## Minimally Invasive surgery for Esophageal cancer

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**Key words:** Minimally invasive esophagectomy, Esophageal cancer

Introduction: Use of the minimally invasive approach for the management of cancer surgery is still in the developmental phase in Mongolia. In our hospital, we had started using laparoscopic approach for gastric cancer surgery since 2016. Concept of Minimally invasive surgery is to reduce operation site trauma, improve pain management and improve recovery process. The aim of this study was to describe our experience in Minimally Invasive surgery and to evaluate the safety of this minimally invasive approach in the treatment of patients affected by esophageal or EGJ cancer. Nowadays we have adopted a minimally invasive strategy and experience in minimally invasive surgery has allowed us to improve our technique. Recently, we performed a thoracoscopic, VATS and laparoscopic approach with Ivor-Lewis operation.

**Methods:** 53 years old male patient, complained of dysphagia, weight loss and chest pain. On September 2021, Minimally Invasive esophagectomy was performed on a patient with squamous cell carcinoma located in the middle esophagus. Body mass index 22,8. Preoperative preparation was smoking cessation and teaching inhalation of inspirometer

**Results:** Operation was successfully performed without needing of open conversion and duration of 540 minutes, blood loss 100 ml. Oral water intake was started 5 days after surgery. Hospital stay was 9 days. No intraoperative neither postoperative complications were found. Histological report was squamous cell carcinoma, well differentiated. Tumor size 3.5 x 1.5 x 1.2 cm. The number of lymph nodes retrieved was 42. Metastatic carcinoma in 2 lymph nodes. Safety margins: Proximal 1 cm, distal 7 cm. Pathologic stage was pT3N2M0 Stage IIIB (Classified by AJCC 8th TNM Staging System)

**Conclusion:** This case report shows that minimally invasive esophagectomy can produce good results in terms of safety and oncologic adequacy for malignant tumors. More big sized and long term studies are needed. Furthermore, we should develop our minimally invasive approach for the management of the cancer surgery and increase our number of surgeries by minimally invasive approach.

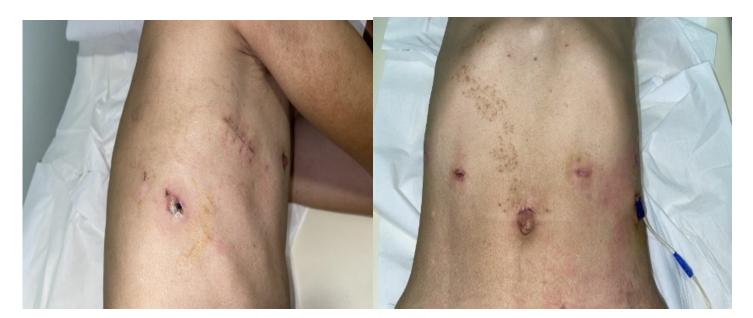


Figure 1. Shows surgical incision sites