

Assessment of Different Prognostic Scores for Early Postoperative Outcomes after Esophagectomy

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Abstract

Objective: Surgery remains the best curative option for oesophageal cancer. This demanding intervention performed on a high risk patient is accompanied by high morbidity and mortality rates. The aim of this study was to analyse the preoperative risk assessment using different comorbidity models in patients operated for esophageal cancer in a tertiary unit.

Methods: A retrospective study was conducted on a prospectively collected database. The performance of several prognostic scores (POSSUM, P-POSSUM, O-POSSUM, Charlson and age adjusted Charlson, ASA score) was assessed in terms of early postoperative outcomes.

Results: Out of 137 patients diagnosed with oesophageal cancer, esophagectomy was performed in 43 cases. Postoperative mortality (11.62%) was best predicted by POSSUM score (10.48; 95% CI 9.37-11.66). The observed morbidity was 58.13%, higher than that expected by POSSUM (48.24%; 95%CI, 44.82-51.66) with a morbidity ratio O/E of 1.2. The area under the ROC curve for the physiological score of POSSUM and age adjusted Charlson index showed a good discriminatory power. The best performance was obtained for POSSUM equation, who showed to have the highest area under the ROC curve (0.826; 95%CI, 0.67-0.92).

Conclusions: A thoroughly assessment of comorbidities and the surgeon's clinical assessment remain the best tool for patient selection for surgery.

Key words: esophageal cancer, esophagectomy, prognostic scores, postoperative complications

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