

Predictive factors for ICU admission in patients with spontaneous, nontraumatic intracerebral hemorrhage

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Abstract:

Background and purpose: Non-traumatic or spontaneous supratentorial hemorrhage (ICH) is a condition that may be difficult to diagnose and treat. In this study, we decided to determine certain criteria for hospitalization of patients with non-traumatic supratentorial ICH in Intensive Care Unit (ICU) .

Materials and methods: This cross-sectional study was performed in Mashhad Ghaem Hospital 2019. Patients with primary non-traumatic supratentorial ICH were studied. Demographic information, main complaint, comorbidities and comorbid symptoms, and level of consciousness of patients at the time of referral (FOUR and GCS criteria) were recorded. Data analysis was carried out in SPSS V21.

Results: Patients (n=126) were studied based on the need for ICU admission (n= 84) or other admissions (n= 42). Older patients were 0.955 times more likely to be admitted to ICU and patients with increase in level of consciousness at arrival were 0.812 times less prone to be admitted to ICU. We found ICU admission 10.29 times higher in patients with intraventricular hemorrhage. Those with Babinski reflex were 0.14 times less likely to be admitted to ICU. Moreover, probability of ICU admission was 0.098 times less in patients with reduced four-limb force. Mortality rate was significantly higher in patients admitted to ICU (45%) than others (26.2%) (P= 0.036) .

Conclusion: Current study could not provide a model for predicting the admission of ICH patients to ICU or other wards, so, developing criteria for ICU admission in these patients requires further research.

Keywords: intracerebral hemorrhage, non-traumatic supraventricular, Intensive Care Unit