Brugada Syndrome:
Clinical Score Model to Predict Lethal Events in Young Patients (≤19 Years)

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A propósito del artículo analizado en la **NOTICIA DEL DÍA** mostrando las características del síndrome de Brugada en niños y jóvenes resulta de interés mostrar el estudio realizado por el equipo de Pedro Brugada. Los autores crearon un modelo (*"score"*) de evaluación clínica con el objetivo de predecir eventos letales en jóvenes portadores del síndrome (≤19 años)

Risk stratification in **BrS** in young patients remains challenging. Gonzalez Corcia et al (1) investigated the clinical characteristics, prognosis, and risk in young patients with the BrS. They studied 95 patients with the BrS aged ≤19 years. The median age at diagnosis was 12.9 years. The clinical presentation was SCD in 7% and syncope in 21%. The remaining 72% were asymptomatic at diagnosis. Electrical abnormalities were present in 36%, including spontaneous type I electrocardiogram (12%), sinus node dysfunction (9%), atrioventricular block (17%), intraventricular conduction delay (16%), and atrial arrhythmias (8%). An electrophysiologic study was performed in 75%; ventricular arrhythmias were induced in 3%. An ICD was placed in 25%. During a mean follow-up of 59 months, 9 patients presented with arrhythmic events (event rate: 1.9% per year). Variables significantly associated with events were: presentation with SCD or syncope, spontaneous type1 ECG, sinus node dysfunction and/or atrial tachycardia, conduction abnormality, and induction of ventricular arrhythmias during PVS. A model including the previous 4 main clinical variables (1, SCD or syncope; 2, spontaneous type 1 ECG; 3, sinus node dysfunction and/or atrial tachycardia; and 4, conduction abnormality) had a high predictive power for the risk of lethal events. A score of ≥4 conferred a 5-year event probability of 30% that increased to 53% if the score was ≥6. In conclusion, in this study validated a model to predict risk in young patients with the Brugada syndrome, which takes into account 4 clinical measures.

Patient characteristics according to risk score

Risk category

➢ **Low**: Score 0; asymptomatic whit no electrical abnormality, 0 ICD, 0 events

➢ **Intermediate**: 1-3; Asymptomatic with electrical abnormality, 0 ICD, 0 ev

➢ **High**: 4-5; Syncope with or without single electrical abnormality, 73% ICD; events 13%

➢ **Very high** ≥ 6; aSCD or syncope with multiple electrical abnormalities; ICD 93%; EVENTS 47%

1. Gonzalez Corcia MC1, Sieira J2, Pappaert G2, de Asmundis C2, Chierchia GB2, Sarkozy A3, Brugada P2.A Clinical Score Model to Predict Lethal Events in Young Patients (≤19 Years) With the Brugada Syndrome.Am J Cardiol. 2017 Sep 1;120(5):797-802.