





# **Two-Portal Video-Assisted Thoracoscopic Surgery for Esophageal Diverticulum**

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#### **Background :**

Esophageal diverticulum (ED) is disorder related to esophageal motility. Surgery is indicated in patients with severe symptoms as dysphagia, esophagitis, anorexia, regurgitation and weight loss. Although open surgery is the standard approach, recently an increasing number of papers have reported the use of minimally invasive

approaches for performing diverticulectomy and myotomy in order to reduce the surgical trauma and favor a fast return to daily activity. In this report, we present our initial experience with Two-Portal VATS operation for ED.

### **Case presentation:**

73 years old female patient, complained from dysphagia and anorexia for a year, Endoscopy revealed a large diverticulum in middle third /26-30 cm from incisor/ of esophagus, many impacted foods in diverticulum. CT scan also evidenced Diverticulum in middle third of esophagus. /1.9x1.6x5.0 cm in size/. Two-Portal VATS was performed.

#### **Results :**

Operation was successfully performed without needing of open conversion and duration of 80 minutes, blood loss 10 ml. No intraoperative neither postoperative complications were found. The chest drain was removed 78 hours after the surgery and hospital stay was 7 days. No recurrence of diverticulum was seen during 3 months follow up.

#### **Discussion:**

In spite the fact that open surgery is the standard approach in symptomatic patients with large esophageal diverticula, recently various minimally invasive techniques including laparoscopy and VATS have been developed to treat this condition. Traditional VATS is usually performed with three-four incisions but over the years there has been an evolution of VATS from multi-ports to single port.

**Conclusion :** Two-Portal VATS is feasible procedure that in theory could reduce the surgical trauma compared to conventional open method. In the near future, we will intend to apply Uniportal VATS technique for ED.



**Figure 1: Preoperative** 



**Figure 2: After 3 months**