Heart Failure and Cardiomyopathies

CLINICO-EPIDEMIOLOGICAL CHARACTERIZATION OF ARRHYTHMOGENIC CARDIOMYOPATHY: DIFFERENCES BETWEEN RIGHT AND LEFT-SIDED PHENOTYPES

Poster Contributions
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Authors: Jose Maria Lopez Ayala, Marina Navarro Penalver, David Lopez-Cuenca, Juan Ramon Gimeno, Virgen de la Arrixaca University Hospital, Murcia, Spain

Background: Arrhythmogenic right and left ventricular cardiomyopathy (ARVC and ALVC respectively) have been previously characterized from a morphological standpoint (pathology and cardiac imaging) but we lack data on the clinical and epidemiological features of the later phenotype. We studied the clinical and epidemiological data of these two phenotypes.

Methods: Patients were recruited between 2002-2014. They were classified into 2 groups: Group A (ARVC): Definitive diagnosis of ARVC (Task Force Criteria 2010) and Group B (ALVC): carriers of a pathogenic mutation associated to arrhythmogenic cardiomyopathy alongside a phenotype of dilated cardiomyopathy (DCM), systolic dysfunction, a history of ventricular arrhythmias and/or a family history of sudden death.

Results: The ARVC population comprised 69 patients, 46 (66.67%) males, mean age 43.16±16.34 years. 36 patients comprised the ALVC group (38.9%) males, mean age 45.72±20.78 years. ARVC were more common in males compared with females (66.67 vs 33.33%) and it diagnosis was made earlier in males (39.91±18 vs 52.17±12.7 years, p: 0.037). Sudden death or sustained ventricular tachycardia (S-VT) was not more common in the athlete subgroup. 18 (26.1%) ARVC vs 9 (25 %) ALVC patients had at least one episode of documented S-VT (p: 0.804). The median age when S-VT occurred was 43 [23-54.25] years in ARVC vs 45 [31-58.5] years in ALVC (p: 0.142). Sudden death or S-VT was exercise-related in 9 (13%) ARVC vs 2 (5.6%) in ALVC. 10 out of 27 documented VT (37%) were triggered by exertion. Syncope of a cardiogenic profile was reported in 10 (17.39%) of the ARVC patients and in 2 of the ALVC group, being the first symptom in all cases. None of the syncope was exercise related.

Conclusion: Despite arrhythmogenic cardiomyopathy is commonly considered a condition that affects young patients and athletes, it was mostly diagnosed in patients in the fifth decade of life, with a similar age at diagnosis in ARVC and ALVC. ARVC affects mostly males. However, there is a higher proportion of females in the ALVC group. The age at diagnosis may differ up to years between males and females. The majority of cases of SD or S-VT occurred in non-athlete patients and it usually occurred at rest.