We detected STE parameters that within the 1st month after intact sarcoglycan expression. In contrast, all patients with normal dystrophin expression also showed myocarditis and deficient dystrophin expression (3 of them with male gender, see carriers of muscular dystrophy was observed in 5 out of those 7 patients with observed in 7/25 patients (28%) with biopsy-proven myocarditis. Noteworthy, a dystrophin expression (either rod domain and/or C- or N-terminal domain) was involving in the median 2 out of 17 segments. Overall, a deficiency in myocardial (EDV) index was 144ml/m² (IQR 112–173ml/m²), median L V ejection fraction (EF)

Methods and results:

Background: The diagnosis of acute myocarditis (aMyo) needs a high level of suspicion. Cardiac magnetic resonance (CMR) may contribute to the diagnosis; but endomyocardial biopsy (EMB) is considered the gold standard, although used infrequently worldwide. Short-term course, albeit unpredictable is usually benign and treatment is mainly supportive.

Objectives: To assess the usual care attitudes regarding hospitalized patients (pts) with a diagnosis of aMyo in Portugal, report patient’s clinical profiles and current therapeutic approaches, and assess the relevance of CMR to eventual changes in management and/or therapeutic decisions.

Methods: Prospective nationwide survey of admitted aMyo pts during a 2-year period (25.04.13–15). Electronic CRFs were completed with admission/discharge data, diagnostic tests, treatments and open-ended questions to evaluate physician’s opinions and conclusions.

Results: 248 pts from 18 centers were included, 98% caucasian, 35±14 (18–84) years old, 83% male. A recent infectious disease was detected in 57.5% (upper respiratory tract in 71.2%) and 23% had been previously treated with antibiotics. On admission, presentation included angina-like thoracic pain (96%), non-CV symptoms-58.4% (fever-71%, respiratory- 52.8%, GI- 28.1%), heart failure (HF)- 5.4% and cardiogenic shock- 0.8%; abnormal ECG - 82% (mostly ST elevation-78.5%); increased troponin levels in 95%; echo (in 94%pts) showed left ventricular dilatation (LVD) - 5.7%, segmental LV wall abnormalities (segmAbn) - 34%, reduced LV ejection fraction (RLVEF) - 21% and pericardial effusion (PE) - 11.7%. CMR (in 57%pts), didn’t change the management in 70% of cases. Coronary angiography (in 40%) revealed significant CAD in 7.4%. EMB was diagnostic in the 2 pts in which was performed (due to severe progressive HF). Multiple viral serologies (in 32.4% pts) were conclusive in only 0.5%. Most pts were treated with NSAIDs, 39% received ACEi orARB, 36 a beta-blocker (BB) and 8.4% diuretics; 3.4% needed inotropes. Only 1 death occurred (shock). At discharge, an abnormal ECG persisted in 64.4% of pts; echo (in 50.4%) showed LVD in 6%, segmAbn in 24.6%, RLVEF in 14.6% and PE in 10.2%. Most pts (98.2%) were discharged on NSAIDs, 37.6% on ACEi or ARB, 30.36% on BB, and 6.47% on diuretics. Final diagnosis was aMyo in 54.4% (probable/possible in 96.9% and definitive in only 3.1%) and myopericarditis in 45.6%. Diagnostic criteria were
“clinical” in 96.4%, supported by lab results in 87.7% and ECG in 68.8%. Echo or CMR contribution in supporting “clinical diagnosis” was 38.3% and 46.6% respectively. Disease course was in most cases “mild” (87%).

Conclusions: Echo and CMR were performed in most pts with aMyo but diagnosis remained mostly “clinical” according to treating physicians. EMB was very rarely performed. Treatment was largely empirical but an “overuse” of CV drugs and NSAIDs was observed.