Peer Review File

Comment 1: The author aimed to identify prognostic factors for lymph node metatases in ct1 adenocaricinomas. it is a very interesting argument, but I think that some part of the study may be reconsidered.

Reply 1: Thank you for your comments. We would reply and revise according to your comments.

Comment 2: How many patients had preoperative histology?

Reply 2: The patients were small nodules and did not receive biopsy, so no patients had preoperative pathology.

Comment 3: How do you selected patients? Only GGO or part solid or also solid? A 80% of CTR corresponded a quite totally solid tumor. Did you consider also GGO or not?

Reply 3: The data of patients with high-resolution CT (tumor size≤3cm) and related examinations in our hospital were selected in order between February 2011 and February 2019. It included GGO, part solid and solid nodule. The purpose of this article is to explore the relationship between the nature of nodules and lymph node metastasis. Generally speaking, if there are enough solid components of nodules, there will be lymph node metastasis. We included GGO, part solid and solid nodule.

Comment 4: What do you intend for sublobectomy and why a group of patients received this kind of resection. Is there any difference in harvested lymph nodes and prognosis in this group?

Reply 4: There were 37 patients received sublobectomy, the main reason was that pulmonary function or age and other factors could not tolerate lobectomy. We did not calculate whether there was any difference between sublobectomy groups and lobectomy group in harvested lymph nodes and prognosis.

Comment 5: The results section is really difficult to understand, especially when the number of upper/middle/lower zone were described. It should be reorganized.

Reply 5: We have deleted this discussion from the original manuscript.

Comment 6: It is not clear patients selection and analysis. The aim of the study is to analyse the association of characteristics of cT1N0M0 with lymph node metastases. In my opinion, if you consider cT1N0M0 only regarding the dimensional parameter, you have to confirm this selection also after pathological exam. In particular, you have to exclude patients with pleural invasion because they are considered as T2, and the risk of nodal metastases is higher than in t1 patients.

Reply 6: The purpose of this article is to explore the relationship between the nature of nodules and lymph node metastasis. So we included a variety of clinical features of nodules, including various dimensional parameter and pleural invasion.

Comment 7: How many N2 stations were resected?

You reported only data regarding nodule characteristics at the TC scan, but the preoperative workout is incomplete. How many patients had PET-TC? How many of them had suspected nodal metastases? Did they have mediastinal staging? I think that this information is essential for the statistical analysis. You reported a very high percentage of N2 metastases; you must specify the preoperative workout.

Reply 7: We aimed to identify prognostic factors for postoperative lymph node metastases in ct1 adenocarcinomas. After receiving PET-CT (due to economic reasons, the proportion is relatively small.), ECT or brain MRI examination, the patients were confirmed to have no distant metastasis and obvious lymph node metastasis, and then received surgical treatment.

Comment 8: How did you perform multivariable analysis? It is not reported in the statistical methods. Moreover, in the multivariable table, the CI of the CTR I very large. I suggest a statistical revision.

Reply 8: Multivariable analysis was Cox proportional hazards. After repeated examination, our data were correct.

Comment 9: Why there was a statistically significant difference among the different cT stages regarding the number of resected nodes? What is your opinion?

Reply 9: Some GGO or small nodules were only sampled from lymph nodes.

Reviewer B

Comment:

1. Page 5, Line 157. I think 'upper mediastinal LN' should be corrected to 'middle mediastinal LN'

2. Page 5, Line 160. I think 'upper mediastinal LN' should be corrected to 'lower mediastinal LN'

Reply: We have revised these two comments in the original manuscript.

Comment: The authors present their study in factors associated with pathological lymph node metastasis in clinical stage IA adenocarcinoma of the lung. There have been many studies that focus on this topic. Multivariable analysis of their study showed that VPI, DP, DM, CTR, and total dissected LNs number were independent factors for LNs. However, those factors are composed of clinical and pathological factors though the primary subject of the study includes patients with clinical stage I adenocarcinoma. That means the interpretation of the results is difficult to use in real clinical settings. For instance, VPI and DP are obtained only based on pathological findings, and how do we select surgical procedures or the degree of lymph node dissection for patients with clinical stage I LAD by using their results? Therefore, the reviewer encourages that the manuscript should entirely be revised with those points and resubmitted to the journal as a new study.

Reply: We aimed to identify prognostic factors for postoperative lymph node metastases in ct1 adenocarcinomas. We hoped to take into account as many indicators as possible. We could measure the distance between the tumor and the pleura by CT scan. Pleural indentation could be seen in some tumors on CT scan. DM could obtain general results when the nodule was excised.