الدراسات العليا

Correlation Between CHA2DS2-VASc-HSF Score and SYNTAX Score in Patient with Acute Coronary Syndrome

Thesis protocol
Submitted in partial fulfillment of
Master Degree of Cardiology

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2025

Abstract

Background Risk stratification assessment of patients with acute coronary syndrome (ACS) plays an important role in optimal management and defines the patient's prognosis. This study aimed to evaluate the ability of CHA2DS2-VASc-HSF score (comprising of the components of the CHA2DS2-VASc score, hyperlipidemia, smoking, and family history of coronary artery disease respectively) to predict the severity and complexity of CAD.

Methods The study was performed on 100 patients admitted with acute coronary syndrome to Coronary Care Unit at Cardiology Department, Fayoum University in 2024. Their medical history, general and cardiac examination, ECG, echocardiography, cardiac troponin and lipid profile were done. CHA2DS2-VASC-HSF score was calculated on admission. Coronary angiography was conducted and the Syntax score (SS) was calculated using SYNTAX score calculator.

Results CHA2DS2-VASc-HSF score had a significant positive strong correlation with syntax score ($r = 0.503$, $p < 0.01$). Moreover, the mean total CHA2DS2-VASc-HSF score for patients with proximal segment affection, three vessel disease, LM disease was significantly higher than those with mid and distal segment affection or single vessel disease. This implies that higher total CHA2DS2-VASc-HSF scores are associated with more severe CAD using SYNTAX score.

Conclusions CHA2DS2-VASC-HSF score is proposed to be a simple bedside score that could be used for the prediction of the severity and complex complexity of CAD.

Keywords: CHA2DS2-VASC-HSF score, severity, syntax score, coronary artery disease