



Recurrent syncope in a case of metastatic malignant melanoma — An unusual presentation of an uncommon disease

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Received 5 October 2005; received in revised form 8 November 2005; accepted 17 November 2005 Available online 27 December 2005

KEYWORDS

Syncope; Melanoma; Tumour **Abstract** Cardiac tumours may be rare causes of syncope. Here we report a malignant melanoma that metastasized to the right atrium as an intracavitary mass that intermittently obstructed the tricuspid valve producing syncope episodes.

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Intracardiac masses may cause syncope by inflow or outflow tract obstruction. Melanoma is the neoplasm with the greatest propensity for cardiac involvement with unpredictable behaviour. We report a case with syncope due to right ventricular inflow tract obstruction most likely caused by a metastatic melanoma.

Case report

A 64-year-old man with a malignant melanoma was admitted to the Cardiology Department because of multiple syncope episodes occurring after sudden standing. Physical examination was unremarkable. Transthoracic echocardiography showed a large echodense mass in the right atrium occupying

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most of the chamber and prolapsing through tricuspid valve into the right ventricle (Figs. 1 and 2). There was a moderate degree of pericardial effusion. Left and right ventricular systolic functions were normal. Transesophageal echocardiography confirmed the transthoracic study. The patient did not accept surgical treatment and medical treatment (chemotherapy) was initiated.

Discussion

Metastases of malignant tumours in the heart are rare causes of syncope. Malignant melanoma in particular has a propensity to involve the heart.

All cardiac chambers can be involved but most commonly the right atrium is involved. In the literature there are 3 cases of syncope due to malignant melanoma. 1—3 In one case syncope resulted from ventricular tachycardia and in another

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Figure 1 A transthoracic echocardiographic view showing the large tumour mass (arrow) in the right atriumprolapsing through tricuspid valve.

case due to inadequate fluid intake during interferon treatment. In the third case, mechanical obstruction of the left ventricular outflow tract was the cause and the primary tumour was an ocular melanoma. In our case the syncope was due to mechanical obstruction of the right ventricular inflow tract by a metastatic mass in the right atrium.

This case supports the important role of echocardiography in the follow-up of patients with unpredictable, potentially rapidly growing tumours. There are also several reports in the literature describing metastatic cardiac involvement several years after resection of the primary

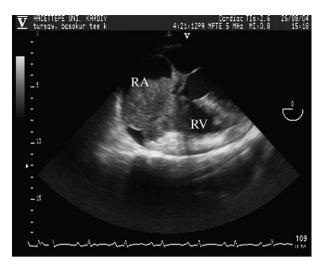


Figure 2 A transesophageal echocardiographic view showing a large tumour mass occupying most of the right atrium and prolapsing through the tricuspid valve into the right ventricle, causing right ventricular inflow obstruction.

tumour. Therefore, patients who survive should also be followed for several years.

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