

Dear editor and reviewers,

Thank you for reading the article and giving constructive comments. These comments are the weaknesses of this article. We carefully read the comments of the reviewers and made detailed modifications to this article, as follows:

Reviewer# 1

Dear Authors, Thank you for conducting this study. The presentation of the 4 cases became more powerful with the newly added two tables. However, the following notes should be revised to improve the presentation of the article. Best regards

1. The title exceeds the upper limit of the words as required by the journal (it consists of 19 words).
2. Abstract:
 - a. A case summary is not sufficient in describing the cases.
 - b. The conclusion is too long to follow.
3. Introduction: This section describes only the incidence of ICA injuries with different neurosurgical approaches. It doesn't give us anything about how they managed, particularly with regard the anesthesiologist's point of view. Therefore, the benefit of the article is not clearly stated.
4. Case presentation
 - a. Only one figure for one case. Besides, the panels of the figure require labeling with arrows.
 - b. Table 1:
 1. I suggest the following legend "The demographic and clinical characteristics of the 4 patients".
 2. You should write the full term of the abbreviation "ICA".
 3. yo→y (year).
 - c. Table 2:
 1. It is better to change the words "death and recovery" to "died and recovered".
 2. I suggest the following legend "Anesthesia management for subsequent surgery and the clinical outcome of the 4 patients".
 3. Urine: you mean urine output.
5. Discussion: I suggest that the last paragraph becomes the conclusion and you can delete the conclusion section because it is too long to follow.

Response: Thanks for your comments.

1. We changed the title to "Emergency treatment and anesthesia management of internal carotid artery injury during neurosurgery: Report of 4 cases", which contains 16 words.

2. Abstract: a. We revised the case summary by adding the similarities and differences in anesthesia management of the 4 patients. b. We simplified the conclusion.

3. Introduction: We simplified the description of the incidence of ICA injuries with different neurosurgical approaches and added the neurosurgeon's management (Nasal packing, muscle patches, direct vessel closure, and endovascular techniques have been described as useful strategies for managing ICA bleeds) and added one citation (citation 6). We added "especially in the aspect of circulation and airway management when patients need transit for further endovascular treatment" in the last sentence of this paragraph which is the major concern for anesthesiologists.

4. Case presentation a. Only 1 patient, who had the most severe clinical symptoms after the onset of ICA injury and died finally, had complete preoperative and postoperative time-varying imaging data to make a comparison. The other 3 patients had good clinical outcomes. That's why we only showed one figure for one case. And the arrows were added in the figure. b. Table 1: We made changes according to your suggestion. It is very helpful, thanks. The title was changed to "The demographic and clinical characteristics of the 4 patients". The abbreviation "ICA" and "yo" were full spelled. c. Table 2: The words "death and recovery" were changed to "died and recovered" and "Urine" was changed to "Urine output". The legend was also improved as your suggestion.

5. Your suggestion about the discussion is very helpful, thanks. I simplified the discussion and deleted the conclusion section. Thanks.

Reviewer# 2

Dear Authors, Although the study is technically sound, the study doesn't add new things to the routine management of the catastrophic ICA injuries. Best regards.

Response: Thanks for your comments. Iatrogenic injury to the internal carotid artery (ICA) is one of the most feared complications in skull base

neurosurgery, especially in endoscopic endonasal surgery. Many neurosurgeons have reported this complication from different perspectives, including retrospective analysis of the incidence and common sites, treatment, and even simulated training.

However, there are few articles on the management of ICA injury from the perspective of anesthesiologists. How to deal with this complication deserves the attention of anesthesiologists as well. As mentioned in a paper (citation 12), prevention is the best management strategy. Preoperative risk assessment as long as circulation and airway management during the operation and the timing of extubation after the operation is included in perioperative management, which is one of the works of anesthesiologists. After the onset of ICA injury, different treatments can lead to different prognoses. Compared with direct packing or suture, endovascular treatment can better display cerebral vascular compensation, and appropriate treatment can be chosen to reduce the incidence of cerebral ischemia. Endovascular treatment must be carried out in a catheter or hybrid operating room, that needs patients' transit. Avoiding circulation collapse and ensuring airway safety in transit and subsequent neurosurgical procedures is crucial. Therefore, although the complication of ICA injury has been discussed, this paper still adds our own opinions acting as anesthesiologists. We hope that in future clinical work, if other anesthesiologists encounter similar situations, they can deal with them calmly.

Reviewer# 3

The manuscript describes management strategies in cases of intraoperative internal carotid artery (ICA) injuries. The authors were able to elaborate the appropriate measures taken to manage internal carotid artery injuries in 4 cases of ICA injuries. No significant grammatical or spelling errors were found. Overall, a well-written article.

Response: Thanks for your comments.

Best regards

Jie Wang