Extended monitoring detects more arrhythmias in hypertrophic cardiomyopathy, researchers find

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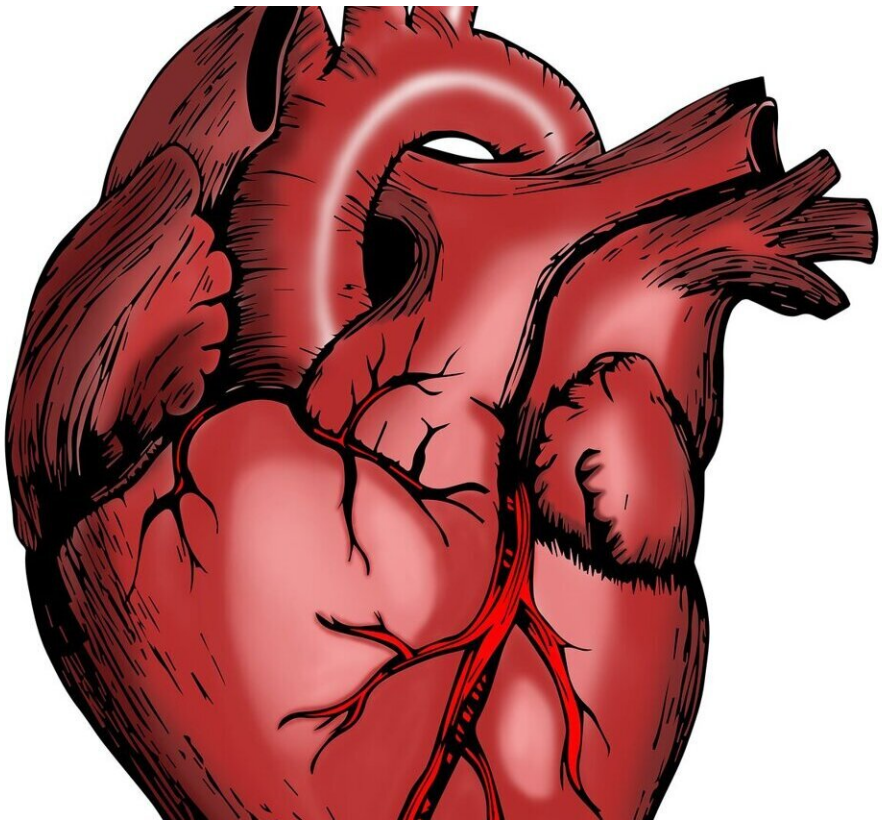

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Thirty day electrocardiogram (ECG) monitoring in patients with hypertrophic cardiomyopathy (HCM) detects more arrhythmias than the

standard 24 to 48 hours, according to late breaking science presented at EHRA 2023, a scientific congress of the European Society of Cardiology (ESC).

Up to 20% of patients with HCM develop atrial fibrillation during the course of the disease and are at particularly high risk of stroke. Therefore, guidelines do not recommend the CHA_2DS_2-VASc score to calculate stroke risk but advise starting anticoagulant treatment in all patients with HCM diagnosed with atrial fibrillation.

Approximately 20-30% of patients with HCM have non-sustained ventricular tachycardia (NSVT). NSVT increases the risk of sudden cardiac death and has been incorporated into decision algorithms to indicate an implantable cardioverter defibrillator (ICD)—for example HCM Risk-SCD, the prediction model recommended by ESC Guidelines.

The use of 24-48 hour Holter monitoring is recommended to detect atrial fibrillation and NSVT in patients with HCM. Extended ECG monitoring has previously been shown to improve detection of atrial fibrillation in patients with cryptogenic stroke or after pulmonary vein isolation.

TEMPO-HCM examined whether extended ECG monitoring of patients with HCM using a continuous recording system would identify a significantly greater number of clinically relevant arrhythmias compared with shorter measurement. This prospective observational study in five hospitals included consecutive patients with a diagnosis of HCM and a clinical indication to undergo conventional ECG Holter monitoring to screen for atrial fibrillation or for risk stratification of sudden cardiac death.

Patients with HCM phenocopies or an ICD were excluded. Participants

underwent extended ECG monitoring for 30 days using a dedicated device. The primary outcome was the detection of clinically relevant arrhythmias (atrial fibrillation/atrial flutter and NSVT) during the first 24 hours of monitoring versus the whole 30 day period.

A total of 100 patients were included. The average age was 57 years and 22% were women. Extended ECG monitoring detected a higher incidence of clinically relevant arrhythmias than 24 hour monitoring: 65% vs. 11% (p