Quality of life in patients with implantable cardioverter-defibrillator: systematic review of randomized controlled trials.

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Abstract

BACKGROUND: Implantable cardioverter-defibrillator (ICD) therapy significantly improves the survival of patients who are at high risk for sudden cardiac death. However, it is unclear whether this survival is accompanied by impairment on quality of life (QoL).

OBJECTIVES: This systematic review sought to describe whether ICD therapy, as compared with standard treatment, can have an impact on QoL outcomes.

METHODS: Extensive literature searches were carried out in PubMed, EMBASE, LILACS and Cochrane Library. Eligible studies were randomized controlled trials (RCTs) of ICD versus medical therapy that reported valid and reliable measures of QoL. Included studies were reviewed to determine baseline patient characteristics, mean duration of follow-up, questionnaires used to assess QoL and association between QoL scores and ICD shock therapy.

RESULTS: Seven studies, enrolling a total of 5,701 patients, were included in this review. The analyzed trials showed conflicting results about the impact of ICD on QoL outcomes. Among the secondary prevention studies, CIDS reported a clear benefit from ICD and AVID showed no difference between ICD and amiodarone groups. Of the primary prevention trials, AMIOVIRT, MADIT II, DEFINITE, and SCD-HeFT found no evidence of impaired QoL in patients with an ICD. Evidence for an association between ICD shocks and QoL was mixed and seemed to depend on the interval between shocks and QoL assessment.

CONCLUSION: There was no evidence of impaired QoL in patients with an ICD. However, ICD patients must be educated of all possible risks and benefits, including transitory declines in QoL after ICD shocks.

KEYWORDS: Implantable cardioverter–defibrillator; congestive heart failure; patient-reported outcomes; quality of life; questionnaires; sudden cardiac death; systematic review

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