An Analysis of Basic Characteristics and Psychological Effects of Patients with Implantable Cardioverter Defibrillator and Cardiac Resynchronization Therapy

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Purpose: To analyze the potential relationships between patient characteristics and the psychological impacts of defibrillator therapy.

Method: A total of 92 Japanese patients with ICD/CRT-D were enrolled (Age 60.7±14.6 years; 72 males; ICD patients: 52 patients). A total of 45 patients (49%) were implanted for the primary prevention of sudden cardiac death (SCD). Participants were characterized by four underlying syndromes (DCM, HCM, OMI, and other heart disease (Other)). All patients completed the Florida shock anxiety scale (FSAS).

Result: Over a mean follow-up period of 694±434 days, 23 patients (25%) received at least one shock delivery. Three patients (3%) saw a psychologist due to their anxiety. The total mean score of FSAS was 17±8 points. There was no significant difference in the mean score of patients implanted for either primary or secondary prevention of SCD (17.6 vs 17.9; P=0.90). In addition, no significant difference was found in the mean score assigned on the basis of underlying disease (DCM: 17±8; HCM: 17±7; OMI: 18±11; Other: 16±6; P=0.65).

Conclusion: The psychological response of ICD/CRT-D patients is unrelated to their underlying disease or to incidents of cardiac arrest. Interestingly, compared to previous studies involving patients in the U.S., the FSAS scores of Japanese patients are inclined to be higher.

Keywords: defibrillator, shock, florida shock anxiety scale