help to alter the prognosis and the therapeutic approach to this condition.

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REFERENCES


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improvement was observed (>35% or ≤ 35%, respectively) in a re-evaluation of left ventricular ejection fraction (LVEF) (mean of 13.5 months until re-evaluation). Approximately 29% of patients showed an increase in LVEF at the first re-evaluation. As expected, mortality was greater among individuals whose LVEF remained below 35%. In those patients alone, ICD was associated with a significant and independent reduction in mortality (HR, 0.64; 95% CI, 0.48–0.85).

Although ICD for primary prevention improves survival in patients with prior infarction and reduced LVEF, the variables used to define the indication (LVEF and functional class) are not very specific markers of sudden cardiac death due to cardiac arrhythmia. Rizas et al. published the results of a subanalysis of the MADIT II study showing that a noninvasive tool for assessing myocardial electrical stability (periodic repolarization dynamics [PRD]) is a promising predictor of sudden death. The variable is derived from a complex mathematical formula applied to a high-resolution electrocardiogram obtained over 10 minutes. It behaves as marker directly proportional to the degree of sympathetic activation of the myocardium. In that study, PRD calculated on inclusion of 856 patients in sinus rhythm behaved as a significant predictor of overall mortality (HR, 1.37; P<.001), whether related to sudden cardiac death (HR, 1.40; P=.003) or not (HR, 1.41; P=.006). On classification of patients into 4 groups according to PRD, only those in the first to third percentiles benefited from ICD implantation, with a 56% decrease in mortality (P<.001); for those individuals with highest PRD values, ICD placement did not improve survival because the decrease in sudden cardiac death was compensated by increased mortality not associated with sudden cardiac death.

With regards subcutaneous ICD, the mid-term outcomes of the EFFORTLESS registry have been reported. The study included a cohort of 985 individuals, whose characteristics differed from those usually found in patients undergoing conventional ICD placement (lower age and higher LVEF). These patients were followed up for at least 12 months. The rate of device-related complications (primary outcome measure of the study) at 30 days and 1 year was 0.3% (95% CI, 0.0–0.6%) and 2% (95% CI, 1.3–3.1%), respectively, with inappropriate shock due to oversensing being the most frequent (11 patients [1.1%]). In total, 115 patients (11.7%) experienced a complication during follow-up. Of these, 24 (2.4%) required device extraction due to infection but endocarditis was not reported in any of the patients. The rate of effective cardioversion/defibrillation of spontaneous episodes was 97.4%. Thus, in this extensive series, subcutaneous ICD showed a similar efficacy and safety profile to that of conventional devices.

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REFERENCES


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Selection of the Best of 2017 in Clinical Arrhythmology

Selección de lo mejor del año 2017 en arritmología clínica

To the Editor,

Atrial fibrillation (AF) continues to be the most common arrhythmia, with a prevalence of around 1% to 2% in the general population. In the setting of arrhythmia, it is the leading cause of morbidity and mortality, and the focus of the majority of scientific production. This year has seen the publication of information on the role of direct oral anticoagulants in the prevention of cardioembolic stroke in AF. There have been numerous efficacy and safety studies in clinical practice, most of which are multicenter retrospective studies, but which support the conclusions of previous clinical trials and reinforce the fundamental role of these drugs in the prevention of stroke vs vitamin K antagonists (VKA). In addition, the RE-CIRCUIT study demonstrated a lower rate of major bleeding when performing AF ablation without interrupting dabigatran therapy compared with conventional treatment with VKA. These findings confirm...