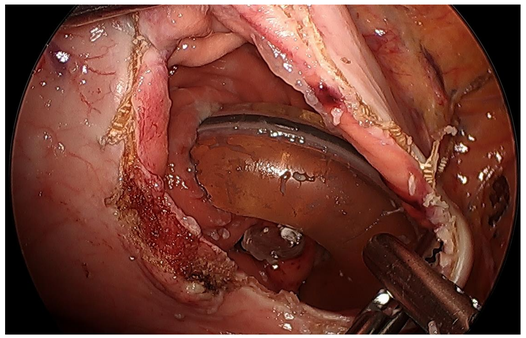
Angelchik device

The Angelchik device was a 45g, fairly rigid, C-shaped silicone prosthesis designed to be secured into a ring around the GEJ with a Dacron strap.

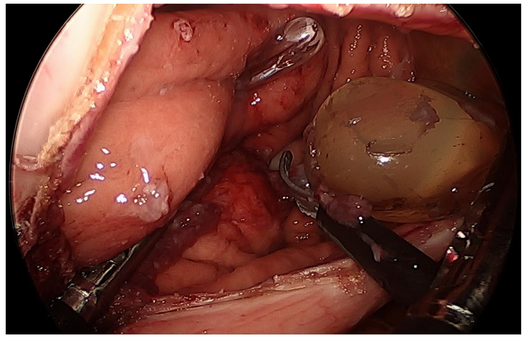


Operation

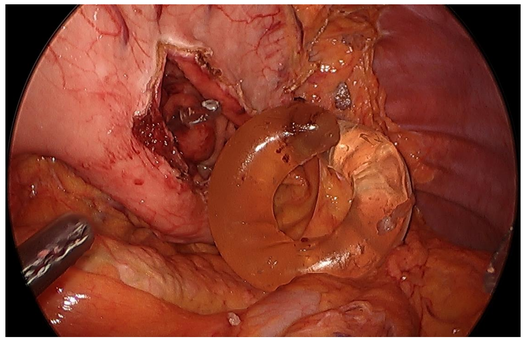
Given his surgical history and the device's current position, laparoscopic foreign body removal was planned via a transgastric approach to avoid dissection of the scarred hiatus. The entire anterior surface of the stomach was adhesed to the abdominal wall, so a posterior gastrotomy was made to access the device inside the stomach.



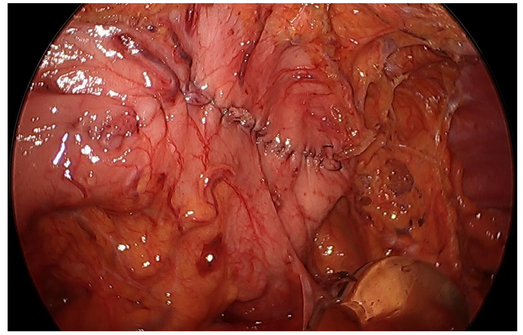
The Angelchik's connecting band was cut so that it behaved linearly; this allowed it to be removed from its pseudocapsule and delivered into the abdomen.



The capsule of tissue with foreign body reaction was left in situ, representing an internalized gastro-gastric fistula of sorts.



The healthy stomach tissue at the gastrotomy was suture-closed and the device (pictured in 2nd panel) was removed through a port site.



The patient's recovery was uneventful and he was discharged on POD3 tolerating a post-gastrectomy diet. He had full resolution of his symptoms at 4w after surgery.

Conclusions

Bulky antireflux prostheses were popularized in the 1970s but were later abandoned due to problems with device migration and erosion. Although the Angelchik fell out of use decades ago, patients still present with late complications associated with these devices. Indeed, our patient presented over 30y after implant. **Younger surgeons should be aware of these older antireflux devices and familiar with surgical options for their explantation.**