



Prognostic factors in aneurysmal subarachnoid haemorrhage (aSAH): Observations from the UK and Ireland SAH database

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Resumen

Advances in aSAH care through the introduction of CT angiography, use of nimodipine, specialist care, and endovascular coiling has improved outcomes. Despite these aSAH continues to exact a high economic and social cost.

A number of factors are well accepted to predict poor outcome; poor presentation grade, increasing age, pre-protection aneurysm re-bleeding and delayed cerebral ischemia (DCI). Most of these prognostic factors were identified from now historical or single center series and contemporary negative predictors of poor outcome are not known. Analyzing data from the UK and Ireland SAH registry we report contemporary predictors of negative outcome and will discuss how these observations may be used to improve outcome further.

The UK and Ireland subarachnoid hemorrhage registry was set up in September 2011 to prospectively record the process and outcome of Subarachnoid hemorrhage patients (SAH). Using Univariate and multivariate analysis of this data we determined the current independent predictors of a negative outcome in patients with SAH.

The median age (IQR) at presentation of our cohort of 4751 patients was 55 (18). Most patients were female 69%, presented in good grade (3260 (70%)) (World Federation of Neurological surgeons (WFNS) grade 1 & 2), and were treated by endovascular coiling (n = 3,534) (75%). The independent predictors of an unfavourable outcome were age (OR 0.96, 95%CI 0.95-0.97, p < 0.001), WFNS grade (OR 0.456, 95%CI 0.43-0.5, p < 0.001) pre operative re-bleeding (OR 0.14, 95%CI 0.09-0.22, p < 0.001) need for CSF diversion (OR 0.36, 95%CI 0.29-0.44, p < 0.001) and DCI OR 0.44, 95%CI 0.35-0.54, p < 0.001).

These data suggest that modifiable risk factors of pre operative re-bleeding and DCI remain barriers to favorable outcomes. Understanding the reasons why patients requiring CSF diversion have an almost 6.5-fold higher adjusted odds of a poor outcome at discharge will be discussed.