Peer Review File

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Reviewer A

It has been interesting reading the manuscript about an important topic still far from being well understood and properly managed. Despite the interest of the topic, multiple points for improvement are needed.
Comments for improvement:

Comment 1: Key finding/new and old knowledge/Implications: wording needs some extensive work to improve the sentences. Probably an English native speaking can easy the change.
Abstract: needs some rework to really be a correct abstract.
1. This sentence included in the results section should be included in the methods section: "Clinically significant anxiety was measured by the Impact of Event Scale-Revised (IES-R)".
2. Methods section should be completed.
3. Results should report the most relevant results
Keywords: need a rework. Think that those words will help (among other parts) to allocate and localize the paper. Therefore, be specific and use terms everybody would use. Look at other authors' keywords.
Methods:
-How long was the preoperative stay before the survey?
- Please, state the registry number of the study in the ethical committee.
- The primary outcome of the study is to measure the distress produced by the diagnosis. Please be precise in the definition.

Reply 1: We thank the reviewer for the comment and the reviewer's comment is greatly appreciated. Sentences have been refined by native English speakers. The methods and results have been improved in the abstract. We have modified our text as advised (see Page 3, line 57).
Modify keywords for ease of positioning. We have modified our text as advised (see Page 3, line 74).
The selection of patients is to start the inclusion of patients when they are admitted to hospital and decide to undergo surgery. Generally, patients are admitted to hospital 1 day before surgery after improving preoperative examination, and patients are included on the day of admission according to the inclusion and exclusion criteria, and questionnaires are filled in.
The Ethics Committee approval number is indicated in the methodological section of the text. We have modified our text as advised (see Page 5, line 138).

The main ending has been redefined. We have modified our text as advised (see Page 5, line 144).

Comment 2: To me the study has one primary outcome: secondary distress and one secondary outcome: reasons to choose a different approach than the suggested by the expert. I see no data about how to evaluate this second outcome.
Results:
1.-Please clarify this foot table text: Table 2 Univariate analysis of clinical pain of pulmonary nodules
Discussion and references
1.- To what extend the capability of ADL is due to the anxiety or to other diseases. Please discuss because this is an important factor in the analysis.
2.- Summarize and discuss your results. Then compare them to those of others if existing. Then comment on top. But always keep your results as reference.

Reply 2: We thank the reviewer for the comment and the reviewer's comment is greatly appreciated. The title of Table 2, which is a univariate analysis of lung nodule specific anxiety, has been modified. We have modified our text as advised (see Page 15, line 381).
We added a discussion of the research results to the discussion section. We have modified our text as advised (see Page 8, line 239).
In the third paragraph of the discussion section, the results are compared with those of Freiman et al.

Reviewer B

I do realize the study was done on anxiety and not on the results of cancer treatment.

Comment 1: However, there needs to be an exact count of the patients that actually presented cancer because this could pose an ethical problem. We need to know exactly what percent presented malignancy. 234 patients is not a small number, and there must be a large number of patients whom would have undergone an unnecessary procedure which could put them at risk. There are risks for general anesthesia itself in an older population.

Reply 1: We thank the reviewer for the comment and the reviewer's comment is greatly appreciated. In Table 1, the postoperative nodule nature and resection scope of target patients were added. We added some data on nodule nature and excision extent (see Page 15, line 377).

Comment 2: Wedge lung biopsy by thoracoscopic surgery can be proven to be difficult in nodules less than 8mm. We need to know how you have marked these nodules before surgery. I personally, prefer barium marking.

Reply 2: We thank the reviewer for the comment and the reviewer's comment is greatly appreciated. Preoperative positioning has been completed in the methods section of the article. We have modified our text as advised (see Page 6, line 152).

Comment 3: Centrally located nodules pose another problem. If the nodules are located near the hilum, a large wedge may approach the more radical lobectomies. We need to know whether the procedure was limited to wedge resection or proceeded to a segmentectomy or lobectomy. A comfortable resection margin would be necessary for a simple wedge resection regardless of its location.

Reply 3: We thank the reviewer for the comment and the reviewer's comment is greatly appreciated. We excluded patients who were included preoperatively but did not undergo thoracoscopic lobectomy (including wedge, segment, sleeve, or lobectomy) for various reasons.

Comment 4: If only a wedge resection was performed, which would be understandable, long term study for recurrence would also be needed.

Reply 4: We thank the reviewers for their comments and many thanks to the reviewers for their comments. In our study, patients underwent not only wedge resection of the lung, but also segmental resection, sleeve resection, and lobectomy.

Reviewer C

Comment 1: Authors reported an interesting study on anxiety related to the diagnosis of tumor nodule. I have some comment:
- authors found that patients with lower ADL had a higher anxiety. Is there also some influence on the organization of the NHS?
- authors should discuss the potential impact of internet and new technologies on the anxiety of patients (patients can find new that could increase or decrease their anxiety)
- Did the authors change something in their everyday clinical life or in the communication with patients based on the results of this paper?

Reply 1: We thank the reviewers for their comments and many thanks to the reviewers for

their comments. Anxiety is more likely to occur in patients with lower ADL, mainly for clinical staff to pay more attention to patients with poor ability to live daily lives, whether NHS organisations have an impact is unclear.
In the discussion part of the article, the influence of the Internet on patients' anxiety is added, which indeed has a great impact on patients' mood. We have modified our text as advised (see Page 7, line 209).
In daily work and life, patients with poor performance of activities of daily living (ADL), solid nodules, multifocal diseases and family history of lung cancer are given more attention, and their concerns are explained in more detail, with half of the explanation of professional knowledge and half of the psychological and emotional guidance.

Reviewer D

Qiu et al in their manuscript, “Factors influencing surgical choice and anxiety in patients with pulmonary nodules smaller than 8 mm” explore the attitudes of patients undergoing lung srgery for <8 mm nodules. Comments/questions below:

Comment 1: I applaud the intentions of this study, as the question of patient preference when faced with this type of clinical situation is interesting and understudied. However, the major limitation of this study is that there is no “control” group, or group of patients that did not undergo surgery.

Reply 1: We appreciate the comments of the reviewers and are very grateful for the comments of the reviewers. Indeed, establishing a control group can better show the comparative differences between the two groups. The study was originally designed to establish a non-surgical control group, but was conducted by discussion due to staffing shortages and other factors.

Comment 2: The other major limitations of this study are that 1) it is unclear what patients are told with regards to their nodules – who is counseling the patients? Surgeons? How many? What are patients told with regards to the recommended plan? Are different clinicians recommending different things? Does the nature of the nodule (solid vs part-solid vs GGN) affect the recommendation? This should be addressed by the study. 2) There do not appear to be any questions in the survey that assess patients baseline level of anxiety and/or personality. Some patients tend to be more anxious than others, in general. This may affect their decision to go ahead with surgery, as opposed to observation. It is critical to understand patients’ baseline personality and level of anxiety in a study about anxiety related to lung nodules.

Reply 2: We thank the reviewers for their comments and many thanks to the reviewers for their comments. It is usually the surgeon in the clinic who consults the patient and recommends basically similar, mainly based on the nature of the nodule, solid, solid or pure frosted glass, which is the most important influence. If the patient's psychological pressure is relatively large, the anxiety has affected the life, the patient believes that the condition is likely to progress. And the doctor will agree to operate on him. The anxiety of patients mainly depends on the evaluation of IES-R scale. The reliability and validity of this scale have proved its effectiveness at home and abroad, so it is feasible to judge whether their anxiety is serious according to the scale score.

Comment 3: The abstract can be refined. More information about the methods and results should be provided. Both of these sections are shorter than the “background” section; it should be the reverse.

Reply 3: We thank the reviewers for their comments and many thanks to the reviewers for their comments. The methods and results in the abstract have been supplemented. We have modified our text as advised (see Page 3, line 57).

Comment 4: “Vigilant watching” (line 95) could be reworded “observation”.

Reply 4: We thank the reviewers for their comments and many thanks to the reviewers for their comments. "Vigilant watching" has been changed to "observation". We have modified our text as advised (see Page 4, line 99).

Comment 5: The survey questions/questionnaire should be provided in the study, along with the summation of how the respondents answered these questions.

Reply 5: We thank the reviewers for their comments and many thanks to the reviewers for their comments. The content of the questionnaire is summarised in the methodology section of this paper. Readers can contact us for the questionnaire content if they need it. The way the respondents answered the questionnaire content is also mentioned in the article, by scanning the QR code and answering the questionnaire.

Comment 6: It is unclear, if the study group contained only patients with nodules < 8 mm, how only 69% of the survey participants had nodules smaller than 8 mm. Please correct.

Reply 6: We thank the reviewers for their comments and many thanks to the reviewers for their comments. We initially sent questionnaires to 338 patients after a screening round, and excluded some patients with no response, nodule size greater than 8mm, and non-surgical

patients, leaving 234 patients. We have modified our text as advised (see Page 6, line 178).

Comment 7: The statement “slightly more than 92%...” (lines 168-169) is incorrect at worst, and misleading at best. In addition, it is unclear why you have categorized ADL as “yes” or “no” in Table 2 and “totally dependent, somewhat dependent, a little reliance, and independent” in Table 1. The categories should correspond between tables.

Reply 7: We thank the reviewers for their comments and many thanks to the reviewers for their comments. Deleted "slightly". We have modified our text as advised (see Page 6, line 186).
The description of ADL in Table 1 and 2 has been uniformly processed. We have modified our text as advised (see Page 14, line 377).

Comment 8: I understand that it is not the focus of the study – however information about the surgeries that patients went through, and critically the pathology found at surgery, would be illuminating.

Reply 8: We thank the reviewers for their comments and many thanks to the reviewers for their comments. In Table 1, the postoperative nodule nature and resection scope of target patients were added. We added some data on nodule nature and excision extent (see Page 15, line 377).

Comment 9: The relative percentage/number of patients who had <8 mm nodules who opted for observation rather than surgery during the study time period should be provided. See point #1 above.

Reply 9: We thank the reviewers for their comments and many thanks to the reviewers for their comments. The study was originally designed to establish a non-surgical control group, but was conducted by discussion due to staffing shortages and other factors.

Comment 10: The discussion sections provides quite a bit of context and literature review however does not really provide an in-depth discussion about the results of this particular study. Please elaborate.

Reply 10: We thank the reviewers for their comments and many thanks to the reviewers for their comments. We have revised the discussion section as appropriate, as detailed in the resubmitted manuscript. We have modified our text as advised (see Page 8, line 239).

Comment 11: “Secrecy” as a category for patient salary in Table 1 should be reworded,

perhaps as “Did not answer” or “No answer”.

Reply 11: We thank the reviewers for their comments and many thanks to the reviewers for their comments. It has been modified in Table 1. We have modified our text as advised (see Page 14, line 377).

Comment 12: Figures 2 and 3 (and Figure 2 especially) are confusing.

Reply 12: We thank the reviewers for their comments and many thanks to the reviewers for their comments. Since the selected group is the patients receiving surgical treatment, Table 2 shows the problems that patients will pay attention to when choosing surgical treatment in the communication between doctors and patients, and Table 3 shows the psychological thoughts of patients when choosing surgical treatment. The designs were made up of surveys of a selected group of people.

Reviewer E

I have reviewed with great interest your manuscript entitled "Factors influencing surgical choice and surgical anxiety in patients with pulmonary nodules smaller than 8mm".

The subject of how surgical anxiety and fear of lung cancer influence patient decisions is not only fascinating but also highly relevant in the current medical landscape.

I found that the introduction of your manuscript successfully establishes a solid background for the research topic and clearly states the objectives. Additionally, the results section is commendable. The tables and graphics are informative and present a wealth of relevant data, which is a significant strength of this work.

However, there are also some concerns that must be addressed before considering your manuscript suitable for publication.

Comment 1: Methods: The primary concern lies in the validation of the questionnaire used for evaluation, which is the core of all your paper, this aspect requires significant enhancement to bolster the credibility of the research.

Reply 1: We thank the reviewers for their comments and many thanks to the reviewers for their comments. The anxiety of patients mainly depends on the evaluation of IES-R scale. The reliability and validity of this scale have proved its effectiveness at home and abroad, so it is

feasible to judge whether their anxiety is serious according to the scale score. We added some data on nodule nature and excision extent (see Page 15, line 377).

Comment 2: Discussion: Given the richness of the data presented, the discussion section does not fully capitalize on this. A more extensive analysis and discussion of the results are necessary to understand their broader implications fully. This section should ideally connect the findings to existing literature and delve deeper into their potential impact on clinical practice.

Reply 2: We thank the reviewers for their comments and many thanks to the reviewers for their comments. An additional in-depth discussion of the findings of the study has been added to the results section. We have modified our text as advised (see Page 8, line 239).

Comment 3: Conclusion: The conclusions drawn appear to be somewhat brief and not adequately supported by the data presented. Strengthening this section with more direct references to the findings and a clearer articulation of the study's implications would be beneficial.

Reply 3: We thank the reviewers for their comments and many thanks to the reviewers for their comments. Data support for the results has been added to the conclusion. We have modified our text as advised (see Page 10, line 287).

Comment 4: In summary: This topic and the data are of high interest. However, to be considered suitable for publication, it requires substantial revisions, particularly in the methodology and discussion sections. The validation of the questionnaire needs to be more robust, and the discussion should more thoroughly analyze the collected data and its clinical implications.

Reply 4: We thank the reviewers for their comments and many thanks to the reviewers for their comments. The methodology and discussion section of the paper have been revised. We have modified our text as advised (see Page 8, line 239).
The reliability and validity of IES-R scale have proved its validity at home and abroad, so it is feasible to judge whether the anxiety degree is serious according to the scale score.