Unexpected massive myocardial calcification

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Figure 1. A) Apical four-chamber view of a transthoracic echocardiogram showing the left ventricle calcifications in the septal and lateral wall with 'snow ball' appearance. B and C) Chest computer tomography showing severe calcifications of the left ventricular lateral wall (B) and of the left ventricular septal wall and mitral annular calcifications (C). RV=right ventricle, LV=left ventricle, RA=right atrium, LA=left atrium.

A 62-year-old female with a history of hypertension, atrial fibrillation and pulmonary embolism was admitted for dyspnoea.

An echocardiogram showed heavy midwall and subendocardial calcification of the septum, lateral wall and apex of the left ventricle (LV) (figure 1A), which correlated with findings on a chest CT scan (figure 1B and C). The calcifications, which could be described as 'snow balls' inside the myocardium on the echocardiogram, did not respect the distribution territory of a coronary artery.

Various patterns of LV calcification have been reported. Old myocardial infarction or calcification of intracavitary thrombus are common causes as are the calcium-phosphate metabolism disturbances of chronic kidney disease.¹ Other conditions reported to result in LV calcification are myeloproliferative diseases, severe sepsis or endomyocardial fibrosis.²⁻⁴

Unfortunately the patient declined further workup and was discharged with a diagnosis of left ventricular calcification of unknown aetiology. ■

References

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