

## **Role of CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS Score as Predictor for Failed Reperfusion After Fibrinolytic in St-Elevation Myocardial Infarction**

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**Abstract : Background:** Recent studies showed that CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score can effectively predict longterm outcome, hospitalization and severity in CAD. However, the role of this score in predicting failed reperfusion after fibrinolytic in STEMI patients has not been studied extensively. The main objective of this study was to determine whether CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score can predict failed reperfusion after fibrinolytic in STEMI patients.

**Methods:** A total of 62 patients with STEMI who undergo fibrinolytic at Haji Adam Malik Hospital since October 2017 until November 2018 were recruited in this cross sectional study. We also performed complete blood count and chest x-ray. CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score was counted before the fibrinolytic started. After the fibrinolytic was done, we assessed the succesfullness with the decrease of chest pain, resolution of ST segments > 50% and aritmia reperfusion criterias.

**Results:** The cut-off value of CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score was 4 (AUC 0.928, 95% CI 0.861-0.995, p<0.05). The CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score  $\geq$  4 group had higher incidence of failed reperfusion. CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score  $\geq$  4 is considered to predict the incidence of failed reperfusion with a sensitivity of 91.7%, a specificity of 69.2%, NPV of 85.7% and PPV of 80.4%. Multivariate analysis also showed that CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score  $\geq$  4 was an independent factor that could predict the occurrence of failed reperfusion (OR 23.769, p<0.001).

**Conclusion:** CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS score is a simple, very useful and easy-to remember bedside score and an inexpensive indicator which can be used as a prognostic marker for failed reperfusion after fibrinolytic in STEMI.

**Keyword :** CHA<sub>2</sub>DS<sub>2</sub>-VASc-HS, fibrinolytic, STEMI.

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