



Editorial: Update on Multidisciplinary Management of Surgical Neurovascular Pathologies

Sabino Luzzi^{1,2*}, Alfio Spina³ and Alice Giotta Lucifero¹

¹Neurosurgery Unit, Department of Clinical-Surgical, Diagnostic and Pediatric Sciences, University of Pavia, Pavia, Italy, ²Neurosurgery Unit, Department of Surgical Sciences, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy, ³Department of Neurosurgery and Gamma Knife Radiosurgery, IRCCS San Raffaele Scientific Institute, Vita-Salute San Raffaele University, Milan, Italy

Keywords: neurosurgery, surgical neurovascular pathologies, neurovascular, surgical procedures, arteriovenous malformations

Editorial on the Research Topic

Update on Multidisciplinary Management of Surgical Neurovascular Pathologies

Neurovascular pathology represents one of the most important problems of neurosurgical practice. With the advancement of knowledge and technology, the updating of skills and treatment strategies for these very different pathologies is of fundamental importance. This Special Issue aims to provide the elements of a more updated vision of the pathology, while also considering multidisciplinary aspects that cannot be ignored.

We want to warmly thank all the Authors who contributed to the Research Topic “Update on Multidisciplinary Management of Surgical Neurovascular Pathologies” with their valuable articles.

In the original research “*Optic Foraminotomy for Clipping of Superior Carotid-Ophthalmic Aneurysms*” (1), Dr. Baldoncini et al. stressed the advantages of the optic foraminotomy for clip ligation of carotid-ophthalmic aneurysms. Dr. Chen and co-workers highlighted the advantages of performing direct carotid artery exposure for acute cerebral infarction in a hybrid angiography suite in their article titled “*Direct Carotid Artery Exposure for Acute Cerebral Infarction in Hybrid Angiography Suite: Indications and Limitations*” (2). Dr. Tanabe and colleagues, in the original article “*Staged Hybrid Techniques with Straightforward Bypass Surgery Followed by Flow Diverter Deployment for Complex Recurrent Middle Cerebral Artery Aneurysm*” (3), described their hybrid technique consisting of flow replacement bypass and flow diverter deployment for complex recurrent middle cerebral artery aneurysms. In their article “*Delayed Progressive Mass Effect After Secured Ruptured Middle Cerebral Artery Aneurysm: Risk Factors and Outcomes*” (4), Dr. Li and coworkers explored the risk and predictive factors of poor outcomes for those patients with a progressive mass effect after endovascular or surgical treatment of ruptured MCA aneurysms and underwent salvage surgery. In the article “*The different fates of three aneurysms: Diagnosis and treatment strategies for unruptured intracranial aneurysms with other intracranial diseases*” (5), Dr. Gaochao Guo and co-workers analyzed the possible treatment strategies for intracranial aneurysms complicated by other diseases in three different clinical scenarios. Lastly, in their interesting manuscript “*Monocyte count on admission*

OPEN ACCESS

Edited by:

Philipp Taussky,
The University of Utah, United States

*Correspondence:

Sabino Luzzi
sabino.luzzi@unipv.it

Specialty section:

This article was submitted to
Neurosurgery, a section of the journal
Frontiers in Surgery

Received: 19 April 2022

Accepted: 27 April 2022

Published: 07 June 2022

Citation:

Luzzi S, Spina A and Giotta Lucifero A
(2022) Editorial: Update on
Multidisciplinary Management of
Surgical Neurovascular Pathologies.
Front. Surg. 9:923493.
doi: 10.3389/fsurg.2022.923493

is predictive of shunt-dependent hydrocephalus after aneurysmal subarachnoid hemorrhage” (6), Dr. Cuoco and colleagues interestingly found that monocyte count $\geq 0.80 \times 10^3/\mu\text{L}$ at admission predicts shunt-dependent hydrocephalus in patients with aneurysmal subarachnoid hemorrhage.

All these articles contributed to furtherly expanding the volume of knowledge about the complex field of neurovascular pathology, this point is the main target of this Special Issue.

We appreciated the rigorous methodology and brilliant discussions of each study. Moreover, we appreciated the effort

of the Reviewers who supported the peer review process. Proud of the commendable work done by all the eminent Contributors, we want to thank them once again, along with Frontiers of Neurosurgery, for the great opportunity to have edited this Special Issue.

AUTHOR CONTRIBUTIONS

All authors contributed to manuscript revision, read, and approved the submitted version.

REFERENCES

- Baldoncini M, Luzzi S, Giotta Lucifero A, Flores-Justa A, González-López P, Campero A, et al. Optic foraminotomy for clipping of superior carotid-ophthalmic aneurysms. *Front Surg.* (2021) 8:681115. doi: 10.3389/fsurg.2021.681115
- Chen CC, Chen CT, Wu YM, Hsieh PC, Yeap MC, Chang CH, et al. Direct carotid artery exposure for acute cerebral infarction in hybrid angiography suite: indications and limitations. *Front Surg.* (2021) 8:819053. doi: 10.3389/fsurg.2021.819053
- Tanabe J, Nakahara I, Matsumoto S, Morioka J, Hasebe A, Watanabe S, et al. Staged hybrid techniques with straightforward bypass surgery followed by flow diverter deployment for complex recurrent middle cerebral artery aneurysms. *Front Surg.* (2022) 9:824236. doi: 10.3389/fsurg.2022.824236
- Li YC, Chen CC, Chen CT, Tu PH, Yeap MC, Wu YM, et al. Delayed progressive mass effect after secured ruptured middle cerebral artery aneurysm: risk factors and outcomes. *Front Surg.* (2022) 9:852576. doi: 10.3389/fsurg.2022.852576
- Guo G, Zhao L, Wu R, Xue B, Zhang S, Liang H, et al. Case Report: The different fates of three aneurysms: diagnosis and treatment strategies for unruptured intracranial aneurysms with other intracranial diseases. *Front Surg.* (2022) 9. doi: 10.3389/fsurg.2022.863718
- Cuoco JA, Williams EL, Klein BJ, Witcher MR, Marvin EA, Patel BM, et al. Monocyte count on admission is predictive of shunt-dependent hydrocephalus after aneurysmal subarachnoid hemorrhage. *Front Surg.* (2022) 9:879050. doi: 10.3389/fsurg.2022.879050

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Luzzi, Spina and Giotta Lucifero. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.