

A case of dysphagia post-surgery

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Case history

A 71-year-old male patient presented to the outpatient clinic with ongoing dysphagia, intermittent bouts of severe epigastric pain and weight loss. He had undergone hiatal hernia repair four years prior due to similar complaints, but this did not alter his symptoms. Postoperative evaluation with gastroscopy, esophageal manometry and esophageal X-ray was suggestive of distal esophageal spasms, for which nitroglycerine and calcium channel blockers were tried, without effect. Four years after surgery, he reports worsening dysphagia for solid but not for liquid meals, with a recent weight loss of 5kg over a few months. Repeat endoscopy and abdominal CT scan were unremarkable except for the postoperative state, esophageal X-ray showed reduced primary peristalsis with tertiary contractions and limited stasis of contrast in a slightly dilated distal esophagus.

A new esophageal high resolution manometry was performed which showed a mean integrated relaxation pressure (IRP4) of the lower esophageal sphincter (LES) of 32 mmHg, indicating an impaired relaxation (normal < 15 mmHg), with pan-esophageal pressurization in 100% of 5mL liquid swallows (10/10) (Figure 1A).

After intravenous administration of nitroglycerine, the mean IRP4 was reduced to 24 mmHg, with pan-esophageal pressurization in only 20% of 5mL liquid swallows (2/10) (Figure 1B).

What is the underlying disease?

Dysphagia is a known complication of hiatal hernia repair, often including anti-reflux surgery such as Nissen fundoplication, and pseudo-achalasia has been reported to occur (1). Symptoms may be identical to those of achalasia, and esophageal manometry can show an image similar to type II achalasia with pan-esophageal pressurization. Nitroglycerine and other NO donors have been shown to reduce LES pressure after acute administration in achalasia patients, but not in mechanical (postsurgical) EGJ obstruction (2). In this case, administration of nitroglycerine induced a marked improvement of sphincter relaxation (decreased IRP4) and pan-esophageal pressurization, confirming the diagnosis of type II achalasia. The patient will thus be managed by therapeutic approaches used in achalasia, and not by redo surgery to eliminate a postsurgical mechanical obstruction (3).

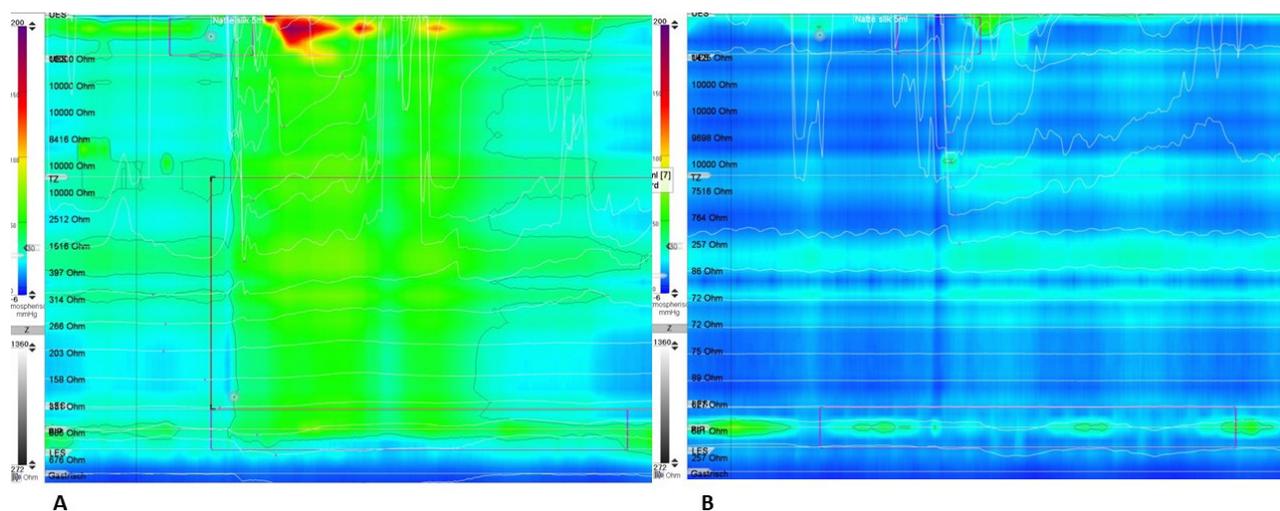


Figure 1. — A: 5mL liquid swallow. There is no LES relaxation and no peristaltic contraction in the esophageal body. Instead, pan-esophageal pressurization can be observed. B: 5mL liquid swallow after administration of IV nitroglycerine. Now the LES relaxes after swallowing with no pan-esophageal pressurization as a result. Esophageal peristalsis is still absent.

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Submission date: 20/07/2022
Acceptance date: 26/07/2022

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