The long-term prognostic power of inducible sustained ventricular tachycardia (VT) at an electrophysiologic study (EPS) performed 1 month after a myocardial infarction (MI) is still unknown. In order to evaluate the long-term prognostic value of inducible sustained VT after MI, we investigated the clinical outcome of a group of patients who underwent an EPS because of abnormal noninvasive testing. Of 305 consecutive patients admitted to our institution after myocardial infarction, 67 (22%) were eligible for EPS because of the presence of ≥ 2 of the following noninvasive risk markers: Lown 4A-B ventricular arrhythmias at Holter monitoring, presence of ventricular late potentials at signal-averaged ECG, and depressed left ventricular ejection fraction (LVEF<0.40) at echocardiographic evaluation. EPS was performed in 47 of 67 (70%) eligible patients (mean age 58±7 years, male gender 89%, anterior myocardial infarction 66%, thrombolysis treatment 41%, LVEF < 0.40 77%, presence of ventricular late potentials 68%, Lown 4A-B 70%) and was considered positive when sustained monomorphic VT was induced. During a follow-up of 9±3±2 years, we observed 12 cardiac deaths (27%, sudden death in 3 cases) and 7 non cardiac deaths (16%); 5 deaths for unknown causes (11%) also occurred, 3 (6%) patients were lost at follow-up, non fatal sustained ventricular tachyrhythmias occurred in 7 patients (16%). The analysis was performed in 39 patients with known cause of death. At univariate analysis we found that inducibility of sustained monomorphic VT was significantly different among patients with and without cardiac death as in patients with and without arrhythmic events (67% vs 26%, p < 0.02; 90% vs 24%, p = 0.003). At multivariate Cox regression analysis only LVEF sustained a significant prognostic power. No significant relationship was found between EPS result and all cause mortality. In conclusion, we report that inducible sustained monomorphic VT 1 month after a MI can suggest a poor cardiac prognosis in patients with high arrhythmic non-invasive risk profile, but in long-term follow-up only LVEF may be considered a significant predictor of adverse outcome.

**P-459**

**LONG TERM PROGNOSTIC VALUE OF ELECTROPHYSIOLOGIC STUDY AFTER MYOCARDIAL INFARCTION: A TEN YEAR FOLLOW-UP STUDY**

S. Sarzi Braga, R. Vainetti, R.E.E. Pedretti, Cardiology, I.R.C.C.S. Fondazione S. Maugeri Istituto Scientijico Di Tradate, Lippe, Detmold, Germany

**Introduction:** The combination therapy with low dose of ACE-inhibitor and diuretic significantly decreased QTc and T wave peak-to-end value which are well known markers of spatial and temporal dispersion of repolarization.

**Conclusions:** The combination therapy with low dose of ACE-inhibitor and diuretic significantly decreased QTc and T wave peak-to-end value which are well known markers of spatial and temporal dispersion of repolarization.

**Reference:**

Fondazione S. Maugeri Istituto Scientijico Di Tradate

**Results:** At the end of the follow-up we observed a significant decrease mean systolic blood pressure from 157±9 to 138±10 mmHg and mean diastolic 86±4 to 87±7 mmHg.

**Mean value ± SD is ms.**

The pattern of repolarization parameters was similar in patients who achieve the target BP and in remaining pts.

**P-460**

**BRAIN (B-TYPE) NATRIURETIC PEPTIDE (BNP) ON EARLY POST MYOCARDIAL INFARCTION PERIOD: PROGNOSTIC INDEX OF EARLY MAJOR POST MYOCARDIAL INFARCTION RELATED ARRHYTHMIAS**

D. Simoncindou, Ossalos Otsaridis, Sichlimiris Arouos, G. Tsigas, C. Georgiopoulou, D. Alcroopolou, S. Anolis. Cardiology Department, Patras University Hospital, Greece

**Introduction:** It is well known that acute myocardial infarction (AMI) induces neurohormonal activation resulting in elevation of plasma levels of ventricular natriuretic peptide (BNP). So far there are no data connecting this BNP elevation with the development of major arrhythmias, such as atrial fibrillation (AF), sustained monomorphic ventricular tachycardia (SMVT), polymorphic VT (PVT) or ventricular fibrillation (VF) in the early post-MI period.

**Methods:** The study population consisted of 20 patients, 17 men and 3 women mean age 61±13 years, who were admitted with a diagnosis of AMI. The levels of plasma BNP at 24 hours after admission were measured and related to the development or not of major arrhythmia events during hospitalization and during the first month post-AMI. We also compared BNP levels with the location of AMI, the mode of reperfusion, peak CKF and left ventricular ejection fraction (LVEF) at the early post-MI period.

**Results:** Measured levels of BNP ranged between 53 and 1036 pg/ml, mean 295±310 pg/ml. During the acute phase, 2 patients developed AF, 2 significant bradycardia, 1 junctional rhythm, and 1 PVT. During their hospital stay, 1 patient developed VT and VF, 1 patient VF and 1 patient 3 episodes of PVT. During the first month of follow-up, 2 patients from the group with the highest BNP values died of non-sudden cardiac death. There was no relation between the BNP level and the development or not of serious arrhythmia events during the acute phase or the early predischarge phase. However, there was a correlation between arrhythmia development from the 2nd post-AMI day until the discharge time.

**Conclusion:** Assessment of BNP within 24 hours post-AMI is a reliable risk stratification index (or development of serious arrhythmias prior to discharge. It appears that a BNP increase during this period does not predict serious arrhythmia development during the first month post-AMI. A larger patient cohort and longer duration of follow up are needed to validate or refute these preliminary results.

**P-461**

**SAECG: TIME-, FREQUENCY- AND COMBINED ANALYSIS IN A HIGH RISK GROUP**

F. Schnoll, M. Landschutzer, B. Kogler, G. Dreyer, A. Gaassner, Rz Grossgmaine Drs Pest, Grossgmaine, Austria

**Introduction:** SAECG has been extensively studied as risk parameter for significant ventricular arrhythmias post MI in low risk populations. Its value in patients with high pre-test risk remains to be defined but would be of substantial interest to select individuals for intervention. Recently a combined index using time-domain analysis (TD) and the frequency-domain analysis spectral turbulence (ST) has been proposed to increase the predictive value (Vazquez JACC 1999).

**Methods:** 45 patients (age 63±9, 91% male, all with CHD, LV-EF ≤ 55% ≤ 12%) had SAECG recorded with noise-level ≤ 0.7 μV using the ART 1200 EPX (Arhythmia Research Technology, Austin, Texas) and analysed in TD, spectrotemporal mapping (STM), ST and a combined index of TD and ST. Programmed ventricular stimulation for spontaneous sustained VT, syncpe or...