Laterality of deep intracerebral haemorrhage and clinical outcome

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Background: Intracerebral haemorrhage (ICH) is a devastating form of stroke, representing one of the main causes of death nowadays. Despite the fact that the percentage of the hospitalized patients with ICH has increased lately, the mortality rate has not declined.

Purpose: To investigate the relationship between hemispheric laterality of acute deep ICH and clinical outcomes.

Methods: We analyzed 469 patients with brain CT scan proven deep ICH of ≤30 ml volume, presenting within 6 hours of symptoms onset. Baseline and 5 days Glasgow Coma Scale and National Institutes of Health Stroke Scale scores, 30 days modified Rankin Scores and mortality data were recorded. For morphological analysis, information was obtained from brain CT scans (baseline, and at 5 days) and autopsy reports. Hematoma volume was determined by the ABC / 2 method. Hematoma expansion was defined as an increase in ICH volume ≥ 33% of baseline.

Results: The deep ICH we analyzed showed laterality that slightly favored left side (54%). 30-day mortality was higher among patients with left side deep ICH (33%). There were no differences between right and left side deep ICH regarding the major disability. Hematoma expansion was the strongest predictor of 30-day mortality and disability for all locations of deep ICH.

Conclusions: Left side deep ICH proved to be more aggressive, associated with a higher risk of death.

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