CARDIOMYOPATHIES

Syncope is a risk factor for death in HCM

Researchers from Italy and the US have reported that idiopathic syncope is a risk factor for sudden cardiac death (SCD) in patients with hypertrophic cardiomyopathy (HCM). In particular, patients who experienced a syncopal episode within the 6-month period before initial evaluation had a risk of SCD five times higher than that of individuals without syncope.

"Fifty years after the first modern clinical description of [HCM], the prognostic implications of syncope had not been systematically investigated," explains Paolo Spirito, who was one of the investigators. A total of 1,511 patients with HCM, who were assessed between 1983 and 2005, were enrolled in the study. Syncope was classified as 'unexplained' when it occurred during normal activities and was not consistent with a neurally mediated event.

At baseline, 153 patients (10.1%) had a history of unexplained syncope and, during follow-up, 74 patients (4.9%) died suddenly from cardiac causes. Patients with syncope had a risk of SCD that approached statistical significance. There was, however, a strong temporal relationship between the occurrence of a syncopal episode and SCD in all age groups, with those who had recent syncope at the highest risk. Conversely, patients aged over 40 years who had syncope more than 5 years before initial evaluation were not found to be at increased risk of SCD. "Our findings indicate that recent unexplained syncope may justify consideration for prophylactic cardioverter-defibrillator implantation, while remote episodes are not associated with increased risk in older patients," concludes Professor Spirito.

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Original article Spirito, P. *et al.* Syncope and risk of sudden death in hypertrophic cardiomyopathy. *Circulation* **119**, 1703–1710 (2009).