were also bilateral, multifocal, stellate areas of hypoautofluorescence that were not appreciated clinically in either eye (Figure 1E and F).

Optical coherence tomography through the lesion in the right eye demonstrated outer retinal thinning with associated attenuation of the inner segment–outer segment junction (Figure 2). Full-field electrotinography findings were normal in both eyes.

Comment. The first report of unilateral RPE dysgenesis was published in 2002. In this report, 3 young men and 1 woman aged 16 to 34 years were noted to have a round leopard-spot lesion contiguous with the optic nerve. In 2009, the typical characteristics of unilateral RPE dysgenesis were described in a set of 9 affected patients, 6 males and 3 females aged 14 to 42 years. The margin of the lesion is pathognomonic, with a scalloped reticular fringe of mild fibrosis and atrophy with inverted FAF imaging relative to fluorescein angiography, and is identical to the lesion in our patient.

The differential diagnosis of this lesion includes acute zonal occult outer retinopathy. However, acute zonal occult outer retinopathy typically has a smooth curvilinear border on autofluorescence and the electrotinographic findings are abnormal. Alternative differential diagnoses include traumatic retinal pigment epitheliopathy and combined hamartoma of the retina and RPE.

This case is unique in that it shows bilateral loss of the RPE in a multifocal, scattered, stellate fashion, best appreciated with FAF imaging. To our knowledge, this is the first reported case of unilateral RPE dysgenesis with abnormal findings on FAF imaging in the fellow eye. In the previously reported series of 9 patients by Cohen et al, only 3 cases were evaluated with FAF imaging and no evidence of bilateral disease was seen. However, as most patients in the case series did not have FAF imaging performed, some of these unilateral cases may have had subclinical bilateral disease.

The etiology of this condition remains elusive. It may be an RPE dysgenesis or dystrophy, or it could reflect previous inflammatory, infectious, or autoimmune insult to the RPE. It is intuitive that a dysgenesis should ultimately be bilateral, and this is the first report to our knowl-

edge illustrating this for RPE dysgenesis, which perhaps should no longer be termed unilateral.

Jennifer Renz, MD
Jordana G. Fein, MD, MS
Robin Vora, MD
Harold Woodcome Jr, MD
Elias Reichel, MD
Jay Duker, MD

Author Affiliations: Department of Ophthalmology, New England Eye Center, Tufts Medical Center, Boston, Massachusetts (Drs Renz, Fein, Vora, Reichel, and Duker); and Department of Ophthalmology, Brown University, Providence, Rhode Island (Dr Woodcome).

Correspondence: Dr Reichel, Department of Ophthalmology, Tufts University School of Medicine, 800 Washington St, PO Box 450, Boston, MA 02111 (ereichel@tuftsmedicalcenter.org).

Financial Disclosure: None reported.

Levofoxacin-Associated Panuveitis With Chorioretinal Lesions

Drug-induced uveitis is a rare complication of many commonly prescribed medications, including bisphosphonates, sulfonamides, multiple vaccines, and topical β-blockers. Recently, a uveitis-like syndrome with iris transillumination defects and pupillary mydriasis associated with oral moxifloxacin use has been described. Fluoroquinolones are an increasingly recognized cause of bilateral uveitis, although the visual significance is often minimal. Herein, we describe a visually disabling but reversible manifestation of levofoxacin-associated panuveitis.

Report of a Case. In July 2010, a 68-year-old woman without pertinent medical or ocular history visited our uveitis clinic because of decreased vision and floaters bilaterally for 5 days. Two weeks prior, she was bitten by a dog and was prescribed prophylactic levofoxacin. After 4 days of therapy, she noted painless bilateral palmar macules and pustules, followed a day later by blurred vision and floaters in both eyes. She discontinued levofoxacin and was referred to us. Other long-term medications she had been receiving at the time of the initial visit included atenolol, amlodipine besylate, rabeprazole sodium, diphenhydramine hydrochloride, and low-dose aspirin; however, none of these represented a new exposure. Further, the patient was bitten by her own dog whose immunizations were up to date, so rabies vaccination was not necessary.

**Figure.** Retinal images before and after 2 months of oral prednisone therapy. Fluorescein angiography (FA) of the patient’s right (A) and left (B) eyes at the initial visit demonstrated early staining of punctate foveal lesions (arrows). The spots have nearly completely resolved in both the right (C) and left (D) eyes with therapy 3 months later. Optical coherence tomography, shown for only the right eye before (E) and after (F) therapy, reveals the retinal pigment epithelial location of these lesions (arrowheads) and similar resolution.
Her visual acuity was 20/500 OU and intraocular pressure was 8 mm Hg OU. Biomicroscopic examination revealed small, nongranulomatous keratic precipitates, 1+ anterior chamber cell and flare, 1+ to 2+ vitreous cells and 1+ haze, and multiple hypopigmented punctate lesions in the foveae in both eyes. These lesions demonstrated early staining on fluorescein angiography (Figure, A and B) and nodular increased reflectivity at the level of the retinal pigment epithelium on optical coherence tomography (Figure, E). Color fundus photographs were not available.

After confirming negative results on chest radiography and syphilis serology, we initiated oral prednisone, 60 mg/d with an extended taper. At each successive visit, her visual acuity and symptoms improved. After completion of a 2-month prednisone taper, her visual acuity was back to baseline (20/40 OU), limited only by preexisting cataracts. The punctate lesions had nearly completely resolved on both examination and ancillary testing (Figure, C, D, and F).

Comment. To our knowledge, this is the second reported case1 of levofloxacin-associated uveitis; moreover, we are aware of no other cases of drug-induced choroidal retinal lesions. Quite atypical of drug-induced uveitis, our patient had temporary legal blindness in both eyes, which responded to antibiotic dechallenge and oral corticosteroid therapy. However, visual recovery was not prompt, resulting in many weeks of disability and anxiety in the face of an uncertain prognosis. As prescription rates of other antibiotic classes have decreased during the past 2 decades with increased attention toward antibiotic-resistance prevention, fluoroquinolone use has increased as much as 5-fold in the ambulatory setting owing to its broad-spectrum coverage.4 As such, levofloxacin-associated uveitis, although rare, may be increasingly encountered. Health care practitioners should be aware of this entity and promptly refer any suspected cases for ophthalmological evaluation.

Nicholas J. Butler, MD
Eric B. Suhler, MD, MPH

Author Affiliations: Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, Maryland (Dr Butler); and Casey Eye Institute, Oregon Health and Science University and Portland VA Medical Center, Portland (Dr Suhler).

Correspondence: Dr Butler, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Division of Ocular Immunology, 1800 Orleans St, Woods Bldg, Room 472, Baltimore, MD 21287 (nbutle10@jhmi.edu).

Financial Disclosure: None reported.

Additional Contributions: George Petricek, BA, of Casey Eye Institute’s ophthalmic photography department, assisted with the Figure.


Transformation of Optic Disc Melanocytoma Into Melanoma Over 33 Years

Optic disc melanocytoma is a deeply pigmented variant of benign melanocytic nevus that has been confused with malignant melanoma.1 Although melanocytoma was believed to be benign,1 there are rare reports of transformation into malignant melanoma, heralded by tumor growth or decrease in vision.2-4 A study of 115 patients revealed malignant transformation in 2 of the patients.2 We report the longest documented follow-up, to our knowledge, of an optic disc melanocytoma and provide clinicopathologic correlation following tumor growth and enucleation.

Report of a Case. An asymptomatic 23-year-old woman had a pigmented lesion in her right eye. Visual acuity was 20/20 OU. The only abnormal finding was a deeply pigmented mass within the inferonasal portion of the right optic disc (Figure 1A). Fluorescein angiography showed early hypofluorescence and late mild hyperfluorescence of the mass with slight late leakage. These findings were characteristic of optic disc melanocytoma, and observation was advised.

After 12 years, her visual acuity gradually decreased to 20/70 OD without change in tumor appearance (Figure 1B). After 25 years of follow-up, visual acuity was 20/80 and there was minor vitreous seeding without tumor growth (Figure 1C). After 29 years, visual acuity was 20/150 and slight tumor enlargement was documented (Figure 1D). After 31 years, visual acuity was hand motions, the tumor appeared necrotic, and extensive vitreous seeding was noted (Figure 1E). The patient refused fine-needle aspiration biopsy. After 32 years, fine-needle aspiration biopsy was performed, which disclosed cells consistent with melanocytoma and no malignant neoplasm. The patient elected observation.

After 33 years, visual acuity remained hand motions with progressive vitreous seeding and retinal edema (Figure 1F and G). The seeding and vision reduction were suspicious for transformation into malignant melanoma, and enucleation was advised.

Following enucleation, gross examination revealed a dark-brown mass obscuring the optic nerve and invading the retina (Figure 2A). Microscopic examination revealed intensely pigmented tumor within the optic nerve head and retrolaminar portion and peripapillary choroid (Figure 2B). The solid tumor was composed of large polygonal cells with abundant pigmented cytoplasm, compatible with melanocytoma (Figure 2C). Additional sections revealed spindle-cell fascicles containing variably sized and shaped nuclei consistent with low-grade spindle B melanoma (Figure 2D). Pigmented spindle cells were present on the retina, composing a neoplastic epiretinal membrane, and pigmented vitreous cells were noted (Figure 2E and F). The histopathologic diagnosis was optic nerve melanocytoma with malignant transformation into low-grade melanoma. There was no clinical evidence of metastasis.


©2012 American Medical Association. All rights reserved.