

589 External validation of the increased wall thickness score for the diagnosis of cardiac amyloidosis

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Aims: This study aimed to validate the increased wall thickness (IWT) score, a multiparametric echocardiographic score to facilitate diagnosis of cardiac amyloidosis (CA), in an independent population of patients with increased LV wall thickness suspicious for CA.

Methods and results: Between January 2019 and December 2020, 152 consecutive patients with increased LV wall thickness suspicious for CA were included. For all patient, the multiparametric echocardiographic score (IWT score) was calculated. To validate the diagnostic accuracy of an IWT score ≥ 8 to predict the diagnosis of CA, sensibility (Se), specificity (Sp), positive predictive value (PPV), negative predictive

value (NPV), and predictive accuracy (PA) were calculated. Among the 152 patients included in the study, 50 (33%) were diagnosed as CA, 25 (16%) had severe aortic stenosis, 25 (16%) had hypertensive remodelling, and 52 (34%) had hypertrophic cardiomyopathy. Among the 50 and 102 patients with and without CA, 19 (38%) and 1 (1%) showed an IWT score ≥ 8 , respectively. Overall, the diagnostic accuracy of an IWT score ≥ 8 for the diagnosis of CA in our population was the following: Se 38% (95% CI: 25-53%); Sp 99% (95% CI: 95-100%); PPV 95% (95% CI: 72-99%); NPV 77% (95% CI: 73-80%); PA 79% (95% CI: 72-85%).

Conclusions: This study reports the first external validation of the IWT score for the diagnosis of CA in patients with increased LV wall thickness. A score ≥ 8 showed a high Sp, PPV and PA, suggesting that the IWT score can be used to identify CA patients in those with increased LV wall thickness.