

Commentary

Several methods^[1,2] have been proposed to reduce postsurgical intracranial residual air, “pneumocephalus,” in chronic subdural hematoma, and postoperative pneumocephalus is thought to relate to higher recurrence rates.^[3] Furthermore, tension pneumocephalus has been reported repeatedly.^[4] Despite these points, some authors believe that postoperative pneumocephalus is not serious.^[5] I also believe that the small amount of residual intracranial air may not lead to serious complications.

To minimize intracranial air, it is indispensable and most essential to keep the burr hole at the highest point during the surgery, which is a common and basic method described widely in major texts books.^[6,7] I believe that massive intracranial air exiting postoperatively principally depends on inadequate intraoperative burr-hole position. Exceptions include the small number of patients in whom adequate positioning of the burr

hole cannot be obtained because of stiff neck or restless conditions. Patients requiring emergent simultaneous drainage of bilateral hematomas are also in this category.

Detailed descriptions on how to keep the burr hole at the highest position are not found in current texts. I use the following method: First, patients are positioned in a motorized bed with their head rotated to the contralateral side. Two dorsal plates are set ventrally to avoid patients slipping downward intraoperatively, and most of the operation is performed with patients in the flat supine position. After inserting the drainage tube and irrigating the hematoma, we rotate the bed to the contralateral side and elevate the patient’s head to keep the burr hole at the highest position. We inject saline through the drainage tube to eject the remaining air then the skin is closed, and the patient is returned to the flat supine position. Using this approach, I have not experienced residual massive intracranial air.

The authors propose a new method of safely evacuating air during surgery for chronic subdural hematoma in the article “Burr-Hole Evacuation of Chronic Subdural Hematoma: Biophysically and Evidence-Based Technique Improvement” published in the current issue of *Journal of Neurosciences in Rural Practice*.^[8] The authors also discuss a perioperative and intraoperative therapeutic strategy in detail and declare the safety of their method.

I have the following concerns: the method the authors used intraoperatively inserting two drains is associated with potential serious risk, which is not described in the paper. During saline injection into the hematoma cavity, blockage of the front tube with clots may lead to intracranial hypertension. Therefore, the authors’ method has additional risks compared with simple irrigation and drainage and should be confined to patients in whom adequate positioning of the burr holes cannot be maintained.

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