CLINICAL PRACTICE

Clinical Images

Recurrent Melanoma Presenting as a Very Large Cardiac Mass with Concurrent Pancreatic Involvement

Avital Y. O'Glasser, MD¹ and Rebecca R. Sauerwein, BS^{2,3}¹Division of Hospital Medicine, Department of Medicine, Oregon Health & Science University, Portland, OR, USA; ²School of Medicine, Oregon Health & Science University, Portland, USA; ³Department of Pathology, Oregon Health & Science University, Portland, USA.**KEY WORDS:** melanoma; cardiac mass; cardiac tumor; metastatic melanoma.

J Gen Intern Med 29(11):1557–8

DOI: 10.1007/s11606-014-2853-6

© Society of General Internal Medicine 2014

Figure 1. Abdominal CT demonstrating a large, heterogeneous soft tissue mass of the pancreatic head (dashed arrow) and a large, hypodense cardiac mass (solid arrow).

A 59-year-old Caucasian woman was diagnosed with a right shoulder 2.0 mm deep, Clark's Level IV melanoma (stage T2aN0/IB), 2.5 years prior. She underwent wide-excision and surgical staging with negative lymph nodes. She did not receive whole-body imaging or adjuvant therapy.

She returned with two weeks of episodic syncope, exertional dyspnea, and epigastric pain. Abdominal computed tomography (CT) revealed a large pancreatic head mass and a right-sided cardiac mass (Fig. 1). She soon developed right heart failure and acute cardiogenic shock, which ultimately led to death.

Received December 17, 2013

Revised February 24, 2014

Accepted March 19, 2014

Published online May 10, 2014

Figure 2. Cross-section of the heart at autopsy, with transmurular involvement of the right ventricle free wall by the large mass (solid arrow). Concentric left ventricular hypertrophy (LVH) is also seen (dashed arrow).

Autopsy revealed a 10.8×8×7 cm tan, focally necrotic transmurular right ventricular (RV) mass (Fig. 2) and a 13×8×6 cm pancreatic head mass. Immunohistochemistry staining was negative for typical melanoma markers, but eventually stained positive for SOX-10.

Melanoma has one of the highest rates of cardiac metastasis; autopsy series identify cardiac metastases in 50–70 % of patients with metastatic melanoma.¹ The majority are small and disseminated, although discrete masses up to 7–8 cm are reported.^{2–4} Because cardiac melanoma usually occurs in the setting of diffusely disseminated disease, treatment options are often limited.

This case highlights that cardiopulmonary symptoms in a patient with a history of melanoma should raise concern for recurrent disease involving the heart.

Conflict of Interest: The authors declare that they do not have a conflict of interest.

Corresponding Author: Avital Y. O'Glasser, MD; Division of Hospital Medicine, Department of Medicine, Oregon Health & Science University, 3181 SW Sam Jackson Park Road, BTE 119, Portland, OR 97239, (e-mail: oglasser@ohsu.edu).

REFERENCES

1. Glancy DL, Roberts WC. The heart in malignant melanoma: A study of 70 autopsy cases. *Am J Cardiol.* 1968;21:555–71.

-
2. **Waller BF, Gottdeiner JS, Virmani RV, et al.** The charcoal heart: Melanoma to the cor. *Chest*. 1980;77:671–6.
 3. **Emmot WW, Vacek JL, Agee K, et al.** Metastatic malignant melanoma presenting clinically as obstruction of the right ventricular inflow and outflow tracts. *Chest*. 1987;92:362–3.
 4. **Basarici I, Demir I, Yilmaz H, Altekin RE.** Obstructive metastatic malignant melanoma of the heart: Imminent pulmonary arterial occlusion caused by right ventricular metastasis with unknown origin of the primary tumor. *Heart Lung*. 2006;35(5):351–4.