

The effect of malignancy on morbidity rates in thoracotomy patients

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Abstract

Background: A comparison of the morbidity rates between the patients who had undergone thoracotomy for malignant and non-malignant pathologies.

Methods: The records of 337 patients who were performed standard posterolateral thoracotomy were retrospectively evaluated. The patients were evaluated in two groups as the patients with malignant pathologies (Group-A) and the patients with non-malignant pathologies (Group-B).

Results: Of 337 patients, 130 (38.6%) were in Group A, and 207 were in Group B. In Group A, 110 (84.6%) patients were male, and 20 patients were female. In Group B, 118 (57%) patients were male, and 89 patients were female. The mean age for each group was 53.9 and 38.7 years, respectively. Group A had a higher incidence of postoperative complications (17% (n=22) than Group B (8.7%; n=18) (p=0.035)). In both groups, the morbidity rate was directly correlated with age, the incidence of comorbidity, and the pulmonary resection. However, it was more significant in Group A than the Group B. The most common complication was prolonged air leak in Group A (n=10; 7.7%), while it was wound infection in Group B (n=6, 2.9%). The hospital follow-up (postoperative hospitalization) time for the patients in Group A (17.1±8.0 days) was longer than in Group B (14.3±7.9 days) (p=0.001).

Conclusions: The results of this study suggest that in addition to common predisposing factors in this group of patients such as advanced age, comorbidity, and pulmonary resection that increase postoperative complication risk, the characteristics of malignant diseases may be predictive factors for increased morbidity. (*Ind J Thorac Cardiovasc Surg* 2008; 24: 244-248)

Key words: Lung cancer, Thoractomy, Lung

Introduction

Malignancies, particularly the lung cancer being the leading cause of death, are the second most common cause for death in the United States¹.

Surgery is the only treatment modality that may provide cure². After major thoracic surgery, the complication rate associated with operation type and

patient related factors is high³. Postoperative complications negatively affect the hospital stay, cost, and operative mortality rates^{3,4}. Various studies have focused on risk factors such as age, comorbidity, smoking, and poor respiratory function that could cause complications⁵⁻⁷.

In the current study, the patients who had undergone thoracotomy for malignant or non-malignant pathologies were compared for postoperative morbidity rates. In addition, the study investigated whether the presence of malignancy as a primary disease was a predictive factor for potential postoperative complications.

Methods

The records of 337 patients who were performed standard posterolateral thoracotomy (PLT) between

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