Intracerebral haemorrhage

Better scoring for better care?

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A new rating scale may help improve the care of ICH patients

Intracerebral haemorrhage (ICH) has a very poor prognosis: according to population based data only 38% of patients survive the first year.¹ Recently, new therapeutic strategies were suggested,^{2,3} but so many uncertainties remain concerning the management of ICH that we need better tools to identify appropriate candidates for appropriate strategies. In the paper by Weimar *et al* (see pages 601–5) a new prognostic score is presented.⁴ This rating scale for ICH is able within 24 h of onset to predict either mortality or the probability of complete recovery after 3 months. The model was formed using retrospective data from the German stroke data bank and was prospectively validated in 11 institutions. It seems simple to use and has a better positive predictive value than clinical opinion alone. However, the clinician's prognosis of early death seems slightly more accurate and this is discussed as a possible bias for a self fulfilling prophecy. Most other prognostic scales for ICH have not been validated at all or not on such a solid basis, and therefore this scale is an improvement. Interestingly, the Essen score focuses on clinical data. While the ICH⁵ and the modified ICH⁶ scores included haematoma volume (measured on CT scan) and the presence or not of intraventricular haemorrhage, Weimar *et al* only took into account the severity of the neurological deficit and the level of consciousness (measured by the NIHSS). This may be criticised since all epidemiological data have shown that haematoma volume is a strong predictor of outcome.

How can a prognostic score for good outcome influence our strategy?

Obviously, it may help to improve the selection of patients for clinical trials and facilitate subgroup analyses in such trials. But furthermore, in daily life, it may also help to identify patients who are likely to have a good outcome and for whom the risk/benefit ratio of favourable outcome may or may not suggest the additional use of experimental or non-validated treatment. It may help to define a group of patients for whom prevention and treatment of complications should be a priority. In practice, it is often very difficult to assess an individual prognosis and therefore to implement full life support including artificial ventilation. Also the decision to resuscitate patients with ICH often depends on local preferences or simply on personal beliefs.

Many neurologists or stroke physicians caring for ischaemic stroke patients are still hesitant to undertake the care of ICH patients, and those ICH cases that are treated on stroke units usually represent a prognostically more favourable subgroup because those with more severe deficits are often cared for by neurosurgeons or general intensive care specialists. Thus, a scoring system such as that devised in Essen will help neurologists and stroke physicians undertake the care of ICH patients. Indeed, in their validation cohort, Weimar *et al* found an in-hospital mortality rate of 20% which is lower than would be expected in a non-selected population of ICH patients, probably because patients admitted to neurosurgical departments were not included.

The development of prognostic scores may help to improve the management

of ICH, but may also point out how heterogeneous our management of ICH actually is. With new therapies being tested and new treatment targets in view, the acute care of ICH patients will enable intensivists, neurosurgeons, neurologists, and stroke physicians alike to work together in research and in practice to improve outcome for this hitherto rather neglected group of stroke patients.

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