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Remission of an Intracardiac Melanoma Metastasis after Tremelimumab Therapy

Sebastian Spethmann^{a, b} Uwe Trefzer^c Fabian Knebel^a

^aMedizinische Klinik für Kardiologie und Angiologie, Campus Mitte, Charité – Universitätsmedizin, ^bBundeswehrkrankenhaus Berlin, Abteilung I – Innere Medizin, and ^cDermatologikum Berlin, Berlin, Germany

Key Words

Tremelimumab · Intracardiac melanoma metastasis · Tumour regression

Abstract

Tremelimumab is a fully human monoclonal antibody specific for human cytotoxic T lymphocyte-associated antigen 4. Administration of tremelimumab to patients with locally advanced and metastatic melanoma has resulted in a subset of patients with durable objective tumour regressions. Our echocardiographic images impressively show the effects of this new antibody in a patient with cardiac metastatic malignant melanoma.

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A 51-year-old woman with stage IV melanoma was enrolled in a tremelimumab study [1]. She was initially diagnosed with malignant melanoma on her back in May 2009. On October 27, 2010, prior to her enrolment in the study, she underwent a transthoracic echocardiography examination. The examination revealed a massive tumour metastasis, probably haematogenic spread through the pulmonary veins, filling out almost the whole left atrium (initial size: [fig. 1a](#), [fig. 2a](#)). In November 2010, a therapy with tremelimumab 15 mg/kg once every 90 days was initiated. Both the patient subjectively and the subcutaneous metastasis responded favourably to the therapy. A follow-up echocardiography 4 weeks later showed regression of the intracardiac metastasis ([fig. 2b](#)). Moreover, 6 weeks later, the left atrial tumour had completely disappeared ([fig. 1b](#), [fig. 2c](#)). Unfortunately, 2 months later, the patient died at home.

Sebastian Spethmann, MD
Medizinische Klinik für Kardiologie und Angiologie
Charité – Universitätsmedizin Berlin
Charitéplatz 1, DE-10117 Berlin (Germany)
E-Mail sebastian.spethmann@charite.de

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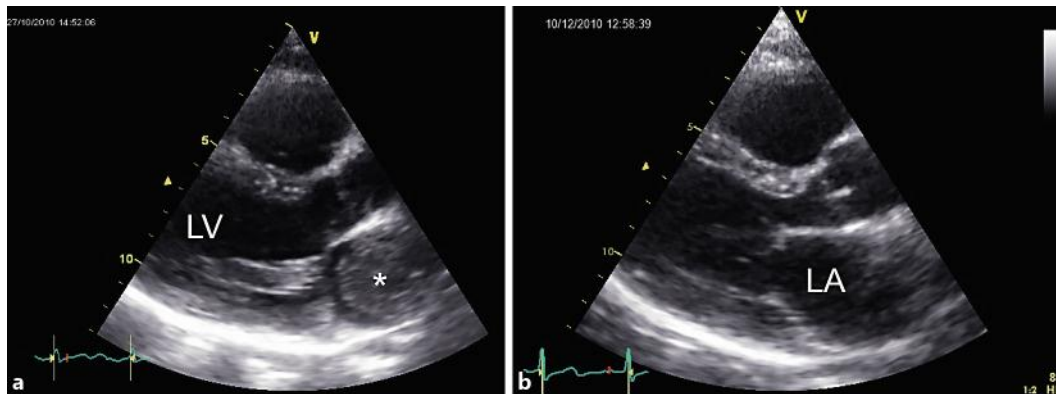


Fig. 1. The parasternal long axis view shows a sessile tumour (*) filling out almost the whole left atrium (LA) (a) prior to tremelimumab therapy. Three months later, the atrial tumour had completely disappeared (b). LV = Left ventricle.

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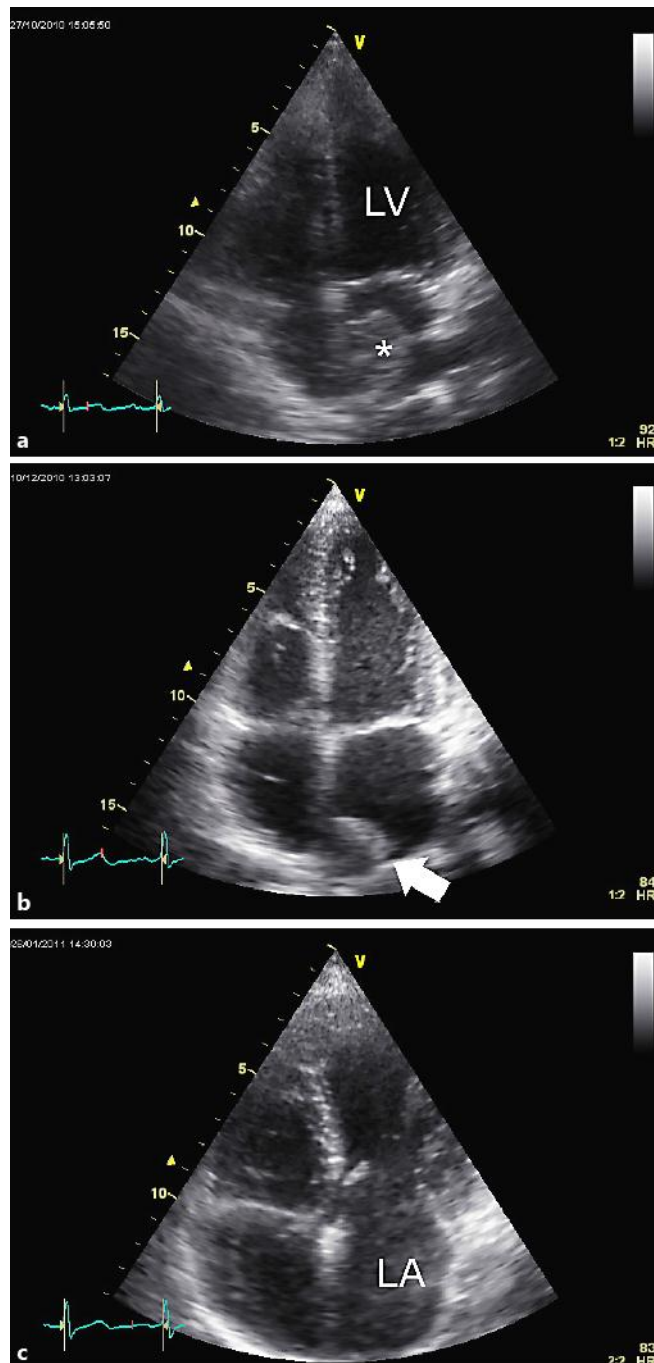


Fig. 2. **a** The four-chamber view reveals a massive left atrial tumour (*), probably out of pulmonary veins. **b** Thirty-six days after the first tremelimumab infusion regression of the intracardiac metastasis occurred (arrow). **c** Six weeks later, the left atrial tumour had completely disappeared. LA = Left atrium; LV = left ventricle.