Proper Timing of Control of Hypertension and Outcome in Acute Spontaneous Intracerebral Hemorrhage

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OBJECTIVE:

Hypertension is the commonest cause of acute spontaneous intracerebral hemorrhage (ICH) which is life-threatening with a poor prognosis. The aim of this study is to evaluate the prognosis and blood pressure monitoring and control in patients presented by acute spontaneous ICH.

METHODS

One hundred and fifty patients presented by acute spontaneous ICH were classified according to the modified Rankin Scale (mRS) score after discharge to 70 patients with better outcomes (mRS = 0-2) while 80 patients with poor outcome (mRS = 3-6). Independent factors that were significantly related to prognosis were assessed by multivariate logistic regression. Spearman's correlation of the blood pressure monitoring in the acute ICH and the outcome was investigated.

RESULTS

Systolic blood pressure at the onset of ICH was higher in the unfavorable outcome group (P = 0.009). Diastolic blood pressure 1 h after admission,

systolic blood pressure 6 h after admission, and the systolic blood pressure 24 h after admission to hospital were lower in the favorable outcome group (P = 0.005, P = 0.007 and 0.01, respectively). The independent variables related to favorable outcomes were younger age patients (P = 0.004), better level of consciousness at admission to hospital (P = 0.0001), and lower systolic blood pressure 6 h after admission to hospital (P = 0.005), decreased volume of hematoma (P = 0.05), supratentorial ICH (P = 0.02), and absence of intraventricular hemorrhage (P = 0.02).

CONCLUSIONS:

Proper control and monitoring of the blood pressure in acute intracerebral hemorrhage must be initiated immediately especially in the first 6 h after hospitalization.

KEYWORDS:

Intracerebral hemorrhage (ICH), Hypertension, Glasgow Coma Scale (GCS), and modified Rankin Scale (mRS).