

Reviewer #1:

Scientific Quality: Grade A (Excellent)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors: Wonderful paper. Taking the three related case and putting them together is a great way to share clinical research. Each case is well reported. Each case adds to the overall purpose of the paper as sharing how perioperative stroke can occur.

Response: Thank you so much for your comment!

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: The authors present a case series of 3 subjects who experienced devastating stroke following thoracic procedures. They then review some of the risk factors specific to CVA. I would like to see a little more specific information regarding issues related to thoracic procedures as detailed below. In presenting the cases and review, I would like to see what is classic overall about risk, timing and consequences of perioperative stroke. Then, what is particular to the group of patients undergoing thoracic procedures (not bypass and related ones which have their own special set of risks and this should be mentioned here).

Response: The incidence of perioperative acute stroke after pulmonary lobectomy or pneumonectomy is around 0.4%-0.6%. However, the risk factors for postoperative stroke after thoracic procedures have not been studied yet. In the Discussion section, we mentioned previous stroke history existed in all three patients and it was a risk factor for postoperative stroke.

Then, how did these cases differ or confirm the expectations of the risk factors enumerated previously. This format is mostly adhered to but a few places might require some addition elucidation.

Response: Thank you for your suggestion. Considering only three cases were reported, it is difficult to make statistical analysis. Thus, we can't confirm risk factors. Larger series of patients might be needed to make the conclusion.

In the Discussion, the authors immediately speak of morbidity of stroke but never mention incidence, much less anything that is known for their particular population (which is where the cardiovascular subgroup could also be contrasted).

Response: Thank you for your suggestion. Please see Introduction: The incidence of perioperative acute stroke after pulmonary lobectomy or pneumonectomy is around 0.4%-0.6%.

Also, nothing was mentioned about timing in general. My impression was that all of the cases described had it occur very early in perioperative setting.

Response: The timing of postoperative stroke has been mentioned in the manuscript. They did occur very early after operation. Case 1 occurred three hours after the surgery, case 2 occurred ten hours after the surgery, case 3 occurred immediately after the surgery at the postanesthetic care unit.

Also, while mentioning the hypercoagulable state that often accompanies surgery due to elevations of tissue factor to initiate the clotting cascade, this is ignored in the Discussion.

Response: Thank you for your suggestion and it was mentioned in the Introduction: Surgical patients are vulnerable to stroke due to alterations in the coagulation system resulting from stress responses to surgery.

Afib is also problematic because of the need to hold anti-coagulants for surgery. Also, what is/should be the typical timecourse for restarting them? In neurosurgery, this is a huge problem. What is the general consensus in thoracic surgery?

Response: We agree it is an important problem. But all patients in our report didn't suffer Afib. To our knowledge, we don't think there is a general consensus about the timing of restarting anti-coagulants in thoracic surgery, it depends on the risk of bleeding and the benefits of anti-coagulants.

In the Discussion, my suggestion is to be specific when referring to specific data from the case. For example, when stating that hypotension occurred, simply state that the patient experienced a 20 min period with a bp of 90/60 and let the reader better process this. Similarly with the reference to hypoxemia in the same patient. Better to state that a 5 min period with a sat O₂ of 85% occurred.

Response: Thank you for your suggestion and these have been corrected in the manuscript.

In the Discussion, in the paragraph that begins Remifen.... The paragraph is not about remifentanyl. It is about the use of multimodal approaches. Also, it would appear that the multimodal approaches that the authors have in mind are those that contain a regional adjunct, so state that explicitly. While such an approach may mitigate high concentrations of volatile

anesthetic that could affect pulmonary matching, they could and often do lead to decreases in blood pressure.

Response: Thank you for your suggestion and these have been corrected in the manuscript.

Some minor issues: bronchoscope -> bronchoscopy in several places coma-> comatose infarct -> infarction

Response: Thank you for your suggestion and these have been corrected in the manuscript.

4 LANGUAGE QUALITY

Please resolve all language issues in the manuscript based on the peer review report. Please be sure to have a native-English speaker edit the manuscript for grammar, sentence structure, word usage, spelling, capitalization, punctuation, format, and general readability, so that the manuscript's language will meet our direct publishing needs.

5 EDITORIAL OFFICE'S COMMENTS

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) *Science editor:* 1 Scientific quality: The manuscript describes a case report of perioperative massive cerebral stroke in thoracic patients. The topic is within the scope of the WJCC. (1) Classification: Grade A, C; (2) Summary of the Peer-Review Report: Taking the three related case and putting them together is a great way to share clinical research. However, the author needs to add some specific information regarding issues related to thoracic procedures and make a revision according to the comments of reviewer 00506214; and (3) Format: There is 1 figure. A total of 21 references are cited, including 8 references published in the last 3 years. There are no self-citations. 2 Language evaluation: Classification: Grade A, B. The authors did not provide the Non-Native Speakers of English Editing Certificate. 3 Academic norms and rules: The authors provided the Signed Informed Consent Form(s), and the CARE Checklist. No academic misconduct was found in the CrossCheck detection and the Bing search. 4 Supplementary comments: This is an unsolicited manuscript. No financial support was obtained for the study. The topic has not previously been published in the WJCC. 5 Issues raised: (1) **The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor;** (2) The "Case Presentation" section was not written according to the Guidelines for Manuscript Preparation. Please re-write the "Case Presentation" section, and add the "FINAL DIAGNOSIS", "TREATMENT", and "OUTCOME AND FOLLOW-UP" sections to the main text, according to the Guidelines and Requirements for Manuscript Revision; and (3) PMID and DOI numbers are missing in the reference list. Please provide

the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout. 6 Re-Review: Required. 7 Recommendation: Conditional acceptance.

Response: Thank you for your suggestion and these have been corrected in the manuscript.

(2) Editorial office director: I have checked the comments written by the science editor.

(3) Company editor-in-chief: I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. However, the quality of the English language of the manuscript does not meet the requirements of the journal. Before final acceptance, the author(s) must provide the English Language Certificate issued by a professional English language editing company. Please visit the following website for the professional English language editing companies we recommend: <https://www.wjgnet.com/bpg/gerinfo/240>.

Response: Thank you for your suggestion, the manuscript has been edited by the editors from AJE, please see attached for the certificate.