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 case 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. 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).

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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. Although melanocytoma was believed to be benign, there are rare reports of transformation into malignant melanoma, heralded by tumor growth or decrease in vision. A study of 115 patients revealed malignant transformation in 2 of the patients. 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.
Comment. Melanocytoma of the optic nerve is a benign condition that has rarely undergone malignant transformation.2-6 Most reports have identified transformation within 5 years of the initial manifestation, although cases at 9 years and 17 years have been reported.2,3 Over 33 years, our patient experienced gradual visual acuity loss from 20/20 to hand motions with progressive vitreous seeding of tumor cells. Histopathologic analysis revealed melanocytoma with necrosis and low-grade spindle B melanoma. Genetic heterogeneity of uveal melanoma has been described,7 but genetic analysis was not performed in this case.

The few previous reports of malignant transformation of melanocytoma illustrated an increase in tumor thickness, hinting at the development of melanoma, within a few years of the initial manifestation.2-4 Our case is different because there was little appreciable change in tumor thickness. The main features of concern were progressive vitreous seeding and vision loss. Extensive tumor involvement of the optic disc with vision loss suggests malignant transformation but can occur with ischemic necrosis of benign melanocytoma.5

Visual acuity and melanocytoma enlargement were assessed by Shields et al5 in 116 eyes. By 10 years, they found visual acuity loss of 2 or more lines in 18% of patients and tumor enlargement in 32% of patients. Malignant transformation occurred in 2 eyes. We demonstrate gradual vision loss and minor tumor enlargement over 33 years with transformation into low-grade melanoma. Follow-up of optic disc melanocytoma for malignant transformation, even over several decades, is advised.

Figure 1. Progression of melanocytoma over 33 years. Fundus photographs of the optic disc melanocytoma at the initial visit with visual acuity of 20/20 (A), 12 years later with visual acuity of 20/70 (B), 25 years later with visual acuity of 20/80 (C), 29 years later with visual acuity of 20/150 (D), 31 years later with visual acuity of hand motions (E), and 33 years later with visual acuity of hand motions (F), and optical coherence tomography demonstrating retinal invasion by melanocytoma (G).
Figure 2. Macrophotographs and histologic analysis. A, Macrophotograph of the enucleated specimen shows deeply pigmented convex tumor on the surface of the optic nerve. An epiretinal seed of pigmented cells rests on the slope near the luteal pigment at the left. B, Intensely pigmented tumor infiltrates the swollen nerve head and extends posteriorly behind the lamina cribrosa. A choroidal component is seen at the left (hematoxylin-eosin, original magnification ×5). C, Depigmented section of the residual melanocytomatous component of tumor discloses large cells with copious quantities of cytoplasm. Most nuclei are bland, but some have distinct nucleoli (bleach, original magnification ×250). D, Fascicles of spindle cells arranged in a haphazard whorl-like fashion and containing variably sized and shaped nuclei compose part of the tumor consistent with low-grade melanoma (bleach, original magnification ×250). E, High-magnification macrophotograph shows a seed of spindle cells composing a focal neoplastic epiretinal membrane. F, Histopathologic analysis of the neoplastic epiretinal membrane shows intensely pigmented spindle cells on the inner surface of the internal limiting membrane (top; hematoxylin-eosin, original magnification ×100), and bland nuclei of the spindle cells are disclosed by bleaching (bottom; bleach, original magnification ×250).

Author Affiliations: Ocular Oncology Service (Drs Shukla, J. A. Shields, and C. L. Shields) and Department of Ophthalmic Pathology (Dr Eagle), Wills Eye Institute, Thomas Jefferson University, Philadelphia, Pennsylvania.

Correspondence: Dr J. A. Shields, Ocular Oncology Service, Wills Eye Institute, 840 Walnut St, Ste 1440, Philadelphia, PA 19107 (jerryashields@gmail.com).

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Florid Arteritis Confined to a Single Branch of the Superficial Temporal Artery

Biopsy of the superficial temporal artery provides vital confirmation of the diagnosis of giant cell arteritis. The vessel splits into 2 main branches: frontal and parietal. It is unknown which branch is most likely to yield a positive biopsy finding or, indeed, whether arteritis is ever confined to a single branch.

Report of a Case. A 69-year-old woman had a 5-week history of neck stiffness and malaise. The erythrocyte sedimentation rate was 55 mm/h. A 30-mm segment of the parietal branch of the left superficial temporal artery was harvested. It was processed with hematoxylin-eosin stain and an elastic Van Gieson stain. A total of 108 sections were examined at 36 different levels. None showed evidence of arteritis (Figure 1). Two days later, a 30-mm section of the frontal branch of the left superficial temporal artery was biopsied. Every section showed extensive granulomatous inflammation (Figure 2). The patient was treated with prednisone and her symptoms resolved.

Comment. It is crucial to obtain a biopsy specimen of adequate length to avoid the problem of “skip areas” in the superficial temporal artery. It is also important to examine the specimen thoroughly by reviewing sections cut at many levels because inflammation can be confined to just a few portions of the artery. Otherwise, there is risk of a false-negative biopsy result.1,2 We describe an extreme example of a skip area: a parietal branch completely free of inflammation in a patient with extensive arteritis of the frontal branch. To our knowledge, no prior report has compared pathological findings in the 2 branches of the superficial temporal artery. In fact, surgeons usually fail to specify which branch was biopsied when they submit specimens, and no histological data exist regarding which branch is more likely to demonstrate arteritis.

Recently, it was suggested that the parietal branch, rather than the frontal branch, should be biopsied in patients with suspected temporal arteritis.3 This approach eliminates the remote risk of facial nerve injury and usually hides the scar behind the hairline. However, this recommendation was predicated on the assumption that the prevalence of arteritis is equal in the parietal and frontal branches. We now show that selective involvement of a single vessel branch can occur in temporal arteritis.

Magnetic resonance imaging has been used to compare the involvement of the parietal vs frontal branch in temporal arteritis. In 21 patients with suspected giant cell arteritis, involvement was rated by noting the amount of mural thickening and gadolinium enhancement of the vessel and perivascular tissue.4 On the left side, abnormalities were present in 14 patients in the frontal branch and in 6 patients in the parietal branch. On the right side,

Figure 1. Patient showing biopsy sites from the parietal and frontal branches of the left superficial temporal artery (A), and representative sections, spaced evenly from 9 different levels of the parietal branch of the left superficial temporal artery, showing no evidence of arteritis (hematoxylin-eosin, original magnification ×12) (B).