



## Laparoscopic Closure of an Esophageal Perforation during a Heller-Dor Procedure for Achalasia

Pereira Graterol Freddy<sup>1,2\*</sup>, Venales Barrios Yajaira<sup>1,2</sup>, Salazar Francisco<sup>1,2</sup> and Bousquet José<sup>1,2</sup>

<sup>1</sup>Minimally Access Surgical Unit, Day Hospital, Venezuela

<sup>2</sup>Department of surgery, "Dr. Luis Razetti" University Hospital, Venezuela

### Clinical Image

The laparoscopic Heller-Dor procedure is actually considered a therapeutic option with great durability for treating the esophageal Achalasia in patients with a low surgical risk [1,2]. The technique is based on the esophageal myotomy, relieving the absent of relaxation of the inferior esophageal sphincter. However, this technique has a related 15% of Esophageal Perforations (EP) [2,3].

The EP has an associated risk of sepsis and multiple organs failure, due to mediastinitis or peritonitis developed in accordance to their evolution time and the anatomical location (thoracic or abdominal) [4]. During the esophageal myotomy, the transoperative esophageal wall's closure has the best results and prognosis [3,4].

The picture series shows an intra abdominal EP during the sub mucosal dissection (Figure 1). The repair was performed employing a 3-0 PDS running suture (Figure 2) and an intraoperative endoscopy, assuring the esophageal wall's closure was practiced (Figure 3). The anterior Dor fundoplication was made for preventing the postoperative gastro esophageal reflux and at the same

### OPEN ACCESS

#### \*Correspondence:

Freddy Pereira, Minimally Access  
Surgical Unit, Day Hospital # 5,  
Lechería, Venezuela, CP: 6016, Tel:  
(+58) 416 6138797;  
E-mail: [freddypereiragraterol@gmail.com](mailto:freddypereiragraterol@gmail.com)

Received Date: 31 Jan 2018

Accepted Date: 20 Feb 2018

Published Date: 26 Feb 2018

#### Citation:

Freddy PG, Yajaira VB, Francisco S,  
José B. Laparoscopic Closure of an  
Esophageal Perforation during a Heller-  
Dor Procedure for Achalasia. *J Surg  
Tech Proced.* 2018; 2(1): 1011.

**Copyright** © 2018 Pereira Graterol  
Freddy. This is an open access  
article distributed under the Creative  
Commons Attribution License, which  
permits unrestricted use, distribution,  
and reproduction in any medium,  
provided the original work is properly  
cited.

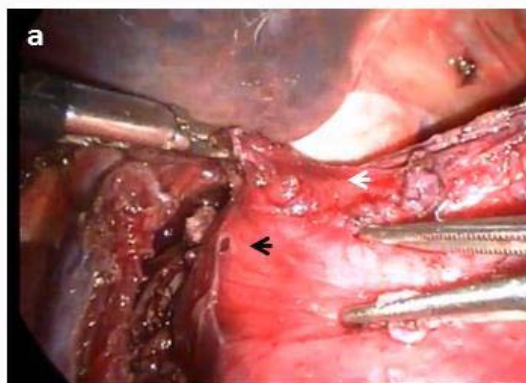


Figure 1: Sub mucosal esophageal perforation (black arrow) and myotomy edge (white arrow).

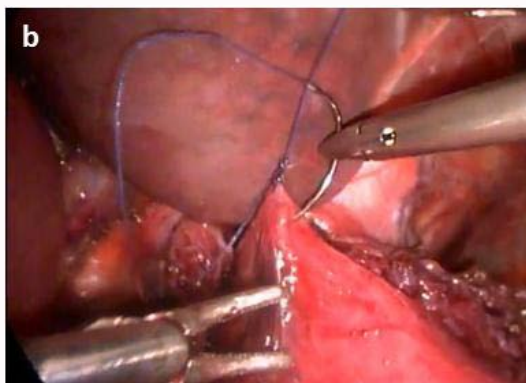
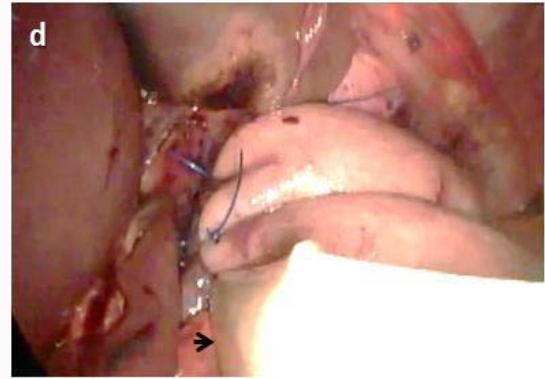


Figure 2: Simple closure of the submucosal esophageal plane.



**Figure 3:** Transoperative video endoscopy: the light is visualized through the esophageal submucosa.



**Figure 4:** Anterior gastric fundoplication and abdominal drainage (black arrow).

time, acting as a patch for preventing leakages (Figure 4). The patient showed a satisfactory evolution and the esophagogram ruled out an esophageal fistula.

## References

1. Campos GM, Vittinghoff E, Rabl C, Takata M, Gadenstätter M, Lin F, et al. Endoscopic and surgical treatments for achalasia: a systematic review and meta-analysis. *Ann Surg.* 2009;249(1):45-57.
2. Weber CE, Davis CS, Kramer HJ, Gibbs JT, Robles L, Fisichella PM. Medium and long-term outcomes after pneumatic dilation or laparoscopic Heller myotomy for achalasia: a meta-analysis. *Surg Laparosc Endosc Percutan Tech.* 2012;22(4):289-96.
3. Tsuboi K, Omura N, Yano F, Hoshino M, Yamamoto SR, Akimoto S, et al. Identification of risk factors for mucosal injury during laparoscopic Heller myotomy for achalasia. *Surg Endosc.* 2016;30(2):706-14.
4. Persson S, Rouvelas I, Irino T, Lundell L. Outcomes following the main treatment options in patients with a leaking esophagus: a systematic literature review. *Dis Esophagus.* 2017;30(12):1-10.