

Intracerebellar haemorrhage and factors affecting treatment decisions

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COI: None

Intracerebellar haemorrhage



- 10% of all ICH:s ⁽¹⁾
- Causes brainstem compression and hydrocephalus ⁽²⁾
- Haematoma evacuation preferred if > 3 cm ⁽³⁾
 - Lack of RCTs, strong evidence unavailable
- Retrospective single-centre series of 1075 consecutive patients
 - 114 patients with intracerebellar haemorrhage
 - Macrovascular and traumatic bleeds excluded

1) Flaherty ML (2005) Racial Variations in Location and Risk of Intracerebral Hemorrhage. Stroke 36(5):934–937

2) Witsch J (2013) Primary cerebellar haemorrhage: Complications, treatment and outcome. Clin Neurol Neurosurg 115(7):863–869

3) Wijidicks EF (2000) Clinician's biases toward surgery in cerebellar hematomas: an analysis of decision-making in 94 patients. Cerebrovasc Dis 10(2):93–96

Conservative vs surgical treatment



	Medically treated patients (n=77)	Surgically treated patients (n=37)	p
Age in years, mean (95% CI)	71.6 (68.9-74.4)	61.7 (57.6-65.8)	<0.001
GCS on arrival, median (IQR)	15 (8-15)	6 (3-14)	< 0.001
Volume in mL, mean (95% CI)	12.7 (9.9-15.5)	30.4 (25.3-35.4)	< 0.001
Atrial Fibrillation, n (%)	16 (20.8%)	0	0.03
Hypertension, n (%)	54 (71.1%)	18 (47.4%)	0.013
Diabetes, n (%)	17 (22.4%)	3 (7.9%)	0.055
Warfarin, n (%)	12 (15.8%)	3 (7.9%)	0.24
Any antiplatelet, n (%)	20 (26.7%)	7 (18.4%)	0.332

Factors leading to surgical treatment



	Binomial logistic regression, OR (95% CI)
Brainstem compression	23.6 (6.6-84.2)
Volume > 10 mL	12.9 (3.65-45.6)
Blocked 4 th ventricle	8.09 (2.85-23)
Diameter > 3 cm	6.12 (1.72-21.8)
Age < 70 years	4.87 (2.02-11.7)
GCS < 8	3.78 (1.61-8.34)
Intraventricular haemorrhage	2.92 (1.25-8.44)

- 3-month mortality – no statistically significant difference (p=0.113)
 - 21.6% in surgically treated patients
 - 36.4% in medically treated patients

The Helsinki ICH Study

- Our group at University of Helsinki:

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