

عنوان مقاله:

The role of ProBNP in differentiation of cardiogenic and non-cardiogenic syncope: A diagnostic accuracy study

محل انتشار:

مجله اورژانس و تروما، دوره 8، شماره 2 (سال: 1401)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Afshin Amini - Emergency Medicine Department, Imam Hossein Hospital, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Maryam Ahmadi Chegeni - Emergency Medicine Department, Imam Hossein Hospital, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Zahra Soltanzadeh Khasraghi - Emergency Medicine Department, Imam Hossein Hospital, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Mohammad Parsa Mahjoob - Cardiology Department, Imam Hossein Hospital, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Sina Shool - Emergency Medicine Department, Imam Hossein Hospital, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Amir Ghabousian - Road Traffic Injury Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Rozita Khatamian Oskooi - Emergency Medicine Department, Imam Reza Hospital, Birgand University of Medical Sciences, Birgand, Iran

Saeed Safari - Proteomics Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

خلاصه مقاله:

Objective: The significance of diagnosing the root reason for syncope and taking therequired preventive or treatment measures cannot be overlooked when it comes to outcome prediction. This study endeavors to examine the role of proBNP in differentiating cardiogenic and non-cardiogenic syncope in patients presenting to the emergency department (ED). Methods: We prospectively performed a cross-sectional study on patients presenting with acute syncope. All the patients for this investigation were followed up until the definite cause of their syncope (cardiac or non-cardiac) was diagnosed and the screening performance characteristics of proBNP in differentiation of cardiogenic and noncardiogenic syncope were evaluated. Results: Three hundred patients with syncope were studied (64.7% male). In the end, the cause of syncope was determined to be cardiogenic in 133 cases (44.3%). The area under the ROC curve of proBNP in the differentiation of cardiogenic syncope from noncardiogenic was estimated to be 0.789 (95% CI: 0.735 - 0.843). The optimal cut-off point for proBNP in this regard was 143.5 pg/mL point. Sensitivity, specificity, positive and negative predictive values, and positive and negative likelihood ratios of proBNP in the mentioned cut-off point were 75.39% (95% CI: 67.61-82.73), 75.44% (95% CI: 68.07-81.62), 71.12% (95% CI: 62.82-78.26), 79.74% (95% CI: 72.46-85.54), 2.46 (95% CI: 1.86-3.25), and 0.25 (95% CI: 0.18-0.34), respectively. Conclusion: The accuracy of proBNP in differentiation of cardiogenic and non-cardiogenic syncope is fair. ProBNP concentration equals to or higher than 143.5 pg/mL can differentiate cardiogenic syncope from non-cardiogenic with 75% sensitivity and 76% specificity. It seems that its use for this purpose should be considered with caution and along with other tools

