

Prognostic Benefits of Thoracoscopic Esophagectomy for Thoracic Esophageal Squamous Cell Carcinomas

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Abstract

Background: Thoracoscopic esophagectomy has been introduced to reduce postsurgical pulmonary complications in patients with esophageal squamous cell carcinomas (ESCCs). However, the survival benefit of this procedure has not been well examined. In the present study, we retrospectively investigated the clinical outcomes of thoracoscopic esophagectomy in patients with operable thoracic ESCCs.

Methods: Eighty-four patients were enrolled in this study. They were diagnosed with resectable clinical stage I-III thoracic ESCCs and underwent thoracic esophageal resection with three-field lymph node dissection at Tottori University Hospital between January 2007 and December 2013. Occurrence of postoperative complications, disease-free survival (DFS) and overall survival (OS) were compared between the open thoracotomy group and the thoracoscopic esophagectomy group.

Results: Fifty-one patients underwent the thoracoscopic method, while 38 underwent the open method. Morbidity was 42.9% and mortality was 2.4%. The thoracoscopic method showed a lower occurrence of postoperative pulmonary complications. The 5-year DFSs of the two groups were not different. However, the 5-year OS of patients in the thoracoscopic method group was superior to that of those in the open method.

Conclusions: Thoracoscopic esophagectomy for thoracic ESCCs is technically feasible and the low rate of postoperative pulmonary complications may prolong the OS of patients.

Key words: disease-free survival, esophageal squamous cell carcinomas, overall survival, thoracoscopic esophagectomy