Reviewer’s report

Title: Genetic relevance and determinants of mitral leaflet size in hypertrophic cardiomyopathy

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Reviewer: Maria Grazia Andreassi

Reviewer's report:

This paper investigated the genetic relevance and determinants of mitral leaflet size in patients with hypertrophic cardiomyopathy (HCM) by performing a very extensive genetic analysis, including 8 sarcomeric genes, 74 other HCM-associated genes and mitochondrial DNA, along with diverse morphologic phenotype definitions and hemodynamic factors.

The findings showed that anterior mitral leaflet elongation is significantly larger in patients with HCM than in controls, mainly related to LV geometry and hypertrophy pattern rather than genetic factors within overt HCM.

The study is well-written and clearly presented, the methodology is appropriate and the conclusions are believable, confirming and extending previous studies regarding the mitral leaflet abnormalities in patients with HCM.

I have only a minor suggestion: please add the number of patients of each group in the figure 3.

Level of interest

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An article whose findings are important to those with closely related research interests

Quality of written English

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