

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 67265

Title: Anesthetic technique for awake artery malformation clipping with motor evoked

potential and somatosensory evoked potential: A case report

Reviewer's code: 03999836

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Czech Republic

Author's Country/Territory: China

Manuscript submission date: 2021-04-19

Reviewer chosen by: Jin-Lei Wang

Reviewer accepted review: 2021-05-10 06:50

Reviewer performed review: 2021-05-14 18:20

Review time: 4 Days and 11 Hours

Scientific quality	[] Grade A: Excellent [] Grade B: Very good [Y] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Language quality	 [] Grade A: Priority publishing [Y] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	 [] Accept (High priority) [] Accept (General priority) [] Minor revision [Y] Major revision [] Rejection
Re-review	[Y]Yes []No
Peer-reviewer statements	Peer-Review: [] Anonymous [Y] Onymous Conflicts-of-Interest: [] Yes [Y] No



SPECIFIC COMMENTS TO AUTHORS

The aim of the reviewed manuscript titled Anesthetic technique for awake artery malformation clipping with motor evoked potential and somatosensory evoked potential is to describe the use of awake craniotomy technique for the clipping of a brain AVM located in the territory of the anterior cerebral artery on the right side. Regarding the Core Tip based on own experience with awake craniotomy technique it is impossible to perform awake craniotomy in a patient requiring respiratory support or even controlled ventilation in particular in case when speech or memory monitoring is needed. Therefore I suggest reformulatting the sentence Awake craniotomy was performed successfully with spontaneous respiration in this patient - e.g. uneventfully in fully cooperative patient with stable neurological status. In the Introduction section the main aim of awake techniques - preservation of functions that can not be monitored in asleep patients (speech, memory,....) should be underlined. Moreover, in the vast majority of AVM cases the simple term clipping is misleading – the principle of surgery is AVM nidus removal, not only the clipping of the feeders. The Case Presentation is well written, but the indication of surgery for asymptomatic, incidentally found small AVM in 62 years old lady without any presented evidence of previous bleeding is at least disputable. Similarly the submitted single projection (Fig.1) 3D DSA does not depict the lesion well – at least 2 projections of DSA images together with MRI scans (axial and sagital for the evaluation of the AVM relationship to the central area or the potential vessels en passage potentially supplying the motor area). Finally also the advantages of surgery as a preferred treatment mode when compared with endovascular treatment or radiosurgery should be discussed for this particular case. The description of anaesthesia technique is adequate (from the neurosurgical point of view) - but the description of the surgery as a simple clipping of the supplying vessels also needs clarification - without



AVM nidus removal ??? Similarly the surgical result (Fig.4) should be illustrated by more descriptive scans. The chapter Discussion is well written from the neuroanaesthesia point, hovewer as a neurosurgeon I would expect some remarks about surgical aspects of AVMs using awake craniotomy techniques – potential problems wth bleeding control, intraoperative oedema, epileptic seizure, maybe better prevention of postoperative normal perfusion pressure breakthrough, to name at least some of them. However I fully agree that mastering the awake craniotomy techniques for less common indications (e.g. AVM) has a great potential for the reduction of early neuropsychological morbidity. Finally after major revision (mainly when talking about neurosurgical aspects of the presented case) the paper deserves further review and reconsideration for publication.



RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases Manuscript NO: 67265 Title: Anesthetic technique for awake artery malformation clipping with motor evoked potential and somatosensory evoked potential: A case report Reviewer's code: 03999836 Position: Peer Reviewer Academic degree: MD Professional title: Doctor Reviewer's Country/Territory: Czech Republic Author's Country/Territory: Czech Republic Author's Country/Territory: China Manuscript submission date: 2021-04-19 Reviewer chosen by: Jia-Ru Fan Reviewer accepted review: 2021-07-15 08:39 Reviewer performed review: 2021-08-01 07:15 Review time: 16 Days and 22 Hours []Grade A: Excellent [Y]Grade B: Very good []Grade C: Good

Scientific quality	[] Grade A: Excellent [Y] Grade B: Very good [] Grade C: Good [] Grade D: Fair [] Grade E: Do not publish
Language quality	 [] Grade A: Priority publishing [Y] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	 [] Accept (High priority) [Y] Accept (General priority) [] Minor revision [] Major revision [] Rejection
Peer-reviewer statements	Peer-Review: [Y] Anonymous [] Onymous Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS



The key points of my review were : - the issue of awake craniotomy in a patient requiring respiratory support or even controlled ventilation - satisfactorily answered and corrected in the Core Tip section. I accept that the main topic of the paper was neuroanaesthesia in this particularly interesting case. - in the Introduction section the main aim of awake techniques - preservation of functions that can not be monitored in asleep patients (speech, memory,....) should be underlined - the authors have modified the discussed sentence as suggested another point of the review were the surgical aspects - I the vast majority of AVM cases the simple term clipping is misleading - the principle of surgery is AVM nidus removal, not only the clipping of the feeders. The Case Presentation is well written, but the indication of surgery for asymptomatic, incidentally found small AVM in 62 years old lady without any presented evidence of previous bleeding is at least disputable. but the description of the surgery as a simple clipping of the supplying vessels also needs clarification - without AVM nidus removal ??? the problem has been clarified adequately and absolutely satisfactorily from the neurosurgeon/s perspective, although the main topic of the paper are neuroanaesthesia aspects . : The adequacy of preoperative and postoperative neuroradiological data and photodocumentation - well selected scans added - The last comment - surgical aspects of AVMs using awake craniotomy techniques - potential problems with bleeding control, intraoperative oedema, epileptic seizure, maybe better prevention of postoperative normal perfusion pressure breakthrough, to name at least some of them - also adequately answered from neurosurgical point of view Final conclusion - all my remarks and querries has been adequately addressed and therefore I can gladly recommed the paper for publication. Peer review report's scientific quality classification after review Grade A - Excellent.