

TEN YEAR RISKS OF RECURRENT STROKE, DISABILITY, DEMENTIA AND COST IN RELATION TO SITE OF PRIMARY INTRACEREBRAL HAEMORRHAGE: POPULATION-BASED STUDY

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Background And Aims: Patients with primary intracerebral haemorrhage (ICH) are at increased long-term risks of recurrent stroke and other comorbidities. However, available estimates come predominantly from hospital-based studies with relatively short follow-up. Moreover, there are also uncertainties about the influence of ICH location on risks of recurrent stroke, disability, dementia and quality of life.

Methods: In a population-based study (Oxford Vascular Study/2002-2018) of patients with a first ICH with follow-up to 10 years, we determined the long-term risks of recurrent stroke, disability, quality of life, dementia and hospital care costs stratified by haematoma location.

Results: Of 255 cases with primary ICH (mean/SD age 75.5/13.1), 109 (42.7%) had lobar ICH, 144 (56.5%) non-lobar ICH, and 2 (0.8%) had uncertain location. Annual rates of recurrent ICH were higher after lobar vs. non-lobar ICH (lobar $\frac{1}{4}$ 4.0%, 2.7–7.2 vs. 1.1%, 0.3–2.8; $p \frac{1}{4}$ 0.02). Moreover, cumulative rate of dementia was also higher for lobar vs. non-lobar ICH ($n/\%$ lobar $\frac{1}{4}$ 17/34.0% vs. 13/18.3%, $p \frac{1}{4}$ 0.049), and there was a higher proportion of disability at 5 years in survivors (15/60.0% vs. 9/31.0%, $p \frac{1}{4}$ 0.03). The 10-year quality-adjusted life years (QALYs) was also lower after lobar vs. nonlobar ICH (2.9 vs. 3.8 for non-lobar, $p \frac{1}{4}$ 0.04). Overall, the mean 10-year censor-adjusted costs were £18,677, with over 80% of costs due to inpatient hospital admission costs, which did not vary by haematoma location ($p \frac{1}{4}$ 0.42).

Conclusions: Compared to non-lobar ICH, the substantially higher 10-year risks of recurrent stroke, dementia, and lower QALYs after lobar ICH highlights the need for more effective prevention for this patient group.