Comment. Neuroretinitis is a clinical syndrome characterized by abrupt visual loss, optic nerve swelling, and a macular star exudate. It is usually unilateral. Originally referred to as “Leber’s idiopathic stellate neuroretinitis,” it is now known that this syndrome is caused by a variety of infectious causes. Since the advent of accurate serologic testing it has become recognized that B henselae, the causative agent of cat scratch disease, is the most common cause of neuroretinitis.4 In the setting of B henselae infection, neuroretinitis with peripapillary serous retinal detachment has previously been described,1,2 as well as bilateral neuroretinitis.3 To our knowledge, ours is the first report of bilateral neuroretinitis with bilateral peripapillary retinal detachments. This is also the first reported case of serous retinal detachment in neuroretinitis caused by an infectious agent other than B henselae. Serous retinal detachments in neuroretinitis are not specific to B henselae infection, but likely represent the severe form of a disease that can be caused by many different organisms.

Human immunodeficiency virus microangiopathy, characterized by retinal hemorrhages, cotton-wool spots, and microaneurysms, is the most common ophthalmic finding in HIV-positive patients. Hepatitis B virus has been listed as a suspected cause of neuroretinitis.4 In 1986 Farthing et al5 described a case of bilateral neuroretinitis in a homosexual patient with acute HBV infection who tested positive for HIV 1 year after the initial examination. It is possible that this patient was HIV-positive at the time of the initial examination, but serum testing for HIV (or human T-lymphocyte virus type III/lymphadenopathy–associated virus, as it was known then) at that time was not sensitive enough to detect the virus in the early stages of disease. Concurrent hepatitis C infection has been shown to have an additive effect on HIV retinal microangiopathy.6 We propose a similar synergistic effect between HIV and HBV in this case, mediated either through a coinfection mechanism or HIV-induced immunosuppression leading to enhanced HBV effect. That our patient’s condition resolved with treatment of HIV and HBV further supports this hypothesis.

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Paravascular Inner Retinal Cleavage in a Highly Myopic Eye

A 34-year-old Japanese woman suspected of having glaucoma by a local physician visited us for a consultation. The patient had not previously undergone intraocular surgery. Her corrected visual acuity was 20/20 OD with −9.5 diopter sphere (DS) and 20/20 OS with −9.0 DS. Her intraocular pressures were 11 mm Hg OD and 8 mm Hg OS. Color and red-free fundus photographs showed multiple, spindle-shaped retinal cleavages around blood vessels in both eyes. Small bundles of nerve fiber were seen passing across the cleavages, and the optic discs appeared normal (Figure 1). Optical coherence tomography showed a clear

Figure 1. Color (A) and red-free (B) fundus photographs of the right eye showing multiple, spindle-shaped retinal cleavages around blood vessels. Small nerve fiber bundles can be seen passing across the cleavages. The optic disc appears normal.


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profile of the inner retinal cleavages (Figure 2). The mean±SD thickness of the retina at the site of the cleavages was 106.4±17.7 m and that of the adjacent unaffected retina was 254.2±25.8 m. The mean thickness of the retina at the site of the cleavages was significantly thinner than that of the adjacent unaffected retina (P<.001, Mann-Whitney U test). The fluorescein angiograms showed no abnormalities. The results of standard automated perimetry (Humphrey Field Analyzer 30-2 program; Carl Zeiss Meditec, Dublin, Calif) were normal, but microperimetry with a scanning laser ophthalmoscope (Scotometry program, version 3.0; Rodenstock Instruments, Ottobrunn, Germany) revealed a relative scotoma in the area of the retinal cleavages (Figure 3). No retinal cleavage was found in her parents or her elder brother.

Comments. Chihara and Chilhara reported a cleavage of the retinal nerve fiber layer in eyes with high myopia, but there has been only 1 report of retinal cleavages around blood vessels in highly myopic eyes. They used the term “cleavage” to distinguish the cleavages from the “defect” seen in glaucomatous eyes.

It is clinically important to differentiate the cleavage from the retinal nerve fiber layer (RNFL) defect. The cleavage is often spindle shaped and we never see small bundles of nerve fiber passing across the RNFL defect. However, there should be many cases in which we cannot make a clear distinction between them just by fundoscopic appearance. Optical coherence tomographic imaging should be very useful in such cases in making a correct diagnosis.

The optical coherence tomographic images showed the cleavages clearly along with the possibility that these cleavages extended deeper than the nerve fiber layer. Although Chihara and Chilhara reported that the retinal sensitivity in the area of the cleavage was not depressed, we detected a relative scotoma in that area in our case. These findings indicated there may be some abnormalities in nerve conduction in the area of the cleavage.

Doubling of the optic disc is rare and is seen as true doubling or pseudodoubling. We describe a peculiar case with multiple anomalies involving a single optic disc: a coloboma involving the optic nerve along with a pit and sensory detachment, and pseudodoubling of the optic disc with a disclike lesion within the coloboma.

Report of a Case. A 34-year-old man was referred to our institute as a case of a “peculiar optic disc.” Examination revealed a right eye that was within normal limits and a left eye that had a coloboma involving the optic disc. A small, craterlike depression was seen in the center of the coloboma. A thin blood vessel along with a tuft of whitish glial tissue extended down from the optic disc and entered the crater on its superior aspect. Several thin vessels emerged from the lesion, thereby simulating another optic disc (Figure A and B). Since we found it difficult to photograph the entire optic disc and coloboma without loss of detail of the simulated optic disc with a standard fundus camera (VISUPAC FF 450Plus IR; Carl Zeiss Meditec, Jena, Germany) (Figure, A), another fundus photograph using a digital slitlamp camera (VISUPAC Digital Archiving system; Carl Zeiss Meditec) and a

Figure 2. Optical coherence tomographic image of the right eye corresponding to the scan line indicated by the arrow. Some of the outer retinal layers other than the nerve fiber layer appear to be absent in the areas of the cleavages.

Figure 3. Microperimetry of the right eye with a scanning laser ophthalmoscope. (size, Goldmann I; brightness, −15 dB; background, 10 candelas/m²). The patient did not recognize the stimulus at the positions indicated by the red Ps.

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