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# Simple risk stratification score for prognosis of syncope

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#### Abstract

## Purpose

The aim of this study is to describe a new simple score to predict the occurrence of severe adverse events in patients admitted for syncope to a tertiary cardiology referral center.

## Methods

Three hundred ninety-three subjects with emergency department visits for syncope were identified and followed prospectively. The primary endpoint was death or unplanned hospital admission after the syncopal episode. The

score consisted of sum of the following: previous syncope (2 points), an abnormal electrocardiogram (3 points), and history of heart disease (4 points). The accuracy of our score was compared to other scores available in the literature.

## Results

Of the 393 subjects, 87 were diagnosed with syncope secondary to structural or electrical heart disease and 306 with noncardiac syncope. The primary endpoint occurred in 202 cases, including death occurring in 25 patients during the 12-month follow-up. The 30-day event rate for the primary endpoint was 26.5 %. The c-statistic for the new score was 0.76 (95 % CI 0.71–0.80) similar to other scores when applied to our sample. Patients with a score of 3 out of 9 had a hazard ratio of 3.46 (95 % CI 1.22–6.11) for death during the follow-up.

## Conclusions

In the study population, the new syncope score detected patients with an increased risk of death after discharge from a syncopal event. Our score predicted adverse events comparably to other scores reported in the literature. It has the advantage of being simple and easily obtained from the history and an inexpensive noninvasive test—the ECG.

## Keywords

Syncope Death Hospitalization Risk score

#### Abbreviations

**AV** Atrioventricular

**Bpm** Beats per minute

CAD Coronary artery disease

**CI** Confidence interval

#### COPD

Chronic obstructive pulmonary disease

#### ECG

Electrocardiogram

#### Hb

Hemoglobin

#### HR

Hazard ratio

#### ICD

International Classification of Diseases

**LBBB** Left bundle branch block

**OR** Odds ratio

**RBBB** Right bundle branch block

**Sat** Oxygen saturation

**SAH** Systemic arterial hypertension

### Notes

References