Recurrent syncope, which patient should we follow more closely

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Introduction: The importance of education is well recognized in patients presenting with syncope, in order to reduce the recurrence rate.
Purpose: To determine a predictive score of recurrent syncopal episodes after the first medical assessment.
Methods: We conducted a retrospective study enrolling patients followed in our Syncope Consultation from January 2015 to November 2019. Clinical and episodes characteristics, as well as diagnostic studies were analysed. Correlation between variables was performed by the Chi-square and T-Student tests, with a significance level of 95%. Independent predictors of recurrent syncope were identified through a binary logistic regression analysis, considering p=0.05. Then, a discriminatory function was applied using the Wilks lambda test to determine the discriminant score of the analysed groups. SPSS 24.0 was used for statistical analysis.
Results: A total of 694 patients were included, and 420 (60.5%) had recurrent syncope at the first evaluation. After educational approach, 97 (14%) maintained recurrent episodes. In this subgroup, the mean age was 63.7±22.8 years-old and 88.7% already had previous recurrent syncope (vs 56.1%; $p<0.001$). The prodrome of malaise was common (40.2% vs 26.8%; p=0.008), but 32% of these patients had syncope without prodromes (vs 21.8%; p=0.032). They also had frequently first-degree atrioventricular (AV) block (22.5% vs 6.8%; $p<0.001$) and 51.7% had a final diagnosis of reflex syncope. No previous medication with calcium channel blockers (CCB) ($p<0.001$), malaise (p=0.011), not having Q-waves in the electrocardiogram (p=0.022) and the presence of first-degree AV block ($p<0.001$) were independent predictors of recurrent syncope. A predictive score of recurrence was determined using the formula: 0.108 – 1.556 x (medication with CCB) + 0.989 x (malaise) – 1.031 x (Q-waves) + 2.406 x (first degree AV block). Variables should be replaced by 1 or 0, depending on whether the condition is present or not. A cut-off of 0.283 was obtained with a specificity of 96.1% and a discriminative power of 81.2%.
Conclusion: In our patients presenting with syncope, recurrence rate reduced from 60,5% to 14% just with educational measures. To help identify patients who maintain recurrence, we determined a predictive score using clinical data from the first visit, with a good discriminative power and excellent specificity. It could be used to strengthen education, to direct diagnostic studies and to shorten follow-up visits, but it still needs validation to be used in clinical practice.