Postoperative Contralateral Subdural Effusion Case Reports

- Application of 3D-Printed External Cranial Protection in the Treatment of Contralateral Subdural Effusion After Decompressive Craniectomy: A Technical Note
- Subdural Extra-arachnoid Hygroma Because of Occult Distal Durotomy After Minimally Invasive Decompression: A Case Report
- Is cranioplasty the optimal treatment for contralateral subdural effusion after decompressive craniectomy?: a case report
- Cranioplasty as the treatment for contralateral subdural effusion secondary to decompressive craniectomy: a case report and review of the relevant literature
- Ommaya reservoir implantation for the treatment of contralateral progressive traumatic subdural effusion secondary to decompressive craniectomy: a case report
- Recurrent, symptomatic, late-onset, contralateral subdural effusion following decompressive craniectomy treated by cranial strapping
- Acute contralateral subdural hygroma following craniectomy
- Contralateral development of chronic subdural hematoma after evacuation of chronic subdural hematoma. A case report

There is no consistent literature about the complications of hinged craniotomy. In particular, there are no reported cases of contralateral subdural effusion (CSE) after HC. Kuptsov et al. present a case of a 55-year-old man who developed CSE after a hinged craniotomy (HC) for intracranial hypertension.

The subdural effusion was managed in a stepwise manner:

He showed **clinical deterioration (GCS 7)**, and imaging (CT and MRI) confirmed a **contralateral subdural effusion**.

A **burr hole drainage** was performed to relieve the effusion.

This provided **temporary relief**, but symptoms recurred within **72 hours**.

The **burr hole was reopened**, and the subdural effusion was drained again.

Additionally, the **bone flap was fixated with titanium plates** to prevent further effusion formation and restore normal intracranial pressure dynamics.

After the second surgery, the patient showed **clinical improvement** and was transferred to a **neurorehabilitation unit** [1].

A 63-year-old man experienced drowsiness (Glasgow coma scale score 13) after a fall that resulted in head trauma. Brain CT revealed a subdural haematoma at the right fronto-temporo-parietal region with a midline shift to the left. Craniectomy for evacuation of the subdural haematoma was performed immediately. A delayed intracerebral haematoma with mass effect in the right frontotemporal region developed later and was removed in a second operation. Although the patient's neurological status improved postoperatively, gradual deterioration was observed during the follow-up period. Contralateral SDG with a midline shift to the right was noted in a follow-up brain CT scan. The patient's condition improved after drainage of the SDG and he was discharged 1 week later [2]

1)

Kuptsov A, Rocca A, Gómez-Revuelta C, Flores-Justa A, Fernández-Villa J, Nieto-Navarro JA. Contralateral subdural effusion following decompressive hinged craniotomy: A case report and narrative review. Neurocirugia (Astur : Engl Ed). 2025 Mar 14:500660. doi: 10.1016/j.neucie.2025.500660. Epub ahead of print. PMID: 40090487.

2)

Su FW, Ho JT, Wang HC. Acute contralateral subdural hygroma following craniectomy. J Clin Neurosci. 2008 Mar;15(3):305-7. doi: 10.1016/j.jocn.2006.08.019. Epub 2008 Jan 7. PMID: 18182295.