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Image and Learning

Gastric Tube Motility Patterns in Patients After Esophageal Resection with Gastric Pull-up

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Oral intake after esophagectomy is decreased in about a quarter of the patients, even in the absence of anastomotic or pyloric stenosis and in early-stage disease.[1] Dysmotility of the vagotomized gastric tube may be a putative factor for dysphagia. The manometric mo-

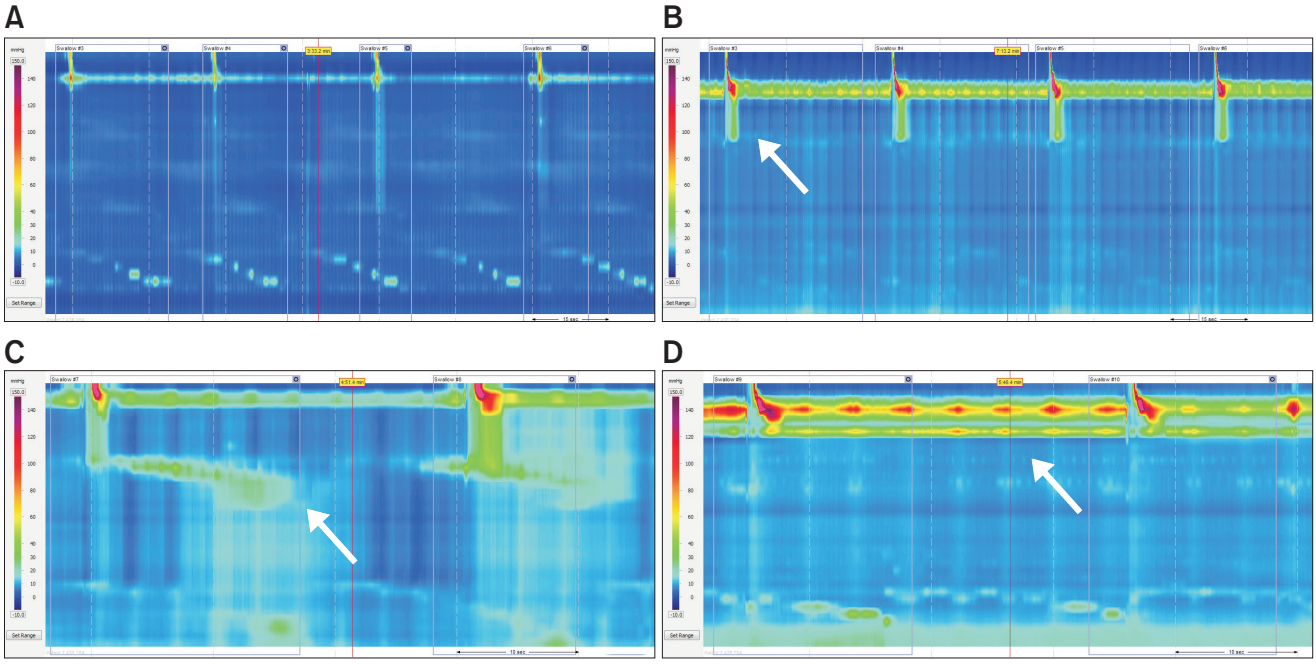

Figure. High-resolution manometric findings of patients who underwent trans-hiatal esophagectomy for esophageal cancer showing: (A) aperistalsis, seen in 100% of the patients, (B) pressurization of the esophagus proximal to the anastomosis (arrow), (C) flow resistance at the thoracic inlet (arrow), and (D) flow resistance at the level of the anastomosis (arrow).

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tor activity of the gastric tube has been scarcely studied in the era of conventional manometry. Some studies showed that the fasting migrating motor complexes may occur late in follow-up in no more than half of the patients,[2,3] but the gastric tube was virtually inert after swallowing.[4,5]

High-resolution manometry gives a detailed view that allows proper study of organs not conventionally studied by standard manometry in identifying the pressure impression of non-contractile anatomy structures, subtle peristalsis and flow obstructions. This technology is probably the most adequate to study the gastric tube after esophagectomy even though no previous studies focused on the topic.

Our figure illustrates high-resolution manometry findings in patients eating an unrestricted diet, and without anastomotic stenosis detected at upper endoscopy, that underwent trans-hiatal esophagectomy, gastric pull-up, and pyloroplasty for esophageal cancer. Absence of peristalsis was noticed in all patients, including the cervical esophageal stump. Pressurization of the esophagus proximal to the anastomosis and flow resistance at the level of the anastomosis as well as the thoracic inlet were secondary findings.

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