More than Meets the Eye: Metastatic Uveal Melanoma

Cathy I. Cheng, MD¹, Susanna S. Park, MD PhD², and Paul Aronowitz, MD³

¹Department of Hospital Medicine, Kaiser Permanente Santa Clara Medical Center, Santa Clara, CA, USA; ²Department of Ophthalmology & Vision Science, University of California Davis Eye Center, Sacramento, CA, USA; ³Department of Internal Medicine, University of California Davis, Medical Center, Sacramento, CA, USA.

KEY WORDS: clinical image(s); melanoma; cancer; oncology; ophthalmology.

J Gen Intern Med 31(11):1397

DOI: 10.1007/s11606-016-3706-2

© Society of General Internal Medicine 2016

A 61-year-old man with subacute, abdominal distension presented to the Emergency Department. He also had progressive left eye pain and vision loss for 3 years. Physical examination revealed hepatomegaly and a left afferent pupillary defect. Left intraocular pressure was elevated at 34 mmHg. Ultrasound demonstrated a large mass filling 80 % of the left globe with low-internal reflectivity consistent with uveal melanoma. The left eye had florid iris neovascularization (arrow, Fig. 1) resulting from tumor secretion of vascular endothelial growth factor and prominent sentinel vessels (dotted arrow, Fig. 2) nourishing a tumor infiltrating the uvea (solid arrow, Fig. 2). Most of these findings could be appreciated with penlight examination. Abdominal computed tomography revealed hepatomegaly with hepatic masses, biopsy of which revealed metastatic melanoma.

Uveal melanoma is the most common primary ocular malignancy in adults.¹ Since liver is the most common site of metastasis,² metastatic uveal melanoma can present with

Figure 1. The green arrow illustrates one of many areas of florid neovascularization in the iris.

Figure 2. The dotted green arrow refers to an area of prominent sentinel vessels, which are nourishing a tumor that has infiltrated the uvea. The solid green arrow denotes the location of the tumor, which is the patient's uveal melanoma.

vision loss and liver masses. In the U.S., the incidence of uveal melanoma is 4.3 cases per million people;³ the average age at diagnosis is 60 years.⁴ Once metastasis occurs, survival is under one year,⁵ and no cure exists. Our patient died the following week on home hospice.

Acknowledgments: This submission did not involve additional contributors or funding sources. This case was presented at the University of California, Davis Department of Internal Medicine Clinical Grand Rounds on June 19, 2014 and at the Society of Hospital Medicine Annual Meeting on March 31, 2015.

Corresponding Author: Paul Aronowitz, MD; Department of Internal Medicine University of California Davis, Medical Center, Sacramento, CA, USA (e-mail: paronowitz@ucdavis.edu).

Compliance with Ethical Standards:

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

REFERENCES

1. Seregard S. Posterior uveal melanoma: the Swedish perspective. *Acta Ophthalmol Scand.* 1996;74:315–29.
2. Silverman PM, Heaston DK, Korobkin M, Seigler HF. Computed tomography in the detection of abdominal metastases from malignant melanoma. *Investig Radiol.* 1984;19:309–12.
3. Singh AD, Topham A. Incidence of uveal melanoma in the United States: 1973–1997. *Ophthalmology.* 2003;110(5):956–61.
4. Singh AD, Turell ME, Topham AK. Uveal melanoma: trends in incidence, treatment, and survival. *Ophthalmology.* 2011;118:1881–5.
5. Liang KV, Sanderson SO, Nowakowski GS, et al. Metastatic malignant melanoma of the gastrointestinal tract. *Mayo Clin Proc.* 2006;81(4):511–6.

Received January 4, 2016

Revised February 8, 2016

Accepted April 4, 2016

Published online May 2, 2016