



Arrhythmias

INFLUENCE OF DIFFERENT BETA-BLOCKERS ON INAPPROPRIATE THERAPY IN THE MADIT-CRT TRIAL

Oral Contributions

West, Room 3009

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Background: The effect of different beta-blockers on inappropriate therapy in heart failure patients with devices has not been investigated previously.

Methods: All patients in the MADIT-CRT study who received a device (N=1790) were identified and treatment or no treatment with different types of beta-blockers were compared. Time-dependent multivariate Cox regression analyses were performed to assess differences in inappropriate therapy yielded as anti-tachycardia pacing (ATP) or shocks.

Results: Inappropriate therapy occurred in 253 of 1790 patients (14%) during a follow-up period of 3.4 years (SD \pm 1.1). Treatment with carvedilol was associated with a significantly decreased risk of inappropriate therapy when compared to metoprolol (HR 0.64, [CI: 0.48-0.85], $p=0.002$). The reduction in risk was consistent for inappropriate ATP (HR 0.66 [CI: 0.48-0.90], $p=0.009$) and inappropriate shocks (HR 0.54 [CI: 0.36-0.80], $p=0.002$). The risk of inappropriate therapy caused by atrial fibrillation was also reduced in patients on carvedilol compared to metoprolol (HR 0.50, [CI: 0.32-0.81], $p=0.004$).

Conclusion: In heart failure patients with either a CRT-D or ICD device, carvedilol proved superior in terms of a 36% reduction of inappropriate ATP and shock therapy compared to metoprolol. Inappropriate therapy due to atrial fibrillation was reduced by 50% in patients on carvedilol compared to metoprolol.

