

Intracerebral hematoma and aneurysmal subarachnoid hemorrhage

Poor [outcome](#) in [patients](#) with [intracerebral hematoma](#) seems to be related to severity of clinical grade on admission ¹⁾.

The current data confirm that the presence of an [intracerebral hematoma](#) (ICH) is a predictor of unfavorable outcome. However, despite large ICHs, a significant number of patients have a good outcome. To achieve a favorable outcome, ultra-early treatment with [hematoma](#) evacuation and [intracranial aneurysm](#) obliteration seems to be mandatory ^{2) 3)}.

However, data concerning the influence of ICH location on outcome is scarce. Therefore, Bruder et al., analyzed the influence of ICH location on clinical course and outcome in patients with SAH and additional ICH. One hundred seventy-four patients were treated with aneurysmal SAH and additional ICH between September 1999 and May 2012. Information including patient characteristics, treatment, and radiological findings were prospectively entered into a database. Patients were stratified according to ICH location and neurological outcome. Neurological outcome was assessed according to [modified Rankin Scale](#) (mRS). ICH location was temporal (58.6 %), frontal (28.7 %), and perisylvian ICH (12.6 %); 63.8 % presented in poor admission status and favorable outcome was achieved in 35.6 %. In the multivariate analysis, favorable outcome was associated with young age, ICH <50 ml, and good admission status. The location of ICH was not associated with outcome. The current data confirms that a significant number of patients with ICH after aneurysm rupture achieve favorable outcome. Prognostic factor for favorable outcome are "age," "size of the hematoma," and "admission status." The location of the ICH seems not to be associated with outcome ⁴⁾.

2016

Of 5362 SAH patients analyzed, 1120 (21%) had concurrent ICH. In order of importance, neurological status, aneurysm location, aneurysm size, and patient ethnicity were significantly associated with ICH. Patients with ICH experienced poorer outcome than those without ICH (OR 1.58; 95% CI 1.37-1.82). Treatment within 6 hours of SAH was associated with poorer outcome than treatment thereafter (adjusted OR 1.67; 95% CI 1.04-2.69). Subgroup analysis with adjustment for ICH volume, location, and midline shift resulted in no association between time from ictus to treatment and outcome (OR 0.99; 95% CI 0.94-1.07).

The most important associative factor for ICH is neurological status on admission. The finding regarding the value of ultra-early treatment suggests the need to more robustly reevaluate the concept that hematoma evacuation of an ICH and repair of a ruptured aneurysm within 6 hours of ictus is the most optimal treatment path ⁵⁾.

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Last update: 2024/06/07 02:52

