

Review Comments-Reviewer A

- 1) First of all, the title is misleading and not strict. Relevant terms in the main text are also poorly used. The present study is a cross-sectional study, so “risk factors” cannot be used, which should be associated factors. Negative mood is also not commonly seen in psychiatry and mental health, which is depressive and anxiety symptoms in this study.

Thank you for your suggestions and we have revised the abstract according to your suggestions.

- 2) Second, the abstract is not adequate. The background did not describe what has been known on the factors associated with depression and anxiety in PGTs, the prognostic roles of depression and anxiety, and have comments on the clinical needs of this research focus. The methods did not describe the inclusion of subjects, the assessment of baseline clinical factors, follow up procedures, and outcome assessments of depressive and anxiety symptoms and prognosis outcomes. The results did not briefly report the clinical characteristics of the study sample and regression coefficients for the identified factors. Importantly, effect size measures and accurate P values must be provided to quantify the findings. The conclusion needs more detailed comments for the clinical implications of the findings.

Thank you for your suggestions and we have revised the abstract according to your suggestions. The scores and details of anxiety, depression and prognosis are described in detail in the methods of the text, and are not repeated here because of the word limit of the abstract.

- 3) Third, in the introduction of the main text is very bad and the authors provided much irrelevant information. Please review what has been known on the levels of depression and anxiety in cancers in particular PGTs and factors associated with depression and anxiety, the prognostic roles of depression and anxiety, have comments on the limitations and knowledge gaps, and clearly indicate the clinical significance of this research focus.

Thank you for your suggestions. we have revised the the introduction according to your suggestions.

- 4) Fourth, in the methodology of the main text, please describe the clinical research design, sample size estimation, time-point of the assessment of depression and anxiety, and follow up details. The authors’ sample size estimation must consider the analysis of the levels of depression and anxiety, and the analysis on their prognostic roles. The 1:10 rule of thumb for the sample size estimation is wrong for this study. The authors should use the binary outcomes of depression and anxiety by using their cut-off scores. In statistics, multiple

logistic regression and multiple Cox regression analysis should be used to analyze the prognostic roles of depression and anxiety. Please ensure $P < 0.05$ is two-sided.

Thank you for your suggestions and we have revised the the methodology of the main text according to your suggestions. Follow up of this study was performed through telephone, internet and outpatient department, among which outpatient department was the most common. Therefore, the results of follow-up in this study are reliable. The factors for the multiple liner regression were selected after adjusting potential risk factors using univariable regression models. We believe that linear regression with SAS and SDS scores can better reflect the degree of influence of risk factors. However, Cox regression is mostly used to analyze the influence of various factors on survival. However, due to limited manpower and time and short follow-up time, the postoperative survival of patients in the two groups was not studied in this study, so Cox regression was not used.

Review comments-Rviewer B

I read the paper “Associated factors of perioperative depressive and anxiety symptoms in patients with parotid gland tumor and its influence on prognosis: a cohort study” with interest. The authors concluded that PGT patients are prone to various postoperative complications and still have a high possibility of negative emotions and clinical efforts should pay attention to patients’ emotions and demeanor, the identification of relevant risk factors as early as possible, the adoption of targeted measures to alleviate patients’ anxiety and depression, and the prevention of complications, to improve the prognosis of patients. Undoubtedly, this topic is quite exciting and requires unquestionably further research. However, I believe it is a research paper that requires substantial elaboration and cannot be published in its current form. Therefore, I can’t recommend this work for publication. My comments and suggestions: 1. Title: The title definitely needs improvement. “Associated factors of perioperative depressive and anxiety symptoms...” does not seem to characterize the article’s content. “...and its influence on prognosis” – prognosis of what? Relapses? Survival of patients? Mental illness?

Thanks for your suggestion, we have revised the title.

2. Highlight Box: “Negative emotions have a significant impact on the prognosis of patients with PGT”; “Negative emotions have a significant impact on the prognosis of patients with PGT.”; “Apart from negative emotions, there are many independent risk factors for the prognosis of patients with PGT.” - prognosis of what? Relapses? Survival of patients? mental illness?

Thanks for your suggestion, we have revised the Highlight Box. Prognosis mainly refers to the occurrence of postoperative complications and postoperative quality of life.

3. Highlight Box: “identification of relevant risk factors” – what do the authors mean? “...and the prevention of complications, so as to improve their prognosis.” – how would it prevent fistula formation, Frey syndrome etc., in the postoperative period?

Thanks for your suggestion. The identification of relevant risk factors mainly includes making adequate preparation before surgery, evaluating various indicators of patients, making plans for possible intraoperative situations, paying attention to the recovery of patients after surgery, communicating with patients at any time, and eliminating various worries of patients in time. Doctors can prevent fistulas by improving the accuracy of the operation, tight suture of the residual glands during the operation, indwelling negative pressure drainage tube after the operation, good pressure dressing, and giving drugs that inhibit the secretion of the glands. In addition, Frey syndrome can be prevented intraoperatively by creating and maintaining a barrier between the postganglionic parasympathetic nerve endings in the parotid gland and the overlying skin tissue to block the growth of the mallocated nerve.

4. Abstract: “Parotid gland tumors (PGTs) are the most common salivary gland tumor.” – it depends if we are talking about benign or malignant tumors.

Thanks for your suggestion, we have revised.

5. Abstract: “...and their effects on prognosis” – Again, a prognosis of what?

Thanks for your suggestion, we have revised.

6. Abstract: Methods: Line 30: “We retrospectively analyzed 238 patients with PGT...” Line 37: “Results: Among 238 patients with PGT...” but in Methods: Line 132: “In total, 200 PGT patients admitted to the Affiliated Hospital of Jiangnan University from August 2017 to August 2021 were included in this study...” and Results: Line 215-216: “A total of 189 patients with parotid tumors were included in this study...” – in various parts of the article, 238 to 186 patients are reported. The complete inconsistency of this information.

Thanks for your suggestion. I'm sorry this was a clerical error in our writing. It has been corrected in the article. I apologize for this.

7. Introductions: Line 71-72: “must be combined with ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), and other ancillary examinations to make a clear diagnosis” – FNAB is the basis for the diagnosis of salivary gland tumors.

Thanks for your suggestion. We have added to the content.

8. Line 75-78: “This requires physicians to carefully screen the benign and malignant characteristics of parotid tumors preoperatively to determine the best treatment modality to improve the quality of life of patients after surgery.” – what the authors mean by saying “...to determine the best treatment modality”.

Thanks for your suggestion. We have modified the content and supplemented the content.

9. Line 79-82: “According to some studies (6,7), for small parotid tumors or those located in the posterior and inferior parts of the parotid gland, local excision is often performed within the normal glandular tissue, such as partial parotidectomy, subtotal parotidectomy, and limited excision.” – this sentence is completely wrong from a surgical point of view.

Thanks for your suggestion, we have deleted.

10. Line 82-84: “In recent years, endoscopic-assisted resection of benign parotid tumors is more in line with the modern concept of minimally invasive surgery than the traditional incision.: - I'm afraid I have to disagree with that. It is rather an individual report, but there is no basis for such a statement.

Thanks for your suggestion. I'm sorry that we misexpressed this sentence. We have modified the content of the article.

11. Line 89-105: no information on other complications such as: hematoma in the wound, wound infection, First Bite Syndrome

Thanks for your suggestion, we have revised.

12. Research participants: “...Exclusion criteria: (I) patients who were discharged from the hospital without a clear pathological diagnosis or incomplete information”. – How long do patients stay in the hospital after surgery? – in my experience, the results of the histopathological examination are awaited, and usually, every patient goes home without a clear pathological diagnosis and only learns about the test results on an outpatient basis.

Thanks for your suggestion. I'm sorry there is a clerical error here. We have modified the content of the article.

13. Line 152-155: WHOQOL is used to determine the quality of life of patients and not to assess the prognosis, as the authors write in Line 186-187. Again: prognosis of what?

Thanks for your suggestion, we have revised.

14. Postoperative recurrence: Line 194-195: “...re-growth of the tumor as primary cancer...” – I understand that recurrences of benign tumors are not considered?

Thanks for the question. The recurrence included benign parotid gland tumors.

Review Comments-Reviewer C

1. Table 1: Please define SD in table footnote.

Thank you, we have revised.

2. Table 2-3: Please define SE in table footnote.

Thank you, we have reviewed.

3. Table 4: Please define SD in table footnote.

Thank you, we have reviewed.

4. Table 6: Please define SD in table footnote.

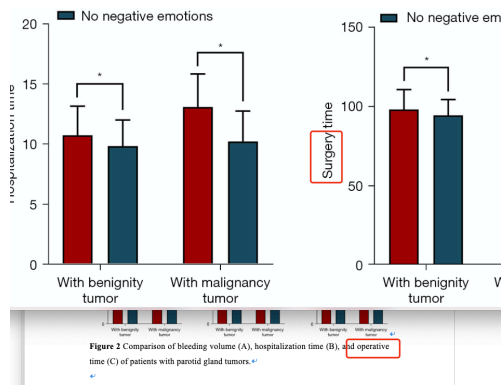
Thank you, we have reviewed.

5. Table 7: Please define SE in table footnote.

Thank you, we have reviewed.

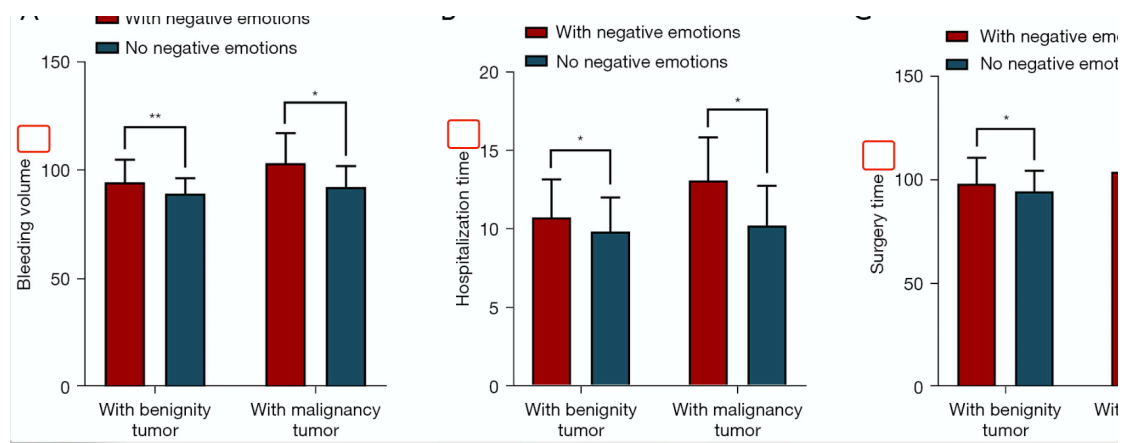
6. Figure 2

a. Figure 2C: Check if it should be unified.



Thank you, we have unified.

b. Figure 2c: Please add units for Y-axis.



c. Please define “*, **” in figure legends.

Thank you, we have defined.

7. Figure 3: Please define “*” in figure legends.

Thank you, we have defined.