Bronchoanastomotic and Bronchoplastic Resections in Pulmonary Malignancy Retrospective Study 2000 - 2009

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Abstract

Bronchial resections are surgical procedures in which bronchial continuity is interrupted, followed by reconstruction of resected ends through terminal anastomosis or various forms of plastic procedures. The purpose of these interventions is to preserve functional lung parenchyma. These procedures are indicated in tumors with central location as an alternative to pneumonectomies, serving to preserve maximum functional lung parenchyma.

Material and Methods: We considered bronchoanastomotic and bronchoplastic procedures performed in our clinic over the period 2000-2009, for malignancy. There were 52 bronchoanastomotic resections and 9 bronchoplastic resections of which we analysed 40 bronchoanastomotic resections and 4 bronchoplastic resections (44 cases) ± associated resection. We excluded cases with non-malignant pathology or those with incomplete data at the beginning of the study.

Results: The importance of the main factors involved in relation with survival was calculated. We considered the type of surgery performed, histological type, TNM stage, and characteristics of the study group (age, sex). We found statistically significant correlations between survival and histopathology of malignancy with a better survival for lung carcinoids, especially for typical carcinoid tumors. TNM stage did not significantly influence survival, but N2 nodal involvement, according to the statistics, shows a poor prognosis. Age is another statistical significant factor correlated with post-operative life expectancy, patients over 65 years old having a worse postoperative survival.

Conclusions: In the corresponding lung malignant pathology, bronchoanastomotic bronchoplastic resections are indicated, but one must take into account the patient's age before submission to surgery, the histopathologic type and N2 nodal involvement.

Key words: bronchoanastomotic resections, bronchoplastic resections, survival

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