A 71-year-old female patient was referred for coronary angiography for suspected acute coronary syndrome with sudden onset of chest pain, ST-segment changes, T-wave inversion involving the left precordial leads, and positive cardiac troponin I. The patient had a history of melanoma at her lumbar region 9 years ago that has been removed with wide surgical excision. The primary tumour’s Clarke’s level was IV and the Breslow thickness was 0.8 mm. There was no regional lymph node involvement and no distant metastasis.

At admission, coronary angiography revealed normal coronary arteries. Echocardiography showed a $6 \times 3$ cm smooth surfaced, homogeneous echogenic mass involving the anterolateral wall and the apex of the left ventricle and a small pericardial effusion. Six days after admission, the patient died suddenly. Autopsy confirmed the diagnosis of cardiac metastasis of malignant melanoma.

Secondary or metastatic heart tumours occur up to 100 times more frequently than primary tumours of the heart. There are no physical or laboratory examinations that specifically detect cardiac metastases. Clinically, secondary heart tumours usually remain silent. In rare cases, chest pain and typical ST-segment changes associated with tumour-associated myocardial and pericardial injury may mimic acute coronary syndrome. Additional diagnostic information can be obtained by echocardiography and computer tomography. Malignant melanoma is a tumour with an aggressive biological behaviour that can involve any organ including the heart. Thus, physicians have to be alert that cardiac metastases mimicking acute coronary syndrome as the initial clinical manifestation of metastatic malignant melanoma may occur late after surgical excision of the primary tumour.

Panel A reveals ECG at admission. (Panel B) Angiography of the left coronary artery in the right anterior oblique view. (Panel C) Computer tomography; arrow indicates metastasis. (Panels D and E) Transthoracic echocardiography—apical four-chamber view; arrow indicates metastasis. (Panel F) Stained section of the primary skin tumour. (Panels G–J) Stained sections of the cardiac metastasis.