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Retrospective Analyses Included Patients with Lung Cancer

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Introduction

In patients with advanced-stage lung cancer and IIP, the clinical questions regarding whether chemotherapy as the initial treatment improves overall survival (OS) and whether it increases the occurrence risk of acute exacerbation of idiopathic interstitial pneumonia (IIP) remain unanswered. Given that chemotherapy-related acute exacerbation of IIP may be a direct cause of mortality in these patients, this study addresses these issues. Patients with idiopathic interstitial pneumonia (IIP) are more likely to develop lung cancer. The most common type of IIP is idiopathic pulmonary fibrosis (IPF). Compared to patients with only IPF, lung cancer development has a negative lung cancer impact on prognosis. About 10% of IPF patients pass away from lung cancer. Patients with advanced-stage or post-operative recurrent lung cancer and IIP prefer chemotherapy. However, because of their poor respiratory condition or the severity of their IIP, some patients may receive the best supportive care (BSC) as their initial treatment. Acute exacerbation is known to be fatal in IIP patients and it typically occurs in IPF patients. However, other fibrotic forms of IIP, whether or not they have lung cancer, have been found to be susceptible to acute exacerbation. During the treatment of patients with IIP and lung cancer, acute exacerbation remains a challenging issue [1].

Description

In patients with advanced lung cancer and IIP, the rate of chemotherapy-related acute exacerbation varies. Without comparing patients treated with BSC to those treated with chemotherapy, some retrospective analyses included patients with IIP and lung cancer, regardless of whether an acute exacerbation occurred. Carboplatin-containing regimens have recently been the focus of prospective single-arm studies in IIP and advanced lung cancer patients. Between 5.4% and 10% of interstitial pneumonia cases are acutely exacerbated; However, due to the small number of acute exacerbation cases in each prospective study the mortality rate from acute exacerbation could not be determined conclusively. Subsequently, there stays lacking proof with respect to chemotherapy-related intense compounding of IIP. In addition, it is unknown whether chemotherapy has a greater risk of acute exacerbation in patients with advanced or post-operative recurrent lung cancer than BSC. Additionally, given that chemotherapy-related acute exacerbation may be a direct cause of mortality in these patients, it remains to be determined whether chemotherapy improves overall survival (OS) in comparison to BSC as the initial treatment [2].

There is a lack of data on the natural course of IIP and lung cancer in patients who receive BSC alone as their first treatment. Patients who receive BSC alone may experience an acute exacerbation that was not brought on by chemotherapy, and some of these patients may pass away as a result of an acute exacerbation rather than lung cancer progress. In patients with advanced-stage or post-operative recurrent lung cancer associated with IIP, this retrospective multicenter cohort study investigated whether or not chemotherapy has an impact on the risk of acute exacerbation and whether or not it improves OS in comparison to BSC.

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We looked back at the patients' medical records and looked at their demographic information. According to the international consensus guidelines provided by the American Thoracic Society (ATS), European Respiratory Society (ERS), Latin American Thoracic Association (ALAT), and High-Resolution Computed Tomography (HRCT) typical pattern of interstitial pneumonia (UIP), potential pattern of UIP, or inconsistent with UIP pattern [3].

Last but not least, we looked into the causes of death. OS was defined as the time between the diagnosis of lung cancer and the clinical outcome. In addition to the pathologic diagnosis, the date of clinically confirmed stage IV or post-operative recurrence of the disease was used to define the lung cancer diagnosis. The patients' overall condition was shown by the Eastern Cooperative Oncology Group's performance status (PS) system. During or as close to the diagnosis of lung cancer as possible, clinical data, such as the results of pulmonary function tests, serum examinations, and the presence or absence of desaturation on exertion, were collected. The paper-based questionnaire that was sent by attending physicians to the data center was mailed to each participating institution, where it was arranged and cleaned for analysis. Age, gender, and smoking index were included; UIP HRCT patterns. The clinical diagnosis of IIP; pulmonary function tests, such as the predicted forced vital capacity (FVC) and the predicted diffusing capacity of the lung for carbon monoxide (DLco) percentages; serum markers like surfactant protein-D (SP-D) and Krebs Lungen-6 (KL-6) histology of lung cancer; desaturation upon exertion [4].

The presence or absence of emphysema on CT, and previous experiences with acute exacerbations. In the chemotherapy group, the used first- and second-line chemotherapy regimens were retrieved. The following are the JRS guidelines that were used to define acute exacerbation: 1) Dyspnea that gets worse with exercise within a month; 2) ground-glass opacity-primarily newly developed lesions superimposed on lung cancer the chronic fibrotic lesions on HRCT; 3) Under the same circumstances, a decrease of 10 mmHg in the partial pressure of arterial oxygen 4) excluding other potential causes of acute respiratory distress, such as pneumothorax, acute pulmonary embolism, acute pneumonia, or cardiac oedema. Following chemotherapy, triggered acute exacerbation was observed, which is consistent with the ATS/ERS proposal. In this study, it was found that the chemotherapy group experienced acute exacerbation between the start of first-line chemotherapeutic treatment and the end of second-line treatment. Throughout the course of each patient's clinical lung cancer experience, we kept an eye on the BSC group for acute exacerbations. In each institution, IIP and a chemotherapy-related acute exacerbation of IIP were diagnosed by the attending physicians. Additionally, these doctors selected BSC or chemotherapy as the initial treatment [5].

Conclusion

We compiled a descriptive summary of the clinical and demographic characteristics of each group. The chi-squared or Fisher's exact tests were used for categorical variables in the bivariate comparisons between the treatment groups. The t-test was used for continuous variables. All patients' IIP acute exacerbation lung cancer risk was compared between groups using a binary logistic regression model without taking into account demographic or clinical characteristics. To estimate the correct effects of chemotherapy and reduce bias lung cancer caused by confounding factors, we used propensity score matching in secondary analyses. Using multiple logistic models with the following variables as covariates, the patients' propensity scores were initially estimated to match patients in the BSC group with patients in the chemotherapy group.

Acknowledgement

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Conflict of Interest

None.

References

1. Clark, B., J. Sitzia and W. Harlow. "Incidence and risk of arm oedema following treatment for breast cancer: A three-year follow-up study." *Qjm* 98 (2005): 343-348.
2. Olsson Möller, Ulrika, Ingela Beck, L. Rydén and M. Malmström. "A comprehensive approach to rehabilitation interventions following breast cancer treatment-A systematic review of systematic reviews." *BMC canc* 19 (2019): 1-20.
3. Armer, Jane M., M. Elise Radina, Davina Porock and Scott D. Culbertson. "Predicting breast cancer-related lymphedema using self-reported symptoms." *Nurs Res* 52 (2003): 370-379.
4. Sage, Andrew P. and Ziad Mallat. "Multiple potential roles for B cells in atherosclerosis." *Ann Med* 46 (2014): 297-303.
5. Ridker, Paul M. "From C-reactive protein to interleukin-6 to interleukin-1: Moving upstream to identify novel targets for atheroprotection." *Circulation Res* 118 (2016): 145-156.

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