

TIME TRENDS IN RISK OF RECURRENT STROKE AND LONG-TERM OUTCOME

AFTER PRIMARY INTRACEREBRAL HAEMORRHAGE: POPULATION-BASED STUDY

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Background and Aims:

Patients with primary intracerebral haemorrhage (ICH) are at increased risk of recurrent stroke with poor outcome. However, available estimates come predominantly from hospital-based studies done many years ago and little is known about the trend of risk of recurrent stroke and death/disability after ICH over time.

Methods:

We compared the risk of recurrent stroke, death and death/disability (mRS>2) at 5 years after first-ever primary ICH in two population-based studies in Oxfordshire: the Oxfordshire Community Stroke Project (OCSP/1981-1986) and the Oxford Vascular Study (OXVASC/2002-2018).

Results:

Of 276 patients (OCSP 66; OXVASC 210), those in OXVASC were marginally older than those in OCSP (mean/SD 75.3/13.8 vs. 71.8/11.3 in OCSP, $p=0.06$). During 758 patient-years of follow-up, there were 191 deaths and 28 recurrent strokes. Risks of recurrent stroke decreased from 10.3 (95%CI 4.7–19.5) in OCSP to 3.1 (1.8–4.8) per 100 patient-years in OXVASC ($p=0.006$). However, this trend was driven by a reduction at younger ages (OCSP vs. OXVASC: 5-year risk at age <75 years 35.4% vs. 6.9%, $p=0.001$; age 75 years 16.3% vs. 20.1%, $p=0.59$), and after the acute phase (risks at 90 days 5.7% vs. 3.3%, $p=0.51$; 90 days–5 years 27.2% vs. 10.4%, $p=0.004$). There was no significant reduction in 5-year death or death/disability over time (OCSP vs. OXVASC: death – 67.7% vs. 62.9%, $p=0.48$; death/disability – 86.8% vs. 82.8%, $p=0.49$).

Conclusions:

Risks of recurrent stroke after primary ICH have fallen substantially in Oxfordshire over the last four decades. However, there has been no improvement in long-term outcome and the substantial risks of recurrent stroke remain at older ages and in the first 90 days.