

**Individual patient data subgroup meta-analysis of surgery for spontaneous
supratentorial intracerebral haemorrhage**

Table S1. Table of potential data sources

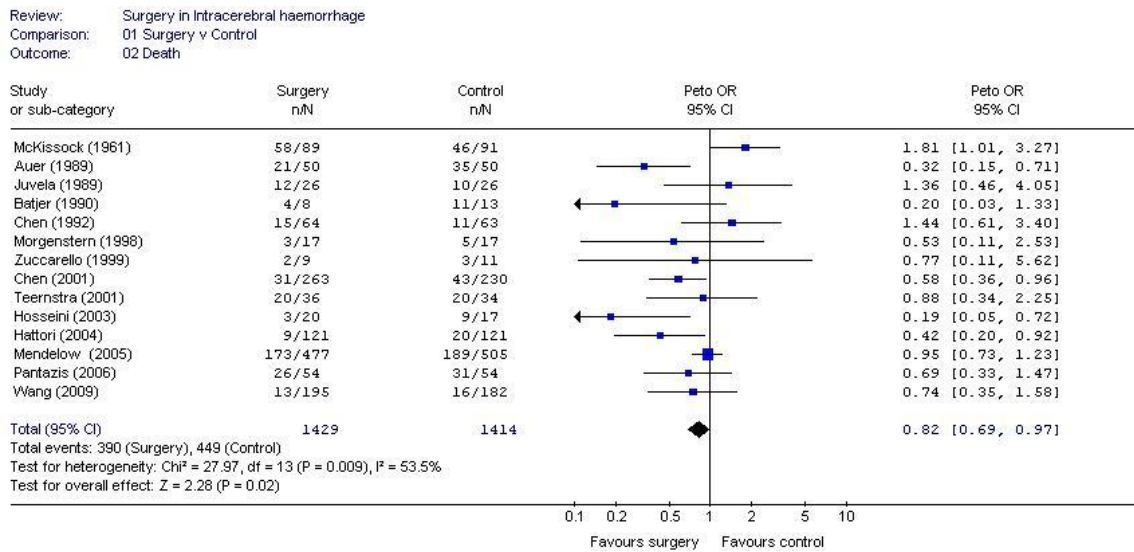
Author (date of publication)	Years of data collection	No. of cases	Evacuation method	Time window	Outcome measure	Outcome timepoint	Location of haematoma	Other inclusion criteria
McKissock (1961) ¹	1959-60	180	craniotomy	>14 days	Full work/ partial disability/ full disability/ dead	6 months	supratentorial	
Auer (1989) ²	1983-6	100	endoscopic evacuation	48 hrs	Similar to Rankin	6 months	supratentorial	Aged 30-80 Volume >10ml
Juvela (1989) ³	1982-6	52	craniotomy	48 hrs	GOS	6 months	supratentorial	Aged <65
Batjer (1990) ⁴	1987-9	21	craniotomy	24 hrs	similar to GOS	6 months	putaminal	Aged 30-75 Diameter > 3cm
Chen (1992) ⁵	1986-90	127	craniectomy/ stereotaxy/ ventricular drainage	Not recorded	5 Category dead/worse/ moderate/ fair/good	3 to 39 months	supratentorial cerebellar	Not recorded
Morgenstern (1998) ⁶	1993-6	34	craniotomy	12 hrs	Barthel (Rankin)	6 months	supratentorial	GCS 5-15 Volume >9ml
Zuccarello (1999) ⁷	1994-6	20	craniotomy/ stereotaxy	24 hrs	GOS	3 months	supratentorial	Volume >10ml GCS >4
Chen (2001) ⁸	1998 - 2000	500	craniotomy/ burrhole (+/- streptokinase /urokinase)	72 hrs	based on Barthel	3-6 months	supratentorial infratentorial	Aged <70 GCS >6 Volume >10ml
Hossieni (2003) ⁹	Not recorded	37	stereotactic aspiration	24 hrs	Karnofsky	12 months	"Deep"	Aged >30 Volume > 40ml
Teernstra (2003) ¹⁰	1996-9	71	stereotactic aspiration + urokinase	72 hrs	Rankin	6 months	supratentorial	Aged >45 years Volume > 10ml
Hattori (2004) ¹¹	1998- 2000	242	stereotactic evacuation	24 hrs	Rankin	12 months	putaminal	Aged 35-85 Japanese Coop Study grade 2-3
Mendelow (2005) ¹²	1995- 2004	1033	craniotomy/ other	96 hrs	GOS Rankin	6 months	supratentorial	GCS>4 Diameter > 2cm
Pantazis (2006) ¹³	1998 - 2003	108	craniotomy	8 hrs	GOS	12 months	supratentorial	Volume > 30 ml Aged <80 GCS <15
Wang (2009) ¹⁴	2003-4	377	minimally invasive + urokinase	72 hrs	Rankin	3 months	basal ganglia	Aged 40-75 GCS >8 Volume 25- 40ml

References

1. McKissock W, Richardson A, Taylor J. Primary intracerebral haemorrhage: a controlled trial of surgical and conservative treatment in 180 unselected cases. *Lancet*. 1961;2:221-6.

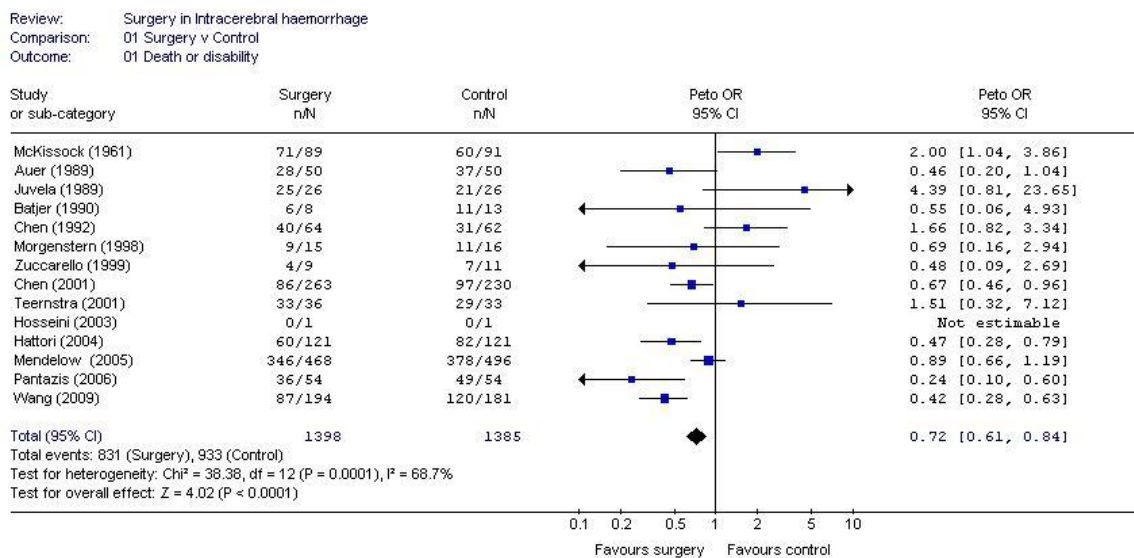
2. Auer LM, Deinsberger W, Niederkorn K, Gell G, Kleinert R, Schneider G, et al. Endoscopic surgery versus medical treatment for spontaneous intracerebral hematoma: a randomized study. *Journal of Neurosurgery*. 1989;70:530-5.
3. Juvela S, Heiskanen O, Poranen A, Valtonen S, Kuurne T, Kaste M, et al. The treatment of spontaneous intracerebral hemorrhage. A prospective randomised trial of surgical and conservative treatment. *J Neurosurg*. 1989;70:755 - 8.
4. Batjer H, Reisch J, Allen B, Plaizier L, Jen Su C. Failure of surgery to improve outcome in hypertensive putaminal hemorrhage. A prospective randomised trial. *Arch Neurol*. 1990;47:1103 - 6.
5. Chen X, Yang H, Cheng Z. A prospective randomised trial of surgical and conservative treatment of hypertensive intracerebral haemorrhage. *Acta Acad Shanghai Med*. 1992;19:237 - 40.
6. Morgenstern LB, Frankowski RF, Shedden P, Pasteur W, Grotta JC. Surgical treatment for intracerebral hemorrhage (STICH): a single-center, randomized clinical trial. *Neurology*. 1998;51:1359-63.
7. Zuccarello M, Brott T, Derex L, Kothari R, Sauerbeck L, Tew J, et al. Early surgical treatment for intracerebral hemorrhage. A randomized feasibility study. *Stroke*. 1999;30:1833 - 9.
8. Teernstra OPM, Evers SMAA, Lodder J, Leffers P, Franke CL, Blaauw G. Stereotactic treatment of intracerebral hematoma by means of a plasminogen activator: a multicenter randomized controlled trial (SICHPA). *Stroke*. 2003;34:968-74.
9. Hosseini H, Leguerinel C, Hariz M, Melon E, Palfi S, Deck P, et al. Stereotactic aspiration of deep intracerebral hematomas under computed tomographic control: a multicentric prospective randomised trial. *Cerebrovascular Diseases*. 2003;16S:57.
10. Pantazis G, Tsitsopoulos P, Mihas C, Katsiva V, Stavrianos V, Zymaris S, et al. Early surgical treatment vs conservative management for spontaneous supratentorial intracerebral hematomas: A prospective randomized study. *Surgical Neurology*. 2006;66:492-501.
11. Chen X, Wu J, Zhou X, YZhang Y, Wang Z, Qin Z, et al. The randomized multicentric prospective controlled trial in the standardized treatment of hypertensive intracerebral hematomas: The comparison of surgical therapeutic outcomes with conservative therapy. *Chinese Journal of clinical Neuroscience*. 2001;4:365-8.
12. Hattori N, Katayama Y, Maya Y, Gatherer A. Impact of stereotactic hematoma evacuation on activities of daily living during the chronic period following spontaneous putaminal hemorrhage: a randomised study. *Journal of Neurosurgery*. 2004;101:417-20.
13. Mendelow AD, Gregson BA, Fernandes HM, Murray GD, Teasdale GM, Hope DT, et al. Early surgery versus initial conservative treatment in patients with spontaneous supratentorial intracerebral haematomas in the International Surgical Trial in Intracerebral Haemorrhage (STICH): a randomised trial. *Lancet*. 2005; 365:387-97.
14. Wang WZ, Jiang B, Liu HM, Li D, Lu CZ, Zhao YD, et al. Minimally invasive craniopuncture therapy vs. conservative treatment for spontaneous intracerebral hemorrhage: results from a randomized clinical trial in China. *Int J Stroke*. 2009;4:11-6.

Figure S1. Meta-analysis of published data for all 14 trials: Mortality



Reference: Updated from: Mendelow A. Surgical management of intracerebral hemorrhage. In: Carhuapoma J, Mayer S, Hanley D, editors. Intracerebral Hemorrhage. Cambridge: Cambridge University Press; 2009. p. 165-75.

Figure S2. Meta-analysis of published data for death and disability



Reprinted from: Mendelow A, Gregson B. Surgery for Intracerebral Hemorrhage. In: Mohr JP, Wolf P, Grotta J, Moskowitz M, Mayberg M, von Kummer R, editors. Stroke: Pathophysiology, Diagnosis and Management. 5th ed: Saunders; 2011.