

A 45-year old male presented at a hospital, reporting a two-day history of headache, vertigo, persistent vomiting, and unsteady gait. Physical examination revealed gaze-evoked nystagmus on extraocular movement testing, left-sided dysmetria and dysidiadochokinesia. He was diagnosed with a left cerebellar stroke. An external ventricular drain was inserted, and sub-occipital craniectomy was performed to manage the effects of elevated intracranial pressure due to the extent of oedema secondary to the infarct. He also underwent screening for the COVID-19 infection, which was positive on SARS-COV-2 polymerase chain reaction testing of his endotracheal aspirate. Blood and cerebrospinal fluid samples were negative. After the surgery, the patient developed atrial fibrillation and had prolonged vomiting symptoms, but these resolved eventually with symptomatic treatment. He was started on aspirin and statin therapy, but anticoagulation was withheld due to bleeding concerns. The external ventricular drain was removed nine days after the surgery. He continued with active rehabilitation ¹⁾.

A 44-year-old man developed 5 years after decompressive suboccipital craniectomy following acute cerebellar infarction an organized hematoma in the suboccipital craniectomy site. Computed tomography and magnetic resonance imaging findings of the organized hematoma are shown and discussed. They believed that recognition of the characteristic imaging findings of the organized hematoma as well as consideration of the history of surgery or anticoagulation treatment assists in its correct diagnosis enabling an inappropriate surgery to be avoided ²⁾.

A 64-year-old male at an outside hospital suffered a right MCA hemorrhagic infarction requiring decompressive hemicraniectomy. One year later, the patient presents to our hospital for elective right-sided cranioplasty. The procedure was uneventful. However, postoperatively, the patient suffered a generalized tonic-clonic seizure and remained comatose. Electroencephalography showed no signs of status epilepticus, but imaging did reveal diffuse cerebral edema and both infratentorial and supratentorial hemorrhagic infarcts requiring placement of a ventriculostomy, removal of the cranioplasty plate, and suboccipital craniectomy. Postoperative tests revealed only the known right M1 occlusion, with no evidence of venous thrombosis, embolic source for new strokes, or new arterial dissection or occlusion. The patient remained with only brainstem reflexes and eventually expired.

This is the first in the literature to report the complication of both supratentorial and infratentorial strokes after a cranioplasty procedure. Reperfusion, vessel injury, and venous stasis after cranioplasty as evaluated by multiple neurological imaging modalities are examined as possible mechanisms for this unique complication. These factors must be considered when evaluating the safety of the procedure for a patient ³⁾.

A 74 years old lady who one month before had suffered a cerebellar infarction complicated with acute hydrocephalus. She had good evolution after [decompressive craniectomy](#) without shunting. Fifteen days after surgery, the patient started with new positional vertigo, nausea and vomiting, and a wound CSF fistula that needed ventriculoperitoneal shunt (medium pressure) because conservative treatment failed. After shunting, the fistula closed, but the patient's symptoms worsened. The MRI showed normal ventricular size with a cerebellar hygroma, extending to the posterior interhemispheric fissure. The collection had no blood signal and expanded during observation. A catheter was implanted in the collection and connected to the shunt. The patient became asymptomatic after surgery, and the hygromas had disappeared in control CT at one month. This case

shows an infrequent problem of CSF circulation at the posterior fossa that resulted in a vertigo of central origin. A hygroma-ventricle-peritoneal shunt solved the symptoms of the patient ⁴⁾

A case of [retroclival epidural hematoma](#) as a complication of [posterior fossa decompressive surgery](#) for the management of acute [cerebellar infarction](#). Serial MRI examinations of the patient were documented and demonstrated ⁵⁾.

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