Influence of time to achieve and maintain target systolic blood pressure of 120-140 mmHg on outcomes after acute intracerebral hemorrhage





Population

N=5761 patients mean age 64.0, 36.8% females median time from symptom onset to randomization of 3.8 hours (2.6 - 5.3)

Exposure

Time from symptom onset to achieve and maintain target systolic blood pressure of 120-140 mmHg

Outcomes

Functional status measured by Modified Rankin scale score (mRS 3-6); Absolute hematoma growth at 24 hours; Renal serious adverse events (SAE), Cardiac SAE

Findings

Approximately one-third of participants achieved and maintained SBP at 120-140 mmHg over 24 hours post-randomization. Earlier SBP control to target of 120-140 mmHg was associated with better functional status (odds ratio 0.99, 95% confidence interval 0.98-0.99, p=0.001), and a significant lower risk of hematoma expansion at 24 hours (0.98, 0.96-1.00, p=0.049). It was not associated with an increased risk of cardiac and renal SAEs.

Conclusions

An earlier achievement and maintenance of this target reduces the likelihood of growth of small-medium sized hematomas, which translates into improved odds of recovery.

Odds Ratio, 95% confidence interval

