

NON-INVASIVE RISK STRATIFICATION IN PATIENTS AFTER MYOCARDIAL INFARCTION - A BRIEF REVIEW

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Abstract:

Noninvasive risk assessment after myocardial infarction is a major but still unresolved goal in clinical cardiology. Various parameters such as ventricular late potentials, T-wave alternans, and repetitive ventricular extrasystoles have been shown to indicate an increased risk of sudden cardiac death. However, the practical use of these arrhythmic markers into clinical decision making remains difficult. The positive predictive value of all noninvasive parameters is limited especially when not combined with a reduced left ventricular function. On the other hand the available therapeutic options, the implantable cardioverter defibrillator or long term amiodarone drug therapy, have side effects, strain the patient and are cost intensive, thus requiring a highly selective usage.

Recently the MUSTT and the MAD IT study proved the effect of defibrillator therapy in post infarction patients pre-selected by a reduced left ventricular function and spontaneous non-sustained ventricular tachycardia, with inducible sustained ventricular tachycardia during electrophysiologic study.

In this article we summarize the clinical results of the currently available methods for noninvasive risk assessment and discuss potential future combinations currently under evaluation.

Keywords: sudden death, electrophysiological study, noninvasive tests, risk assessment