

May 24-25, 2018
London, UKInterv Cardiol J 2018, Volume: 4
DOI: 10.21767/2471-8157-C1-003

USING THE MB-LATER SCORE FOR PREDICTING ARRHYTHMIA RECURRENCE AFTER CATHETER ABLATION FOR ATRIAL FIBRILLATION: THE GUANGZHOU ATRIAL FIBRILLATION PROJECT

Hai Deng¹, Alena Shantsila² and Gregory Y H Lip²¹Guangdong General Hospital, China²University of Birmingham, UK

Background: Success of catheter ablation (CA) for atrial fibrillation (AF) is determined by many clinical factors, which have been derived clinical scoring systems to help predict the outcome of CA.

Objective: To compare the predictive ability of seven existing clinical scoring systems (HATCH, CHADS₂, CHA₂DS₂-VASc, BASE-AF₂, APPLE, CAAP-AF and MB-LATER) in a Chinese AF cohort undergoing CA.

Methods: 1410 patients (mean age 57.2±11.6 years; 68% male) with AF undergoing CA during 2011-2015 were enrolled. Symptoms, 12 lead ECG and holter ECGs were recorded before discharge, and at 1, 3, 6 months and every 6 months thereafter. Any record of atrial tachyarrhythmia lasting >30 seconds after the 3-month blanking period was defined as AF recurrence.

Results: During a mean 20.7±8.8-month follow-up, recurrence occurred in 365 patients (25.9%). On multivariate analysis, clinical risk factors for AF recurrence post CA were age, AF type, body mass index, coronary heart disease, left atrial diameter, estimated glomerular filtration rate and early recurrence (all P<0.05). All tested scores were predictors of AF recurrence with areas under the curve (AUCs) of 0.58, 0.57, 0.57, 0.75, 0.74, 0.71 and 0.73 respectively (all P<0.01). Compared to all other scores, the MB-LATER score showed improved reclassification (NRI range 30%-82.6%, P<0.01) and discrimination indexes (IDI range 2.6%-18.6%, all P<0.01) in predicting AF recurrence.

Conclusion: The MB-LATER score is a simple and practical score that performs better or at least comparable to other scores for prediction of AF recurrence after CA.

Image

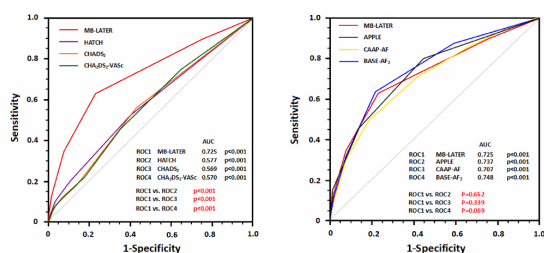


Fig. 1. AUC of the MB-LATER and comparison to other scores

Table 1. Measures of predictive accuracy and improvement using MB-LATER score in prognostication of progression to permanent AF

MB-LATER score vs.	IDI	P-value	NRI	P-value
APPLE score	0.063	<0.001	0.717	<0.001
CAAP-AF score	0.093	<0.001	0.549	<0.001
BASE-AF ₂ score	0.026	<0.001	0.300	<0.001
HATCH score	0.161	<0.001	0.801	<0.001
CHADS ₂ score	0.162	<0.001	0.801	<0.001
CHA ₂ DS ₂ -VASc score	0.186	<0.001	0.826	<0.001

doctordh@hotmail.com