

# Prognostic Significance of Hyperglycemia in Acute Intracerebral Hemorrhage The INTERACT2 Study

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## Resumen

Background and Purpose-

We aimed to determine associations of baseline blood glucose and diabetes mellitus with clinical outcomes in participants of the Intensive Blood Pressure Reduction in Acute Cerebral Hemorrhage Trial (INTERACT2).

Methods-

INTERACT2 was an international prospective, open, blinded end point, randomized controlled trial of 2839 patients with spontaneous intracerebral hemorrhage (< 6 hours) and elevated systolic blood pressure randomly assigned to intensive (target systolic blood pressure < 140 mm Hg) or guideline-based (systolic blood pressure < 180 mm Hg) BP management. Associations of hyperglycemia at presentation (> 6.5 mmol/L) and combined and separate poor outcomes of death and major disability (scores of 3-6, 3-5, and 6, respectively, on the modified Rankin scale) at 90 days were determined in logistic regression models.

Results-

In 2653 patients with available data, there were 1348 (61%) with hyperglycemia and 292 (11%) with diabetes mellitus. Associations of baseline blood glucose and poor outcome were strong and near continuous. After adjustment for baseline variables, the highest fourth (7.9-25.0 mmol/L) of blood glucose was significantly associated with combined poor outcome (adjusted odds ratio 1.35, 95% confidence interval 1.01-1.80; P trend 0.015). Diabetes mellitus also predicted poor outcome

(adjusted odds ratio 1.46, 95% confidence interval 1.05-2.02; P=0.023), though more important for residual disability than death on separate analysis.

#### Conclusions-

Hyperglycemia and diabetes mellitus are independent predictors of poor outcome in patients with predominantly mild to moderate severity of intracerebral hemorrhage. These data support guideline recommendations for good glycemic control in patients with intracerebral hemorrhage.

#### Clinical Trial Registration-

URL:

[GRAPHICS]

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#### Palabras clave

**Palabras clave de autor:**diabetes mellitus; hyperglycemia; death; outcome; clinical trial; prognosis; disability

**KeyWords Plus:**ACUTE ISCHEMIC-STROKE; ADMISSION GLUCOSE; BRAIN-INJURY; SURVIVAL; DEATH; RISK;INTERLEUKIN-1-BETA; ASSOCIATION; MANAGEMENT; SECRETION

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