management, analysis, and interpretation of the data; or preparation, review, or approval of the manuscript.


---

Endogenous Endophthalmitis

With Brain Abscesses Caused by Streptococcus constellatus

We report a novel case of endogenous endophthalmitis presumably caused by Streptococcus constellatus. Concurrently, the patient developed severe lower-extremity weakness. Biopsy of brain abscesses yielded S constellatus.

**Report of a Case.** A 54-year-old man with uncontrolled diabetes mellitus had a 1-week history of progressively worsening floaters and poor vision in the left eye. He denied having eye pain. He reported a resolved febrile illness 2 weeks prior with productive cough, nausea, vomiting, and abdominal pain. He denied having eye trauma, recent indwelling catheters, recent intravenous treatment, or intravenous drug use. There was questionably a history of diverticulitis.

Best-corrected visual acuity measured 20/25 OD and light projection OS. No relative afferent pupillary defect was detected. Ocular motility was full and without pain. Intraocular pressures were within normal limits. The examination results of the right eye were unremarkable. Slitlamp examination of the left eye revealed moderate conjunctival injection, nongranulomatous keratoprecipitates, 3+ anterior chamber cells, and a mild nuclear sclerotic cataract. Significant vitritis precluded a clear view of the retina in the left eye, but an elevated white macular lesion was noted (Figure 1).

Endogenous endophthalmitis was suspected. A diagnostic vitrectomy was performed, and vancomycin hydrochloride, cefazidine, and clindamycin phosphate were injected intravitreally. Vitreous cultures and polymerase chain reaction of vitreous washings for cytomegalovirus, herpes zoster virus, Candida, and Toxoplasma were negative. Tuberculin purified protein derivative and blood cultures were negative. Results from complete blood cell count, comprehensive metabolic panel, rapid plasma reagin, fluorescent treponemal antibody absorption, Toxoplasma serology, human immunodeficiency virus testing, angiotensin-converting enzyme level, serum lysozyme level, and urinalysis were normal, except for elevated serum and urine glucose levels. Postoperatively, best-corrected visual acuity was counting fingers OS. The macular lesion was soon less apparent and continued to fade postoperatively. Systemic workup to this point was unfruitful. Computed tomography of the chest showed only nonspecific lower-lobe scarring in the right lung.

The patient began to have progressive lower-extremity weakness and slurred speech. He was admitted to the intensive care unit. We consulted the infectious disease service. Magnetic resonance imaging of the brain and spine revealed multiple ring-enhancing lesions (Figure 2). A transesophageal echocardiogram revealed no evidence of shunts or vegetations. Owing to the broad differential diagnosis, a biopsy of the frontal brain lesions was performed; this revealed intracranial abscesses that grew S constellatus. On further questioning, the patient revealed a history of tooth extraction 2 months prior to his initial visit. With intravenous treat-
ment with both ceftriaxone sodium, 2 g twice daily, and metronidazole, 1 g twice daily, his neurologic condition improved from being unable to walk (0/5 strength) to 4/5 lower-extremity strength. He was discharged for rehabilitation. Intravenous treatment with ceftriaxone was continued for 12 weeks. On follow-up examination 7 months after his initial visit to the ophthalmology clinic, best-corrected visual acuity measured 20/200. A 2+ posterior subcapsular cataract was noted in the left eye, along with a central macular scar (Figure 3).

Comment. Streptococcus constellatus is generally a commensal organism found in the mouth, oropharynx, and gastrointestinal tract. This organism has been cultured from dental caries and periodontal disease but has also been isolated from brain abscesses, gastrointestinal perforations, and obstetric infections. To our knowledge, it has not previously been reported as a cause of endogenous endophthalmitis; however, cases of orbital abscesses and cavernous sinus thrombosis after dental work have been reported.2,4 Streptococcus constellatus is a difficult organism to classify and is commonly misidentified. Although it has been cultured from blood in cases of endocarditis, it grows mainly via abscesses; therefore, an abscess is the best culture source. Many antibiotics eradicate these organisms, but surgical intervention is usually needed for absolute treatment.1

Lena V. Chheda, MD
Warren M. Sobol, MD
Bruce M. Buerk, MD
Paul A. Kurz, MD

Author Affiliations: Department of Ophthalmology, The Ohio State University, Columbus (Drs Chheda, Sobol, Buerk, and Kurz), and Retina Physicians and Surgeons (Drs Sobol and Buerk) and Dayton Veterans Affairs Medical Center (Drs Sobol, Buerk, and Kurz), Dayton.

Correspondence: Dr Kurz, Department of Ophthalmology, The Ohio State University, Havener Eye Institute, 915 Olentangy River Rd, Columbus, OH 43212 (paul.kurz@osumc.edu).

Financial Disclosure: None reported.


Rosai-Dorfman Disease Simulating Nodular Scleritis and Panuveitis

Scleritis is a potentially sight-threatening inflammatory condition of the sclera that may be associated with keratitis, uveitis, glaucoma, and exudative retinal detachments.3 Sinus histiocytosis with massive lymphadenopathy, or Rosai-Dorfman disease, is a rare histiocytic disorder characterized by massive, painless lymphadenopathy.2,3 While extranodal involvement is common, eye involvement is infrequent and most often seen in the orbit or eyelid.4 Direct ocular involvement is exceedingly rare.5 We report a case of Rosai-Dorfman disease that simulated nodular scleritis and panuveitis.

Report of a Case. A 20-year-old woman with diabetes, hypertension, and hypothyroidism had a 3-day history of severe pain and vision loss in the left eye. She also noticed a slowly enlarging nodule on the left eye over the previous 5 months. Review of systems was negative for fever. Visual acuity was 20/20 OD and counting fingers OS. Intraocular pressure was 43 mm Hg OS. Examination showed an elevated perilimbal subconjunctival nodule, large keratic precipitates, 3+ anterior segment inflammation, 2+ vitreous haze, and subretinal exudate (Figure 1A and B). Ultrasoundography revealed diffuse scleral thickening. Laboratory testing revealed no leukocytosis, a normal angiotensin-converting enzyme level, a nonreactive rapid plasma reagin test result, and a slightly elevated erythrocyte sedimentation rate (25 mm/h). Tuberculosis skin testing and chest radiography results were normal. Results of testing for antinuclear antibodies, anticytoplasmic nuclear antibodies, and HLA-B27 were negative.

She was diagnosed as having nonnecrotizing nodular scleritis with panuveitis and was treated with oral prednisone, topical prednisolone acetate, and topical anti-hypertensive eyedrops. She experienced frequent relapses over the following 6 months and began treatment with oral methotrexate. She was lost to follow-up for 4 years. During this time, a systemic evaluation for pelvic mass revealed a large mass, which was partially resected. Histopathologic examination showed histiocytic infiltration. She returned to the eye clinic with recurrent left eye pain and vision loss. She was restarted on a course