

Editors' Pick in November 2023

Moonyoung Chung

Managing Editor, Journal of Korean Neurosurgical Society; Department of Neurosurgery, Soonchunhyang University Bucheon Hospital, Soonchunhyang University, Bucheon, Korea

In this issue, 14 articles are published including three review articles, one laboratory research, eight clinical studies, and two case reports. Among these articles, the Editorial Board would like to introduce two clinical studies. One is a prospective randomized controlled trial to evaluate effect of intra-operative scalp block procedure in improving recovery after surgery. The other is retrospective cohort study on elderly chronic subdural hematoma patients whose medical records were acquired in five centers of authors.

Effects of scalp nerve block on the quality of recovery after minicraniotomy for clipping of unruptured intracranial aneurysms : a randomized controlled trial²⁾

Postcraniotomy headache could be bothersome problem for both patients underwent brain surgery and surgeons performing the surgery¹⁾. Even if surgical procedure itself conducted properly, a patient might feel discomfort if there was postoperative headache that was not existed before surgery³⁾. The authors performed prospective randomized controlled trial comparing effect of scalp nerve blocks (SNB) before scalp incision to conventional management in aspect of better recovery from craniotomy in 52 patients who underwent clipping of unruptured intracranial aneurysm²⁾. The authors included factors associated with postoperative recovery, including the

quality of recovery (QoR)-40 score, pain scale, opioid consumption, and postoperative nausea and vomiting.

They reported that QoR-40 score was not significantly different between the SNB and control groups but small differences in one and two days after surgery. On the other hands, postoperative pain scale within 3–12 hours after surgery and total amount of opioid consumption less than 3 hours were significantly less severe in the SNB group. It seems like that small number of patients might affect these subtle differences between the SNB and control groups. As addressed in discussion section, the authors also know that sample size included in this study is too small for a certain conclusion. However, it is noteworthy that postoperative pain score and opioid consumption were significantly lowered in spite of this small sample size.

Balancing bleeding risk and thromboembolic complications in elderly chronic subdural hematoma patients undergoing burr hole trephination : a multicenter retrospective cohort study and review of literature⁴⁾

Chronic subdural hematoma is one of the most common disorders that neurosurgeons encounter in clinical conditions^{5,6)}. Even though a delayed hemorrhage hypothesis following previous minor trauma is a well-known mechanism of chronic subdural hematoma, there are many chronic subdural

• Received : October 23, 2023 • Revised : October 30, 2023 • Accepted : October 30, 2023

• Address for correspondence : **Moonyoung Chung**

Department of Neurosurgery, Soonchunhyang University Bucheon Hospital, Soonchunhyang University, 170 Jomaru-ro, Wonmi-gu, Bucheon 14585, Korea
 Tel : +82-32-621-6822, Fax : +82-32-621-5018, E-mail : m.chung@schmc.ac.kr, ORCID : <https://orcid.org/0000-0003-4733-6321>

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

hematoma without reliable causes including previous trauma history⁸⁾. In cases without any exact causes, burr-hole trephination with indwelling drainage catheter is a widely accepted treatment strategy for chronic subdural hematoma⁵⁾. Because use of antithrombotic agent might be one of probable cause of chronic subdural hematoma, discontinuation of such a medicine that used to be prescribed for prevention of cerebrovascular and cardiovascular diseases could be an important issue especially for old age patients⁷⁾.

The authors retrospectively review medical records of 462 patients who underwent burr-hole trephination for chronic subdural hematoma⁴⁾. They reported that intake history of antithrombotic agents did not significantly increase risks of recurrences of chronic subdural hematoma and reoperations after initial burr-hole drainage. Moreover, there was no statistical correlation between use of antithrombotic agents and increases of morbidity and mortality. Based on these observations, the authors concluded that maintenance of antithrombotic agent might be recommended for patient with chronic subdural hematoma considering the burr-hole drainage surgery. Analyzing surgical outcome in aspect of evidence based medicine is not an easy work especially for such an emergency based operation⁷⁾. It is considered that retrospective cohort study with multicenter medical records might be the most feasible alternatives to overcome such a limitation.

The author also reviewed thromboembolic complication related to use of antithrombotic agents and chronic subdural hematoma. They found that most study emphasized early resumption of antithrombotic agents after surgical intervention for chronic subdural hematoma. Because cardiovascular disease is the major cause of death for old age⁶⁾, the author argued that continuous use of antithrombotic agent is recommended for prevention of adverse cardiovascular events after surgical intervention.

AUTHOR'S DECLARATION

Conflicts of interest

No other potential conflict of interest relevant to this article was reported.

Author contributions

Conceptualization : MC; Formal analysis : MC; Methodology : MC; Funding acquisition : MC; Writing - original draft :

MC; Writing - review & editing : MC

Data sharing

None

Preprint

None

ORCID

Moonyoung Chung <https://orcid.org/0000-0003-4733-6321>

• Acknowledgements

This work was supported by the Soonchunhyang University Research Fund.

References

1. Bello C, Anderegg L, Luedi MM, Beilstein CM : Postcraniotomy headache: etiologies and treatments. **Curr Pain Headache Rep** 26 : 357-364, 2022
2. Choi S, Choi YH, Lee HS, Shin KW, Kim YJ, Park HP, et al. : Effects of scalp nerve block on the quality of recovery after minicraniotomy for clipping of unruptured intracranial aneurysms : a randomized controlled trial. **J Korean Neurosurg Soc** 66 : 652-663, 2023
3. de Oliveira Ribeiro Mdo C, Pereira CU, Sallum AM, Martins-Filho PR, Desantana JM, da Silva Nunes M, et al. : Immediate post-craniotomy headache. **Cephalalgia** 33 : 897-905, 2013
4. Eun J, Ahn S, Lee MH, Choi JG, Park JS, Cho CB, et al. : Balancing bleeding risk and thromboembolic complications in elderly chronic subdural hematoma patients undergoing burr hole trephination : a multicenter retrospective cohort study and literature review. **J Korean Neurosurg Soc** 66 : 726-734, 2023
5. Feghali J, Yang W, Huang J : Updates in chronic subdural hematoma: epidemiology, etiology, pathogenesis, treatment, and outcome. **World Neurosurg** 141 : 339-345, 2020
6. Luca AC, David SG, David AG, Țarcă V, Pădureț IA, Mîndru DE, et al. : Atherosclerosis from newborn to adult-epidemiology, pathological aspects, and risk factors. **Life (Basel)** 13 : 2056, 2023
7. Mehta V, Harward SC, Sankey EW, Nayar G, Codd PJ : Evidence based diagnosis and management of chronic subdural hematoma: a review of the literature. **J Clin Neurosci** 50 : 7-15, 2018
8. Tamura R, Sato M, Yoshida K, Toda M : History and current progress of chronic subdural hematoma. **J Neurol Sci** 429 : 118066, 2021