Title: **A Clinical Study of High-dose Urokinase Treatment for Hypertension Induced Ventricular Hemorrhage**

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Abstract:

Objective: This study discusses the therapeutic effect of high-dose urokinase treatment for hypertension ventricular hemorrhage. Methods: A total of 60 patients with hypertension ventricular hemorrhage were randomly assigned to two groups: treatment group (n=30) and control group (n=30). Both groups received bilateral external ventricular drain. The treatment group was injected with 50,000 IU urokinase to the lateral ventricle every day; the total injection volume per day was 100,000 IU. The control group was injected with 20,000 IU urokinase to the lateral ventricle every day with a total injection volume per day of 40,000 IU. Lumbar puncture was performed in both groups after the later ventricular drain was removed to release cerebrospinal fluid (CSF). Head Computed tomography(CT) examination was performed regularly to observe changes in the ventricular hematoma as well as the occurrence of complications such as intracranial infection and hydrocephalus. Patient prognosis six weeks after surgery was compared between the two groups. Results: In the treatment group, the intraventricular hemorrhage clearance time and the number of instances of urokinase treatment were significantly less than those of the control group ($P<0.05$). The total urokinase dosage of the treatment group was significantly higher than that of the control group ($P<0.05$). With respect to post-surgery complications, in the treatment group, there were three cases of hydrocephalus and one case of intracranial infection. In the control group, there were four cases of hydrocephalus and three cases of intracranial infection. Intraventricular re-hemorrhage was not observed in either group. Intracranial infection was relieved after strengthened anti-infective therapy and continuous drainage. There was a statistically significant difference in the occurrence of complications between the treatment group and the control group ($P<0.05$). The rate of good prognosis in the treatment group was higher than that of the control group ($P<0.05$), and the inefficiency rate was lower ($P<0.05$). Conclusions: High-dose urokinase treatment produces a significant therapeutic effect in hypertension ventricular hemorrhage. This treatment can quickly eliminate intraventricular hemorrhage, shorten the ventricular drain tube indwelling time, decrease the occurrence of intracranial infection, and increase the likelihood of a good prognosis.