The predictive value of short-term risk of stroke of RRE-90 scale in patients with transient symptom with infarction

Hui Fang
The First Affiliated Hospital of Zhengzhou University, Zhengzhou, China

RRE-90 scale initially developed to predict the recurrence risk of stroke by the American Academy of Neurology was found to be able to predict the short-term risk of stroke in patients with transient symptom with infarction (TSI). However, this scale was just applied to predict short-term prognosis in patients with TSI in 2011, and it is necessary to verify its validity and reliability in different races and populations. The aim of this study was to evaluate the accuracy of the RRE-90 scale to predict the short-term risk of stroke after TSI in a Chinese population.

Data were prospectively collected from the Department of Neurology and emergency department of the First Affiliated Hospital of Zhengzhou University. RRE score was available within 7 days after onset. The predictive outcome was stroke occurrence at 7 days. The receiver-operating characteristic curves were plotted, and the C statistics were calculated as a measure of predictive ability. The cut-off point was determined, cut-off point for predictive value of subsequent stroke was analyzed.

Eighty consecutive TSI patients were prospectively enrolled, the mean age was 60.20±11.42 years, and 32% of them were women. The best cut-off point was 3. The incidence of stroke at 7 days was 20%, which ranged from 5.8% in patients with lower RRE-90 scores (0-2) to 46.4% in those with higher scores of 3 to 6. The C statistic of RRE-90 score was 0.839 (95% CI ) at 7 days. We concluded that RRE-90 scale was able to assess the risk of early stroke after TSI in a Chinese population.

fanghui2005@163.com