

[gw22-e0210]

COMBINATION OF ANKLE-BRACHIAL INDEX AND CORONARY ARTERY CALCIUM SCORE AS A PREDICTOR FOR 3-VESSEL CORONARY ARTERY DISEASE IN OLDER PATIENTS

Chengming Yang, Yunjing Lan, Chunyu Zeng, Yuqiang Fang, Peng Chen *Department of Cardiology, Daping Hospital of the Third Military Medical University, Chongqing, China*

10.1136/heartjnl-2011-300867.397

Objective To get the sensitivity, specificity and accuracy of ankle-brachial index (ABI) and coronary artery calcium score (CACS) to judge the 3-vessel coronary artery lesions. Furthermore, to investigate whether the value of judge the 3-vessel coronary artery lesions can be improved when combining both of the two methods. All those is to find a non-invasive and inexpensive method with good sensitivity and specificity.

Methods According to the results of CAG, 96 older patients who had underwent ABI and CACS measurement were divided into two groups: group of 3-vessel artery lesions and the control group. The baseline information were compared to investigate whether there were differences in the two groups. The best cut-points of ABI and CACS were analysis by ROC, and the parallel test were analysed to investigate whether combining the two can improve their diagnosis value.

Results The baseline information between the two groups is no significant difference. As compared, $ABI < 0.9$ and $CACS > 400$ were the best cut-point value with maximn youdens index which was determined by ROC. $ABI < 0.9$ and $CACS > 400$ were independence predictors of the 3-vessel lesions. The sensitivity and specificity of $ABI < 0.9$ to predict 3-vessel lesions were 58% and 87%, the sensitvity and specificity of $CACS > 400$ of that were 64% and 86%, and that of parallel test were 85% and 83%. Whose sensitivity significantly increased ($p < 0.05$) and specificity has dropped, but the difference was not statistically significant.

Conclusions $ABI < 0.9$ and $CACS > 400$ were the best cut-point value and independence predictors for the 3-vessel lesions. The cut-off point of $ABI < 0.9$ and $CACS > 400$ for the determination of 3-vessel coronary lesions had high respectivity but relatively low sensitivity. The parallel test of combine $ABI < 0.9$ and $CACS > 400$ greatly increased the sensitivity and specificity was not significantly decreased. Combining use is more practical value.