A comparative study of hs-CRP diagnostic value and ABCD2 criteria in predicting the future incidence of acute cerebrovascular events during follow-up in TIA patients

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Abstract:

Background and purpose: Stroke is the most common and the most deadly neurological disease that is accompanied with many complications. The aim of this study was to compare the diagnostic value of hs-CRP and ABCD2 criteria in predicting the future incidence of acute cerebrovascular events during follow-up in patients with transient ischemic attack (TIA).
Materials and methods: This cohort study was performed in TIA patients during the first 24 hours of onset of symptoms. Blood samples were taken and demographic information was obtained, then hs-CRP was measured in all patients. History of hypertension, atherosclerosis, and ABCD2 scores were also recorded.
Results: The patients (n= 135) included 69 (51.11%) male and 66 (48.88%) female cases. Eight subjects had a stroke within three months. There was no significant relationship between hs-CRP level and stroke incidence (P= 0.303), but ABCD2 cut-off scores of >1.5 had the most sensitivity (87.5%) and specificity (81.9) that could significantly predict the occurrence of stroke (P= 0.011). Systolic blood pressure (OR=1.04) and ABCD2 score (OR=2.43) could predict the occurrence of stroke (P <0.05). Findings showed a significant relationship between hs-CRP level and age (over 60 years) and the incidence of slurred speech (P <0.05).
Conclusion: CRP level was not significantly associated with the incidence or absence of stroke in three months after TIA, but ABCD2 score was found to be more accurate in this regard.

Keywords: CRP, TIA, acute stroke, transient stroke