Risk factors for postoperative pulmonary infection in patients with esophageal cancer: A systematic review and Meta-analysis

Lin, K¹; Ren, M².

Review question / Objective: Esophageal cancer is the sixth leading cause of cancer-related death, with pulmonary infection being an important complication after esophageal cancer resection. Therefore, early identification of risk factors for postoperative pulmonary infection and appropriate treatment are of great significance for prognosis. In recent years, scholars at home and abroad have conducted a large number of clinical studies to explore the risk factors for postoperative pulmonary infection in esophageal cancer, but their results are inconsistent. For this reason, this study provides a basis for early clinical prevention and intervention of pulmonary infection through Meta-analysis of studies related to risk factors for postoperative pulmonary infection in patients with esophageal cancer.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 April 2022 and was last updated on 22 April 2022 (registration number INPLASY202240139).
prevention and intervention of pulmonary infection through Meta-analysis of studies related to risk factors for postoperative pulmonary infection in patients with esophageal cancer.

**Condition being studied:** Esophageal cancer.

**METHODS**

**Participant or population:** Postoperative esophageal cancer.

**Intervention:** Exposure to risk factors for postoperative pulmonary infection in patients with esophageal cancer.

**Comparator:** No exposure to risk factors for postoperative pulmonary infection in patients with esophageal cancer.

**Study designs to be included:** Case-control or cohort study.

**Eligibility criteria:** Inclusion criteria. 1. study population: patients with esophageal cancer treated with endoscopic minimally invasive surgery, open surgery and thoracoscopic surgery. 2. Study type: case-control study and cohort study. 3. Outcome indicators: risk factors for postoperative pulmonary infection in patients with esophageal cancer as outcome indicators. Exclusion Criteria. 1. The study was on pulmonary infections caused by diseases other than postoperative esophageal cancer. 2. Study data were incomplete or unusable, and complete data were not available through other means. 3. Repeatedly published literature. 4. Reviews, systematic reviews, Meta-analyses, animal studies or conference papers. 5. Newcastle-Ottawa Scale (the Newcastle Scale, NOS) score < 6.

**Information sources:** Pubmed, EMBase, The Cochrance Library, Web of Science, CNKI, Wanfang Data, VIP, CBM.

**Main outcome(s):** OR.