
Peer Review File

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Review Comments

1) In the abstract, please indicate the clinical needs for summarizing the available evidence in the background, describe the methods for evaluating the quality of the evidence and how the evidence was summarized in the methods, provide the best evidence for the effective EBM-based prevention of intracranial infection after endoscopic endonasal transsphenoidal pituitary neoplasm resection in the results, and have a more detailed comment for the clinical implication of the findings.

Reply 1) : We feel great thanks for your professional review work on our article. As you are concerned, there are several problems that need to be addressed. According to your nice suggestions, we have made extensive corrections to our previous draft, the detailed corrections are listed below.

In response to the reviewer's comments about the background, we have indicated the clinical needs for summarizing the available evidence in the background section. We have made the following additions: However, the quality of the evidence for existing preventive measures varies significantly, the related content is scattered, and the scope is broad. Nurses lack the specificity and targeted guidance for preventing intracranial infections after EETS surgery, nurses find that evidence necessitates screening and identification during its application, and it challenging to utilize current tool for guiding clinical practice. Thus, the protocols for preventing intracranial infection after EETS required further refinement.

Changes in the text: See Page 2, line 41-47.

In response to the reviewer's comments about the methods, we have described the methods for evaluating the quality of the evidence and how the evidence was summarized in the methods. We have made the following additions: Then conduct literature screening and evaluation, extract and summarize relevant evidence on perioperative prevention of intracranial infection after EETS from the selected literature. Two researchers applied the JBI levels of evidence preappraisal system (2014 version) to categorize the included evidence into five levels (level 1a being the highest and level 5c being the lowest).

Changes in the text: See Page 2, line 62-67.

In response to the reviewer's comments about the results, we have made the following additions: Ultimately, 24 pieces of best evidence for preventing intracranial infections after endoscopic endonasal transsphenoidal surgery for pituitary adenomas were formed, and they will be divided into four categories.

Changes in the text: See Page 3, line 70-72.

In response to the reviewer's comments about the findings, we have a more detailed comment for the clinical implication. We have made the following additions: Summary of the best evidence for preventing intracranial infections following EETS plays a critical role in enhancing surgical success, optimizing patient management, fostering multidisciplinary collaboration, advancing research, and improving patient satisfaction.

Changes in the text: See Page 3, line 76-80.

2) In the introduction, the authors need to clarify the clinical needs for this summary and have a general review of the methodology of evidence summary.

Reply 2) : We feel great thanks for your professional review work on our article. According to your nice suggestions, we have made corrections to our previous draft, the detailed corrections are listed below.

However, these intervention and management strategies have developed from comprehensive nursing care for diseases and nursing measures for other complications, the quality of the evidence supporting these practices varies significantly, the related content is scattered, and the scope is broad. They lack the specificity and targeted guidance for preventing intracranial infections after EETS surgery. Consequently, nurses find that evidence necessitates screening and identification during its application, and it challenging to utilize current tool for guiding clinical practice. Thus, the protocols for preventing intracranial infection after EETS required further refinement. This study thus aimed to use evidence-based nursing research methods, search for relevant literature at home and abroad, conduct literature screening and evaluation, extract and summarize relevant evidence on perioperative prevention of intracranial infection after EETS from the selected literature.

Changes in the text: See Page 4, line 124-136.

3) In the methodology of the main text, please detail the 6S model and specify how the evidence was summarized. It seems the authors only assessed the evidence.

Reply 3) : We feel great thanks for your professional review work on our article. According to your nice suggestions, we have made corrections to our previous draft, the detailed corrections are listed below.

We have detailed the 6S model, “of the pyramid, starting with 'systems' in the 6S model, followed by summaries, synopses of syntheses, syntheses, synopses of studies, and finally considering studies. ” was added.

Changes in the text: See Page 5, line 160-162.

Regarding how the evidence summary was conducted, we have detailed this process on page 5, lines 158-165 of the original manuscript. Below is the original content for your reference: “Two researchers (W, C) independently read the included literature and

extracted evidence item by item, which was then checked and classified by a third researcher (Y), and finally summarized. During the integration process of evidence content, when evidence was complementary to each other, it could be fused into a single piece of evidential information according to the logical relationship of the evidence; when the content of evidence conflicted, it was necessary to follow the principle of giving priority to the most recently published authoritative literature, evidence-based evidence, and high-quality evidence.”

Should you require further elaboration, please let me know, and I will promptly make the necessary revisions.

- 4) Please also consider to cite several related papers: 1.Huang Y, Qin L, Lv H, Lv S, Lu Y. Neuronavigation-assisted pituitary neuroendocrine tumor resection: a systematic review and meta-analysis. *Quant Imaging Med Surg* 2024;14(7):5012-5027. doi: 10.21037/qims-23-1570. 2. Deng C, Gu L, Sun J, Feng M, Bao X. Intracranial seeding of pituitary neuroendocrine tumor: a case report. *Gland Surg* 2024;13(6):1108-1115. doi: 10.21037/gS-24-36.

Reply 4): We think this is an excellent suggestion. We have cited related papers in the proper places of the revised manuscript.

Changes in the text: See Page 12, line 396-397, 400-402.