

IS ICD IMPLANTATION NECESSARY IN TWA POSITIVE – POST AMI PATIENTS, WITH LVEF > 40% ?

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Introduction: In post acute myocardial infarction (AMI) patients with LVEF < 30%, microvolt T wave alternans (MTWA) has shown an excellent negative predictive value for the risk of Sudden cardiac death (SCD). Induction of never before –seen monomorphic ventricular tachycardia (MVT) in the setting of post AMI patients with LVEF > 40% has been claimed to have no prognostic significance.

Methods and results: 52 patients, LVEF > 40%, without prior documented ventricular arrhythmias, had exercise MTWA testing 8 to 12 weeks post AMI. MTWA was positive in 14 patients (28%). MTWA positive patients were further evaluated by programmed ventricular stimulation (PVS). Rapid MVT was induced in 6 patients (42,8%) after the first extrastimulus. Predictors of inducibility were alternans onset below 100 b/ min and alternans voltage > 4 μ V.

Conclusion : These preliminary data show that repolarisation alternans is associated with ventricular arrhythmia inducibility on PVS in post– AMI patients without LV systolic dysfunction. Onset heart rate < 100 b/min and alternans voltage > 4 μ V were associated with inducibility on PVS. Primary profilaxis of SCD with ICD implantation, might be necessary in such patients, despite of a normal LVEF.