Isolated Anterior Uveitis as the Initial Sign of Systemic Candidemia

Endogenous fungal endophthalmitis may occur in both healthy and immunocompromised patients. Commonly, such patients have choroidal infiltration and a variable degree of posterior uveitis at the initial examination. Treatment is based on the severity of the disease and the response to treatment. We report a case of isolated iridocyclitis with a hypopyon secondary to Candida albicans infection. The atypical manifestations, diagnostic procedures, treatment, and outcome of this case are discussed.

Report of a Case. A 14-year-old girl who underwent cardiac transplantation 4 months earlier was admitted with a 1-week history of fever of unknown origin. Her immunosuppressive medications at the time included tacrolimus and prednisone. In addition, she had been receiving intravenous immunoglobulins monthly through an indwelling catheter for hypogammaglobulinemia. A workup included blood and urine cultures that were negative except for cytomegalovirus antigenemia. Ganciclovir treatment was started, and the patient was referred for an ophthalmic examination. Her corrected visual acuity was 20/50 OU. Low-grade anterior uveitis was noted in the left eye without evidence of vitritis or choriorretinitis. The patient denied any history of ocular trauma. Additional tests, including rapid plasma reagin, rheumatoid factor, anti-nuclear antibody levels, angiotensin-converting enzyme levels, HLA-B27 antigen, and chest radiography, were ordered, and the results of all tests were unremarkable.

Six weeks later, the patient’s visual acuity had dropped to 20/200 OS, and she developed a hypopyon. Because of the progression of anterior uveitis despite topical steroid treatment and persistent fever, an anterior chamber tap and a lumbar puncture were recommended. Stains of the aqueous humor revealed 3+ polymorphonuclear neutrophil leukocytes with no organisms. Aqueous cultures grew C. albicans. The cerebrospinal fluid showed a marked lymphocytic pleocytosis with increased protein but no growth. The patient was started on a regimen of intravenous amphotericin B, and topical fluconazole and ganciclovir treatments were discontinued.

Postoperatively, fungal invasion of the iris and lens with formation of a fungal ball at the pupillary margin was noted (Figure 1). Another anterior chamber tap was performed and amphotericin B (5 µg) was injected into both the anterior chamber and vitreous, but the iris-dolenticular opacity persisted.

Subsequently, because of lack of clinical response, pars plana vitrectomy, lensectomy, and excision of the involved iris with intravitreal amphotericin B (5 µg) were performed in the left eye. Intraoperatively, white fluffy material within the body of the crystalline lens and over the pars plana was noted and cultured. These findings prompted complete capsulotomy and aggressive vitreous base shaving with scleral depression. Intraoperative examination of the fundus did not show any involvement of the retina or choroid. Cultures obtained from the lens material and vitreous cassette were both positive for C. albicans. The patient then underwent 2 additional administrations of intravitreal amphotericin B (5.0 µg) every 72 hours. The results of cultures from these procedures remained negative for organisms.

After initiation of systemic treatment, the patient’s fever ceased, and
Comment. Fungal intraocular infection often results from hematogenous seeding of highly vascularized structures, such as the choroid or retina, and typically manifests as creamy-white chorioretinal infiltrates with an associated vitritis. In our case, hematogenous spread of fungal elements into the ciliary body most likely was followed by extension into the iris and body of the lens, resulting in intralenticular abscess formation.

Mild cases of fungal chorioretinitis can be successfully treated with systemic antifungal agents. Severe endogenous fungal chorioretinitis with the presence of vitritis is most often treated with pars plana vitrectomy and intravitreal injection of amphotericin B with systemic antifungal medications. In cases where fungal invasion of an avascular tissue such as the lens is suspected or proven, a thorough debulking, including lensectomy and capsulectomy, may play an important role.

Intravitreal injection of antifungal medication provides therapeutic levels, which may not be achieved by systemic administration alone. In our case, because of the extensive nature of the infection and the presumably higher vitreous clearance rate in an aphakic and vitrectomized eye, we elected to repeat the intravitreal injection of amphotericin B.

Endogenous fungal endophthalmitis may present a diagnostic challenge. Ocular signs and symptoms can be atypical, vague, and slowly progressive. A high degree of suspicion in susceptible patients along with an aggressive surgical di-

Bilateral Orbital Myeloid Sarcoma as Initial Sign of Acute Myeloid Leukemia: Case Report and Review of the Literature

Most pediatric orbital tumors are unilateral, and little is mentioned in the literature of the frequency and differential diagnosis of bilateral pediatric orbital tumors. Acute myeloid leukemia (AML) can involve the orbit as a solid tumor termed myeloid sarcoma or chloroma. We herein describe a child who was seen with bilateral orbital tumors that were the initial manifestation of AML. A literature review suggests that leukemia might be the most likely diagnosis in a child with bilateral soft tissue orbital tumors, a point that has not been widely recognized.

Report of a Case. Painless, progressive proptosis of the left eye developed in a previously healthy boy aged 25 months during the course of 2 weeks. Orbital magnetic resonance imaging (MRI) showed bilat-