ARRHYTHMOGENIC CARDIOMYOPATHY. PATTERNS OF VENTRICULAR INVOLVEMENT USING MAGNETIC RESONANCE.


PURPOSE: Recently, biventricular (BVAC) and left dominant arrhythmogenic cardiomyopathy (LDAC) had been included in the spectrum of arrhythmogenic cardiomyopathy (AC). The aim of the study was to describe, using cardiac magnetic resonance, the patterns of ventricular involvement as well as of late gadolinium enhancement (LGE).

METHODS: Medical records and databases from 3 hospitals were reviewed in order to obtain data of patients with arrhythmogenic cardiomyopathy. Diagnosis of classic and biventricular arrhythmogenic cardiomyopathy was made based on task force criteria. LDAC was diagnosis if LGE was present along with positive familiar history.

RESULTS: 21 consecutive patients were included (38±15yrs, 13 males). Diagnoses were LDAC in 5 patients (24%), BVAC in 8 (38%) and ARVC in 8 (38%). Right ventricular involvement was present in 17 patients (81%). And left ventricular involvement in 21 (100%). Among them, 10 patients (48%) had right ventricular volumes over the upper limit of normality and 7 patients (33%) had mild involvement with wall motion abnormalities and microaneurysms.

LGE was subepicardial in most cases (10 patients, 48%) and was more frequent in the inferior and lateral walls (15 patients, 71%).

LV involvement is the most frequent abnormality found in AC, LGE was seen in the left ventricle in all the patients studied. LGE was more frequently subepicardial and located in the inferior and lateral walls.

CONCLUSIONS: Ten patients showed LGE in the right ventricle and 21 patients (100%) in the left ventricle. Left ventricle systolic dysfunction LVEF<55% in 15 patients, 71%) and left ventricular dilatation (LVEDVi=98ml/m2) 4 patients, 19%.

CLASSICAL ARRHYTHMOGENIC CARDIOMYOPATHY

BIVENTRICULAR ARRHYTHMOGENIC CARDIOMYOPATHY