# Ocular Oncology Case Study

Solitary idiopathic choroiditis (SIC) in a patient with a history of breast carcinoma.

BY CARLOS BIANCIOTTO DELICH MD; AND CAROL L. SHIELDS, MD

#### CASE PRESENTATION

A 53-year-old white woman was referred with a suspicious lesion in the fundus of the left eye, found in a routine eye exam. Ten months previously she had been diagnosed with breast carcinoma and was treated with mastectomy with no affected axillary lymph nodes. Her systemic workup was negative for metastatic disease. She was referred for evaluation of a choroidal metastasis.

#### **EXAMINATION**

She had no visual complaints. Her uncorrected visual acuity was 20/20 in both eyes. Intraocular pressures were within normal limits and the slit-lamp exam was unremarkable in both eyes. Fundus examination of the right eye was normal. In the left eye, a yellow, round lesion with distinct margins was found located 0.5 mm superior to the optic nerve, measuring  $1.5 \times 1 \times 1.5 \text{ mm}$  (Figure 1). Autofluorescence showed hypoautofluorescence of the lesion (Figure 2), and B-scan ultrasonography revealed a thickness of 1.5 mm, with high internal reflectivity on Ascan ultrasound. Optical coherence tomography showed a dome-shaped mass located at the level of the retinal pigment epithelium with no signs of subretinal fluid (Figure 3). These features were more consistent with a resolved choroidal granuloma (solitary idiopathic choroiditis) than with choroidal metastasis.

#### **DISCUSSION**

Solitary idiopathic choroiditis is a distinct clinical entity that can simulate an intraocular neoplasm.<sup>1</sup> Affected patients are usually young (mean age 35 years) females (63%) and commonly white (93%). Laboratory evaluation generally shows negative results even though it is suspected that the resolved granuloma could have been a result of infection such as cat scratch disease (Bartonella infection). Often patients will give a history of contact with cats. There is usually no other sign of uveitis.

In an analysis of 60 patients, patient symptoms at presentation included visual loss (38%), floaters (15%), mild

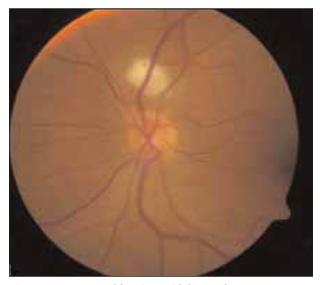


Figure 1. A 53-year-old patient with known breast cancer developed this yellow choroidal mass, suggestive of solitary idiopathic choroiditis rather than metastasis.

pain (5%), metamorphopsia (3%), and scotoma (3%).<sup>1</sup> Approximately 35% of patients had no symptoms. The lesions were classically located posterior to the equator (93%), most often within 3 to 4 mm of the optic disc. The tumor color was typically yellow (97%), and the mass displayed distinct margins (63%).

At the time of clinical diagnosis, most cases (67%) of solitary idiopathic choroiditis are inactive. If inactive, management consists of observation. If active with surrounding subretinal fluid or vitreous cells, management should include systemic evaluation as well as local or systemic steroids and/or antibiotics, depending upon the evaluation. Systemic evaluation should include cat scratch disease, tuberculosis, syphilis, sarcoidosis, and other less common conditions depending on the patient's general health, exposures, and location. In the long run, solitary idiopathic choroiditis tends to remain stable once it is in the inactive form.



Figure 2. Autofluorescence showed hypoautofluorescence with no subretinal fluid.

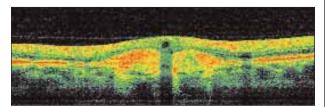


Figure 3. OCT showed a dome shaped mass at the level of the retinal pigment epithelium/choroid with no signs of subretinal fluid.

### CASE RESOLUTION

In this case, this patient was referred with an amelanotic lesion suspicious for metastasis from known breast cancer. Knowledge of the clinical features and outcome of solitary idiopathic choroiditis allowed a critical diagnosis to be made and provided relief for the patient that she did not have a metastasis.

Support provided by the Retina Research Foundation of the Retina Society in Capetown, South Africa.; and the Eye Tumor Research Foundation, Philadelphia, PA. The authors have no financial interests to disclose pertaining to this article.

Carlos Bianciotto Delich, MD, is a fellow in Ocular Oncology at Wills Eye Institute, Thomas Jefferson University, Philadelphia.

Carol L. Shields, MD, is the Co-Director of the Ocular Oncology Service, Wills Eye Hospital, Thomas Jefferson University. Dr. Shields is a member of the Retina Today Editorial Board. She may be reached at carol.shields@shieldsoncology.com; phone: +1 215 928 3105; fax: +1 215 928 1140. The authors have no financial interest on the devices or medications mentioned in this document.





<sup>1.</sup> Shields JA, Shields CL, Demirci H, Honavar S. Solitary idiopathic choroiditis: the Richard B. Weaver lecture. Arch Ophthalmol . 2002;120:311-319.

## Subscribe to RETINA TODAY'S e-News

Our monthly electronic newsletter can be delivered directly to your e-mail account. It will bring you full text links to all of the articles in the print edition, as well as periodic news updates. Subscribing is easy and free.

Simply e-mail us at retinatoday@bmctoday.com, type "Subscribe e-News" in the subject line, and include your name in the body of the e-mail. You can unsubscribe at any time by clicking on the "unsubscribe" link in the e-Newsletter.

We look forward to hearing from you!

