Case Report

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Postpartum *Candida* Endophthalmitis Treated with Fluconazole

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Key Words

Candida albicans
Endophthalmitis
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Abstract

We report a case of *Candida albicans* endophthalmitis occurring after an uneventful pregnancy that was cured with oral fluconazole therapy.

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Introduction

Candida albicans is the most common cause of fungal endophthalmitis and is almost always associated with risk factors such as long-term systemic antibiotic use, intravenous hyperalimentation, drug use, childbirth, indwelling intravenous catheters, prosthetic heart valves or debilitating diseases [1]. Therapy is limited by the high toxicity of amphotericin B which penetrates poorly into the vitreous, or by multiple resistances to 5-fluorocytosine. Miconazole is effective against *Candida* species but can only be given intravenously. Ketoconazole is well absorbed orally but is less effective against *Candida* species. We recently came across a case of endogenous endophthalmitis which was cured by fluconazole, a new antifungal drug.

Case Report

After an uneventful pregnancy, a 36-year-old Yugoslavian woman developed fever and a loss of vision in her right eye two weeks after delivery. She was examined at our hospital 5 months later, after her return from a stay in Yugoslavia. There was an endophthalmitis in her right eye, and a parapapillary focus of chorio-retinitis was present in her left eye (fig. 1a). Visual acuity was limited to light perception OD and was 1.25 (25/20) OS. *C. albicans* was cultured from the vitreous specimen of the right eye. The patient was treated with oral fluconazole (Diflucan®, Pfizer, Zurich) 400 mg/day for 3 months. The drug was well tolerated, and no change in the liver function tests was noted. Visual acuity of the right eye gradually improved to 1.0 (20/20). The intense vitritis and retinitis OD resolved and the focus of retinitis OS had a cicatricial aspect (fig. 1b). After cessation of therapy, no relapse was observed during a 5-month follow-up.

Fig. 1. a Small parapapillary focus of chorioretinitis in the left eye. b Healed focus of chorioretinitis 6 months after cessation of therapy.

Discussion

As reported by Cruciani et al. [2], 2 cases of chorioretinitis and 1 case of endophthalmitis were cured with 3 weeks' oral therapy of fluconazole, 200 mg/day. Another case of endophthalmitis caused by right-sided *C. albicans* endocarditis [3] was treated with 6 months' therapy of 200-600 mg/day of fluconazole along with two additional intravitreal injections of amphotericin B (5 µg).

Fluconazole (Pfizer Zurich) is a novel bis-triazole antifungal agent with good absorption after oral administration, long plasma half-life (30 h), low plasma-protein binding (11%) with a rapid distribution in tissues [4]. High doses are mostly used in HIV-infected patients for the treatment and secondary prevention of digestive candidiasis and cerebral cryptococcosis. As expected from its pharmacological properties, the vitreal concentration has been shown to be excellent and similar to cerebral penetration. Because of these properties, fluconazole might become the first-choice therapy for ocular *Candida* infections [5].

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