Early Diagnosis of Cardiac Amyloidosis. A Step Forward

Diagnóstico precoz de la amiloidosis cardíaca. Un paso más hacia adelante

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Cardiac amyloidosis is undergoing a significant transformation. From being a terminal disease without therapeutic alternatives to a pathology with new therapeutic options, which could potentially change the course of the disease. (1) Therefore, it is highly relevant to achieve a relatively early diagnosis.

The development of nuclear medicine and magnetic resonance imaging techniques has represented a significant progress in the diagnosis of the transthyretin form of amyloidosis. (2, 3) However, this evidence is obtained once the diagnosis is suspected, which usually occurs in advanced cases.

Echocardiography is still the first-line technique for the diagnosis of early suspicion. Morphological findings, in cases of moderate suspicion, are not specific and patients with increased wall thickness of different etiology can lead to erroneous conclusions.

The work presented by Ariel Saad et al. (4) in this issue of the Argentine Journal of Cardiology expands and improves the use of echocardiography for the diagnosis of cardiac amyloidosis. The authors compared 15 patients with diagnosed amyloidosis and 15 patients with hypertrophic cardiomyopathy. Patients had only mild to moderate wall thickness, but with abnormal ventricular filling. Among a series of ventricular mechanical parameters, the authors concluded that the product of longitudinal stress and apical circumferential stress and the ratio of ejection fraction and global longitudinal strain ratio (EF/GLS) enable the differentiation of cardiac amyloidosis. These are good news for echocardiography, since nowadays most cardiologists and echocardiography laboratories are familiar with global longitudinal strain. The present work confirms Pagourelias et al.'s findings, (5) reporting that EF/GLS could differentiate amyloidosis from other entities coursing with hypertrophy with 89.7% sensitivity and 91.7% specificity.

Currently, several echocardiographic techniques incorporating strain facilitate the early detection and differential diagnosis of ventricular hypertrophy cardiomyopathies, from the visually simple "cherry on top" (6) denoting better apical than basal strain, to those described in the present article.

It only remains to apply it on a larger scale and analyze its usefulness in the "real world". In any case, this time the diagnostic progress seems to go hand in hand with therapeutic development. Nothing better can be expected.

CONFLICTS OF INTEREST

None declared.

(See authors' conflicts of interest forms on the website/Supplementary material).

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