

Early Blood Pressure Lowering Does Not Reduce Growth of Intraventricular Hemorrhage following Acute Intracerebral Hemorrhage: Results of the INTERACT Studies.

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Abstract

Background: Intraventricular hemorrhage (IVH) extension is common following acute intracerebral hemorrhage (ICH) and is associated with poor prognosis.

Aim: To determine whether intensive blood pressure (BP)-lowering therapy reduces IVH growth.

Methods: Pooled analyses of the Intensive Blood Pressure Reduction in Acute Cerebral Hemorrhage Trials (INTERACT1 and INTERACT2) computed tomography (CT) substudies; multicenter, open, controlled, randomized trials of patients with acute spontaneous ICH and elevated systolic BP, randomly assigned to intensive (<140 mm Hg) or guideline-based (<180 mm Hg) BP management. Participants had blinded central analyses of baseline and 24-hour CT. Association of BP lowering to IVH growth was assessed in analysis of covariance.

Results: There was no significant difference in adjusted mean IVH growth following intensive (n = 228) compared to guideline-recommended (n = 228) BP treatment (1.6 versus 2.2 ml, respectively; p = 0.56). Adjusted mean IVH growth was nonsignificantly greater in patients with a mean achieved systolic BP \geq 160 mm Hg over 24 h (3.94 ml; p trend = 0.26).

Conclusions: Early intensive BP-lowering treatment had no clear effect on IVH in acute ICH.