SCHOOL OF MEDICINE
SURGERY

Video Presentation 1

Takedown of Dor fundoplication in a patient with achalasia and large epiphrenic diverticulum

Presenter: Colton Miller BA

Colton Miller, BA, Tram Le, MD, Jay Zhu, MD

Introduction: We present a case of a 58-year-old female patient with a history of achalasia and weight loss treated with Heller myotomy and Dor fundoplication, who developed a delayed recurrence of her symptoms after 9 years, presenting with dysphagia and a large fusiform epiphrenic diverticulum without a stalk. In this time, she developed a delayed recurrence of dysphagia and odynophagia symptoms. Her symptoms were severe, and after significant weight loss, she became exclusively fed through a G-tube prior to her presentation. She was found to have a large epiphrenic diverticulum on upper-GI fluoroscopy and CT scan. Uniquely, this epiphrenic diverticulum was fusiform in nature. An EGD demonstrated narrowing of the GE junction. She was referred to our clinic for evaluation of possible esophagectomy given the size of the diverticulum and severity of her symptoms. We performed a laparoscopic takedown of the prior fundoplication and a completion Heller myotomy with a positive outcome and improvement of her symptoms.

Methods: This patient's case was chosen for its rarity and was established through both chart review and compilation of the footage of her operation.

Results: We performed an uncomplicated laparoscopic Dor fundoplication takedown and completion Heller myotomy in an initial effort to spare her esophagus and improve her symptoms. After her surgery, she reported significant improvement in her symptoms at early follow-up. Post-operative upper-GI fluoroscopy showed improved outflow of the EGJ. She began eating soft foods without issue and increased her oral food intake gradually. Her G-tube has been removed, and she reports continued improvement in her symptoms and quality of life.

Conclusions: Achalasia and epiphrenic diverticula are rare with an incidence of 1/100,000 and 1/500,000 respectively.To our knowledge, this is the first case reported in the literature of a large epiphrenic diverticulum without a stalk.Literature is sparse regarding revisional surgery in patients with achalasia and severe recurrent dysphagia following myotomy. One large case series documented the outcomes of 58 patients with achalasia and recurrent dysphagia after initial myotomy and revisional surgery. Of these, 37 underwent fundoplication takedown with no significant difference noted between those with takedown alone vs reconstruction.However,25% of those who followed up experienced recurrent dysphagia. Fundoplication takedown alone may be a suitable option for patients with recurrent symptoms.