

A Case of Simultaneous Esophageal and Pulmonary Cancer Treated by Endoscopic Mucosectomy and Lobectomy Using Video-Assisted Minimal Thoracotomy

A 75-year-old man was examined because of epigastric pain and loss of weight. Panendoscopy showed an area of purple discoloration in the esophagus, not emerging beyond the mucosa, 15 mm in diameter. When this area was stained with 1% toluidine blue solution, it turned permanently blue. Histological examination of a biopsy specimen revealed squamous cancer of the esophagus. An endoscopic ultrasound examination was negative; a chest radiograph confirmed the presence of a tumor in the right upper lobe of the lung. The transthoracic needle lung biopsy specimen showed this to be an adenocarcinoma. The esophageal cancer was removed by endoscopic mucosectomy with Olympus instruments (Figures 1, 2). Simultaneously, the camera port was inserted into the thoracic cavity, and the exploration revealed that the tumor had not reached the visceral pleura. A muscle-sparing mini-thoracotomy was carried out to manage the vascular structures of the upper lobe of the



Figure 1: The tumor, stained with toluidine blue solution, is caught in the snare.

lung. The bronchus was sutured with a linear endoscopic sewing machine (Ethicon ELC-45), and the tumor was removed (Figure 3). Histologically, the esophageal tumor was found to be a pT1 muscular mucosal cancer (Figure 4), while the lung tumor was a pT2 N0 Mx adenosquamous cancer. The patient was discharged after an uneventful postoperative period. At a control examination six months later, he was free of complaints and had gained 10 kg. Endoscopy combined with staining demonstrated no change in the esophagus.

In the diagnosis of early esophageal cancer, an important role is played by a combination of endoscopy with vital staining (toluidine blue, Lugol's solution). Simultaneous surgery and endoscopic mucosectomy of esophageal cancer, and a minimally invasive technique for pulmonary cancer, can be combined in a case such as this one.

I. Szántó¹, Á. Altorjay¹, J. Kiss¹,
J. Garcia¹, P. Nagy², Á. Bohák³

¹ Dept. of Surgery

² Institute of Pathology

³ Radiological Clinic, Postgraduate
Medical School (HIETE), Budapest,
Hungary

References

1. Warren S, Gates O. Multiple primary malignant tumors: a survey of the literature and a statistical study. *Am J Cancer* 1936; 16: 1358–1414.
2. Fékété F, Sauvanet A, Kaissarian G, Jauffret B, Zouari K, Berthoux L, et al. Associated primary esophageal and lung carcinoma: a study of 39 patients. *Ann Thorac Surg* 1994; 58: 837–42.
3. Endo M. Endoscopic resection as a local treatment of mucosal cancer of the esophagus. *Endoscopy* 1993; 25 (Suppl): 672–4.
4. Szántó I, Kiss J, Vörös A, Altorjay Á, Nagy P. Endoscopic mucosectomy of the esophagus with a “shark-tooth” polypectomy snare. *Endoscopy* [in press].

Corresponding Author

I. Szántó, M.D., Ph.D.
Dept. of Surgery
Postgraduate Medical School (HIETE)
P.O. Box 112
Szaboles u 35
1389 Budapest
Hungary



Figure 2: The excised esophageal specimen.

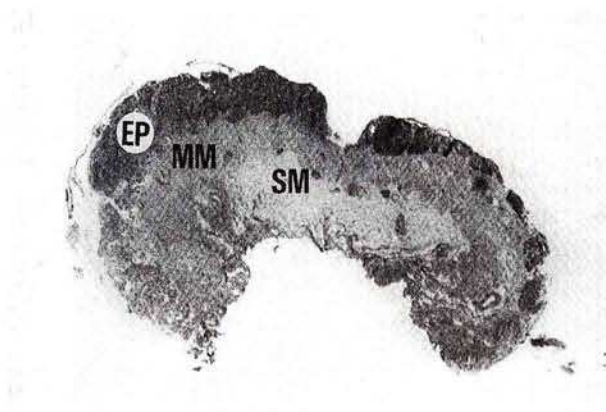


Figure 3: Histological section of the excised early esophageal cancer. EP: epithelium, MM: muscularis mucosa, SM: submucosa.

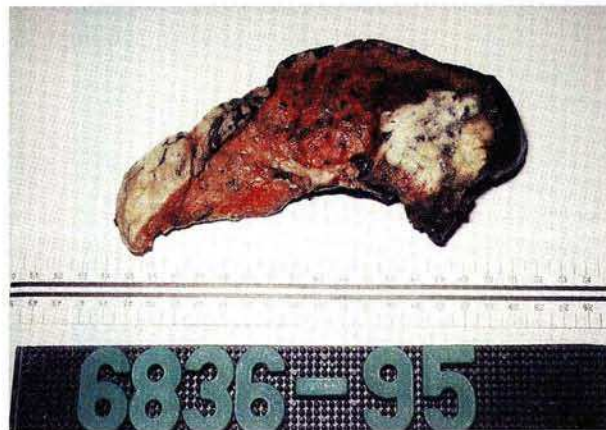


Figure 4: The lung cancer, removed using a minimally invasive surgical technique.