CLINICAL PREDICTORS OF DISEASE PROGRESSION AND POOR PROGNOSIS OF APICAL HYPERTROPHIC CARDIOMYOPATHY

Poster Contributions
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Background: Apical hypertrophic cardiomyopathy (AHCM) is believed to have favorable prognosis and has a broad spectrum of clinical features. However, there has been no study about clinical factors associating with progression of AHCM. The aim of this study was to evaluate clinical predictors which related with progression and prognosis of AHCM.

Methods: From 2003 to January 2009, a total of 218 patients who had regular echocardiographic follow up were enrolled. The primary endpoint was progression of AHCM. Progression of AHCM was defined as a transformation of HCM, formation of apical aneurysm or apical pouch, increase in maximal wall thickness (MWT) (>5mm) or reduction in MWT (>3mm). The secondary end point was major adverse cardiac events (MACE) and development of atrial fibrillation.

Results: During the mean follow-up period (51.8 ± 29.8 months), progression of AHCM was observed in 25 cases (11.5%) and MACE in 55 cases (25.2%). In multivariate logistic regression analysis, MWT ≥ 20mm was an independent risk factor for progression of AHCM (OR=5.57, 95% CI 1.918 – 16.134, p=0.002), as well as for MACE(OR=2.963, 95% CI1.218 – 7.209, p=0.017). Kaplan-Meier analysis showed that patients with MWT≥20mm had a higher MACE rate than patients with MWT <20mm (40.5% vs. 20.1%, log rank,p=0.044).

Conclusions: MWT ≥20mm in patients with AHCM was associated with morphologic progression and poor prognosis. Therefore, AHCM patients who have MTW ≥20mm may need more careful clinical monitoring and echocardiographic follow up.