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IMAGE FOCUS

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Symptomatic charcoal heart

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A 47-year-old woman with a past history of left choroidal malignant melanoma submitted to eye enucleation 13 years before presented to the emergency department because of pleuritic chest pain, shortness of breath, and tiredness.

Transthoracic echocardiography revealed pericardial thickening and multiple confluent hypoechoic nodular images, extending into the adjacent myocardium (Panel A, arrow, Supplementary data online, Clip S1). For tissue characterization, a cardiac magnetic resonance was performed, confirming diffuse pericardial thickening and multiple myocardial masses with heterogeneous behaviour and hyperintense sign in T_1 - and T_2 -weighted sequences, respectively, positive for perfusion and with areas of delayed enhancement along the masses and within the whole pericardium (Panels B–E, Supplementary data online, Clip S2–S5). These findings were compatible with the myopericardium malignant tumour involvement. A fluoro-D-glucose positron emission tomography scan excluded extracardiac tumour extension/foci (Panel G). Conventional histology (Panel F, haematoxylin/eosin) and immunohistochemistry, positive for neural crest derived markers HMB-45 and S-100-protein, confirmed malignant melanoma metastasis on cardiac needle biopsy. The patient was put on dacarbazine chemotherapy with symptomatic relieve at a 6-month follow-up period.

Advanced metastatic malignant melanoma has a very high propensity for heart metastization, being noted in a significant number of patients at autopsy. Nevertheless, exclusive and symptomatic cardiac extension with main pericardial affection-related complains is rare, namely for primary eye tumours.

Supplementary data are available at *European Heart Journal – Cardiovascular Imaging* online.

