CLINICAL SIGNIFICANCE OF NON-SUSTAINED VENTRICULAR TACHYCARDIA ON ROUTINE MONITORING OF PACEMAKER PATIENTS

ACC Poster Contributions
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Background: Pacemakers (PM) are capable of recording tachyarrhythmic events, including non-sustained ventricular tachycardia (NSVT). A finding of NSVT often elicits clinical evaluation, though its significance is unknown. We wished to evaluate the prognostic significance of NSVT noted on routine follow-up of PM patients.

Methods: A single-center retrospective cohort study was performed on all patients followed for > 1 year in the PM Clinic at Northwestern University's faculty practice from 2004-09 whose PM's were capable of recording NSVT. NSVT was defined as ≥5 consecutive beats recorded on intracardiac electrocardiogram, with a rate of ≥175/minute lasting < 30 seconds. Patients were categorized as having: (1) NSVT when ventricular origin was confirmed; (2) no NSVT; (3) ventricular high rate episodes (VHR) when ventricular origin could not be determined with certainty. The primary endpoint was all cause mortality.

Results: Of the 542 enrollees (51% male, 75±16 years), 130 had NSVT (24%), 330 (61%) had no NSVT and 82 (15%) had VHR. There was no significant difference in age, ejection fraction, prevalence of diabetes, hypertension, coronary artery disease, or beta blocker use between groups (p>0.05). During a mean follow up time of 5.3 years, there was no difference in median survival between groups (figure).

Conclusion: NSVT noted on routine follow-up in PM patients does not affect long-term survival.