

Letter to Editor



Letter to the Editor: Clinical and Radiologic Outcomes of Single Burr Hole Drainage and Mini-craniotomy in the Treatment of Inhomogeneous Chronic Subdural Hematoma: A Retrospective Study (*Korean J Neurotrauma* 2022;18:208-220)

Joonho Byun

Department of Neurosurgery and Brain Tumor and Skull Base Surgery Center, Korea University Guro Hospital, Korea University College of Medicine, Seoul, Korea

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Address for correspondence:
Joonho Byun

Department of Neurosurgery and Brain Tumor and Skull Base Surgery Center, Korea University Guro Hospital, Korea University College of Medicine, 148 Gurodong-ro, Guro-gu, Seoul 08308, Korea.
Email: drjunho2@gmail.com

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ORCID iDs

Joonho Byun
<https://orcid.org/0000-0003-0687-3286>

Conflict of Interest

The author has no financial conflicts of interest.

Dear Editor,

Thank you for giving me the opportunity to review the paper titled “Clinical and Radiologic Outcomes of Single Burr Hole Drainage and Minicraniotomy in the Treatment of Inhomogeneous Chronic Subdural Hematoma: A Retrospective Study.”³⁾

According to the authors, burr hole drainage is more effective than minicraniotomy in treating inhomogeneous chronic subdural hematoma (CSDH). The neomembrane-neovascularization theory of CSDH development suggests that multistage hemorrhage CSDH may be a common form of the condition.^{1,5)}

Multistage CSDH can be diagnosed by brain computed tomography (CT). However, diagnosing multistage and “multiseptated” CSDH using only a brain CT scan may be difficult. Magnetic resonance imaging (MRI) may provide helpful information for diagnosing multiseptated CSDH.²⁾ Lee et al.⁴⁾ reported that diffusion-weighted MRI provides better resolution of multiseptated CSDH and can predict post-treatment failure more accurately than brain CT.

The authors reported that burr hole drainage leads to better radiological outcomes than minicraniotomy in the treatment of CSDH. During surgery, evacuation of the mixed-stage hematoma and septostomy of the pseudomembrane of the hematoma are easier with minicraniotomy due to the wider opening. However, there may be a bias in selecting minicraniotomy for complicated cases of CSDH. Acute or early subacute forms of hematoma cannot be drained with a subdural catheter, and blind insertion of a subdural catheter can cause bleeding from the pseudomembrane of the septation.

It would have been better if the authors had investigated the preoperative brain MRI findings in both groups to increase comparability. The authors performed burr hole drainage surgery under general anesthesia, and there may have been cases in which they had to be converted to minicraniotomy intraoperatively. The authors should have mentioned such cases, as they can significantly affect the results of the study. The authors concluded that single burr hole drainage was better than minicraniotomy for inhomogeneous CSDH, but the difference was not statistically significant. Therefore, the conclusions should be interpreted with caution due to the limitations of the study.

In summary, I recommend that the authors include preoperative MRI findings for both groups and classify the degree of inhomogeneity of multistage and multiseptated CSDH. Furthermore, the authors should clearly mention the cases in which they had to convert the burr hole to minicraniotomy during surgery. I hope my comments are helpful for your research.

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