

Commentary

In the article "Dreaded complications of mistaken identity - Hygroma vs. effusion following decompressive craniotomy," the authors describe a case of a patient who underwent decompressive hemicraniectomy (DHC) after a severe head injury.^[1] The reconstruction of the calvaria was performed four years later after DHC. CAT scan on re-admission showed a hypodense subdural fluid collection. A lumbar drainage was inserted preoperatively so that the flap sunk to the level of the adjacent skull. We think that this approach should be reconsidered since draining CSF might even lead to an increase of the subdural fluid collection since the "*vis a tergo*" force represented by the brain is decreased.^[2]

The patient subsequently underwent cranioplasty. Postoperatively, the patient developed a substantial right-sided weakness with a 2/5 power. A CAT scan was performed showing persistent subdural fluid collection with radiological signs of acute hemorrhage and significant mass effect. This constellation of symptoms and imaging implicates that no subdural inspection was performed during the cranioplasty procedure. Furthermore, manipulation of the tissue might have lead to a small brain contusion, which caused small hemorrhage. In our opinion, an intraoperative revision of the subdural space should have been performed.

This could have been done by a tiny dural incision or even by insertion of a Cushing's needle. By this step, subdural collection could have been diagnosed as either being a hygroma or being a chronic subdural hematoma. Simultaneously, a certain amount of fluid could have been evacuated so that the bone flap could have properly been placed in.

Revision surgery was performed; the dura was opened. The dura was described as being massively thickened, which is not an astonishing finding since the DHC was performed your years ago. Subdural revision showed a chronic subdural hematoma, which was covered by a typical membrane. A second complication occurred; the scalp flap was infected. This is not unusual since the revision was done under emergency conditions. Emergency neurosurgical procedures have a higher potential for infectious complications.^[3]

The colleagues discussed the need for acquiring imaging in order to differentiate between the different entities of subdural fluid collection since it might not be evident in cases of chronic subdural hematoma and subdural hygroma.^[4] The authors are right in their statement that the need to drain a hygroma is very seldom since they are rarely symptomatic. Nonetheless, the need of acquiring an MRI to differentiate the entity of subdural fluid collection is seldomly given.

In the presented case, we think that the preoperative insertion of a lumbar drainage was not useful. We would rather favor a different approach and perform an intraoperative subdural inspection, which would enable the surgeon to analyze the fluid as well as reduce the space occupying effect that the fluid would cause, if the calvaria are restored.

Overall, we think that one should try to perform cranioplasty surgery within the first six months after DHC, but of course, we are aware that this might not be easy to organize.

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