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Supplemental material

Risk factors for developing subdural hematoma: a registry-based study in 1457 patients with shunted idiopathic normal pressure hydrocephalus

Gasslander et al.

<https://thejns.org/doi/abs/10.3171/2019.10.JNS191223>

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**SUPPLEMENTAL TABLE 1:
Definition of each perioperative variable.**

| Variable | Definition |
|---|---|
| Age | Years |
| Gender | Male/Female |
| MMSE pre-surgery | Mini-mental state examination ³ |
| Gait pre-surgery | *1–8; 1=Normal, 8= Wheelchair bound |
| Balance pre-surgery | *1–7; 1=Stands independently >30 s on either lower extremity alone, 7=Unable to stand without assistance |
| modified Rankin scale (mRSE) pre-surgery | *0–6; 0=No symptoms, 6=Dead ^{2,5,6} |
| Diabetes | Yes/No |
| Hypertension | Yes/No |
| Heart disease | Yes/No |
| Previous stroke | Yes/No |
| Anesthesia classification/ASA-score (ASA physical status classification system) | *0–5; 1= normal health, 3= severe systemic disease, 5= moribund, not expected to survive without surgery |
| Planned surgery | Planned/acute |
| Adjustable shunt | Yes/No |
| Shunt type | Manufacturer (for instance Strata, Certas, Codman Hakim etc.) |
| Opening pressure at the time of surgery | Opening pressure at shunt insertion (values converted to mm of water) ^{1,4} |
| Opening pressure, most recent adjustment | Last registered opening pressure before SDH-diagnosis for the SDH group and last known overall for the no SDH group. If no adjustment, opening pressure at time of surgery is recorded (values converted to mm of water) ^{1,4} |
| Shunt with an ASD | Yes/No |
| modified Rankin scale (mRSE), 3 months post-surgery | 0–6, 0=No symptoms, 6=Dead ^{2,5,6} |
| MMSE 3, months post-surgery | Mini-mental state examination |
| Gait, 3 months post-surgery | *1–8; 1=Normal, 8= Wheelchair bound |
| Balance, 3 months post-surgery | *1–7; 1=Stands independently >30 s on either lower extremity alone, 7=Unable to stand without assistance |
| Proximal catheter location | Frontal/Occipital/Bilateral |
| Legend: * - ordinal scale, ASD – Anti-siphon device, Anesthesia classification/ASA-score – American Society of Anesthesiologists physical status classification system. | |

REFERENCES

1. Eklund A, Koskinen LO, Williams MA, Luciano MG, Dombrowski SM, Malm J: Hydrodynamics of the Certas programmable valve for the treatment of hydrocephalus. **Fluids Barriers CNS** **9**:12, 2012
2. Farrell B, Godwin J, Richards S, Warlow C: The United Kingdom transient ischaemic attack (UK-TIA) aspirin trial: final results. **J Neurol Neurosurg Psychiatry** **54**:1044-1054, 1991
3. Folstein MF, Folstein SE, McHugh PR: "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. **J Psychiatr Res** **12**:189-198, 1975
4. Lundkvist B, Eklund A, Koskinen LO, Malm J: An adjustable CSF shunt: advices for clinical use. **Acta Neurol Scand** **108**:38-42, 2003
5. Rankin J: Cerebral vascular accidents in patients over the age of 60. II. Prognosis. **Scott Med J** **2**:200-215, 1957
6. van Swieten JC, Koudstaal PJ, Visser MC, Schouten HJ, van Gijn J: Interobserver agreement for the assessment of handicap in stroke patients. **Stroke** **19**:604-607, 1988