BACKGROUND: Contrasting findings on trends and determinants of operative mortality after surgery for esophageal and gastric cancer have been reported from population-based studies.

METHODS: Discharge records of residents in the Veneto Region (northeastern Italy) with a diagnosis of esophageal or gastric cancer and intervention codes for esophagectomy or gastrectomy were extracted for the years 2000-2009. In-hospital, 30-day, 90-day, and perioperative (30-day + in-hospital) mortality were computed. The influence of patient and hospital variables on in-hospital mortality was assessed through multilevel models.

RESULTS: Overall, 6,500 resections were performed in the period of 2000-2009, with a 10% decline in the second half of the study period. In-hospital mortality was 4.6% (5.3% in 2000-2004 and 3.8% in 2005-2009) and was higher for extended total gastrectomy and total esophagectomy. In 2005-2009 mortality declined for all resection types except extended total gastrectomy (8.0%). For esophageal procedures, 30-day mortality was lower than in-hospital or perioperative mortality. A protective effect of procedural volume was found for esophageal but not for gastric resections; among gastric procedures, mortality was higher in male patients and in extended total gastrectomy patients.

CONCLUSIONS: Analyses of discharge records allowed investigation at a population level of time trends (downward mainly for esophageal resections) and determinants of perioperative mortality (hospital volume, gender, and procedure type).

FULL TEXT PER GLI UTENTI REGISTRATI ALLA RIVISTA