

# Ventriculoperitoneal shunt for hydrocephalus after aneurysmal subarachnoid hemorrhage

- Impact of acute hydrocephalus after aneurysmal SAH on longitudinal cognitive outcome- post-hoc analysis of the MoCA-DCI study
- Lumbar Puncture or External Ventricular Drainage as Initial Treatment for Acute Hydrocephalus in Aneurysmal Subarachnoid Hemorrhage-A 2-Center Cohort Study
- Flow Diverter Assisted Embolization of Ruptured Aneurysms is Associated with Increased Hemorrhagic Complications: Prognostic Factors and Outcomes in Neuroendovascular Treatment of Subarachnoid Hemorrhages
- Machine Learning in Predicting the Cognitive Improvement of Ventriculoperitoneal Shunt for Chronic Normal Pressure Hydrocephalus After Aneurysmal Subarachnoid Hemorrhage
- Improvement in outcomes with ultrasound-guided ventriculoperitoneal shunt insertion
- Outcomes and complications of external ventricular drainage in primary and secondary intraventricular hemorrhage: a descriptive observational study
- Outcomes of Fenestration of Lamina Terminalis for Hydrocephalus following Clipping of Ruptured Aneurysms of Anterior Circulation
- Bilateral vocal cord paralysis following ventriculoatrial shunt placement for hydrocephalus after subarachnoid hemorrhage: illustrative case

Ventriculoperitoneal shunt should be the main treatment for hydrocephalus after aneurysmal subarachnoid hemorrhage, but ETV can be employed as a temporary intervention in certain conditions, such as during the waiting period for the clearance of aneurysmal subarachnoid hemorrhage <sup>1)</sup>.

---

Shunt-dependent hydrocephalus after aSAH is associated with higher morbidity and mortality, and prediction modeling of shunt dependency is feasible with clinically useful yields. It is important to identify and understand the factors that increase risk of shunting and to eliminate or mitigate the reversible factors. The aSAH-PARAS Consortium (Aneurysmal Subarachnoid Hemorrhage Patients' Risk Assessment for Shunting) has been initiated to pool the collective insights and resources to address key questions in post-aSAH shunt dependency to inform future aSAH treatment guidelines <sup>2)</sup>.

---

Patients who had NPH due to poor-grade aSAH would benefit from shunt placement when given the correct candidates and timely management of shunt malfunction. Additionally, the curative effect of the shunt should have been regarded as a long-term goal of rehabilitation in these patients <sup>3)</sup>.

---

Although Little et al. currently use a proactive shunting paradigm for posthemorrhagic hydrocephalus, a report demonstrates that a conservative approach to patients with borderline ventricle size (i.e., RBCI of 1.0-1.4) and normal intracranial pressure should be evaluated in a prospective randomized trial <sup>4)</sup>.

<sup>1)</sup> Fukuhara T, Shimizu T, Namba Y. Limited efficacy of endoscopic third ventriculostomy for

hydrocephalus following [aneurysmal subarachnoid hemorrhage](#). Neurol Med Chir (Tokyo). 2009 Oct;49(10):449-55. doi: 10.2176/nmc.49.449. PMID: 19855140.

2)

Adams H, Ban VS, Leinonen V, Aoun SG, Huttunen J, Saavalainen T, Lindgren A, Frosen J, Fraunberg M, Koivisto T, Hernesniemi J, Welch BG, Jaaskelainen JE, Huttunen TJ. Risk of Shunting After Aneurysmal Subarachnoid Hemorrhage: A Collaborative Study and Initiation of a Consortium. Stroke. 2016 Oct;47(10):2488-96. doi: 10.1161/STROKEAHA.116.013739. Epub 2016 Sep 15. PMID: 27633019.

3)

Yu H, Yang M, Zhan X, Zhu Y, Shen J, Zhan R. Ventriculoperitoneal shunt placement in poor-grade patients with chronic normal pressure hydrocephalus after aneurysmal subarachnoid haemorrhage. Brain Inj. 2016;30(1):74-8. doi: 10.3109/02699052.2015.1075153. Epub 2015 Dec 29. PMID: 26713399.

4)

Little AS, Zabramski JM, Peterson M, Goslar PW, Wait SD, Albuquerque FC, McDougall CG, Spetzler RF. Ventriculoperitoneal shunting after aneurysmal subarachnoid hemorrhage: analysis of the indications, complications, and outcome with a focus on patients with borderline ventriculomegaly. Neurosurgery. 2008 Mar;62(3):618-27; discussion 618-27. doi: 10.1227/01.neu.0000317310.62073.b2. PMID: 18425009.

From:  
<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**



Permanent link:  
[https://neurosurgerywiki.com/wiki/doku.php?id=ventriculoperitoneal\\_shunt\\_for\\_hydrocephalus\\_after\\_aneurysmal\\_subarachnoid\\_hemorrhage](https://neurosurgerywiki.com/wiki/doku.php?id=ventriculoperitoneal_shunt_for_hydrocephalus_after_aneurysmal_subarachnoid_hemorrhage)

Last update: 2024/06/07 02:55