Culture-Proven Candida Albicans Endogenous Endophthalmitis in a Patient with Onychomycosis

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Purpose: We report a case of Candida albicans endogenous endophthalmitis with subretinal abscess in an immunocompetent patient with onychomycosis.

Case Report: A 40 year-old man admitted the complain of pain and ciliary injection in his left eye for 20 days. He denied ocular trauma, previous intraocular surgery, intravenous drug use or any other predisposing factors for endogenous endophthalmitis. Metilprednisone and co-trimaxazole had been started in elsewhere with the suspicion of ocular toxoplasmosis.

At inital examination in our clinic, the visual acuity was hand motions in the left eye. A slit-lamp examination revealed intense anterior chamber inflammation and fundoscopy showed an exophytic yellowish-white subretinal mass in the macula with vitreous cells and 2+ vitreous haze.

An extensive uveitis screen was performed, but all of these initial tests were normal or negative, including chest X-ray, haematological profile, ESR, CRP, serum ACE level, serology for toxoplasma and VDRL as well as HIV, HCV, HBV, EBV, CMV, VZV. Systemic steroids were discontinued. Further clinical evaluation revealed that the patient had signs of toenail infection affecting several toes over the previous one year and he was not on any medication for this. The patient underwent diagnostic vitrectomy with intravitreal injection of voriconazole. The histopathological study of vitreous specimen revealed C. Albicans. Intravitreal injection of amphotericin B was performed. Intravenous amphotericin B and fluconazole was also started. Although antifungal treatment, inflammatory findings progressed and "string of pearls" appeared in the vitreous. Two weeks later, retinal detachment devoloped and the patient underwent pars plana vitrectomy. Meanwhile, cultures of nail clippings from his infected toenails were positive for Gram-positive yeast cells. The patient improved following the vitrectomy and there were no signs of vitreous infiltrates after 1 week. One month after surgery, the intraocular inflammation gradually subsided. However, his visual acuity stayed at counting fingers as a result of macular scarring.

Conclusion: We showed a proven endogenous fungal endophthalmitis in an immunocompetent patient. The use of systemic steroids in the past, caused progression of the disease in this case. In these situations, when the clinical findings suggest a fungal etiology, it should keep in mind that endogenous candida endophthalmitis can be a result of fungal infections from distant sites such as the toenails and systemic steroids should not be started before definite diagnosis.

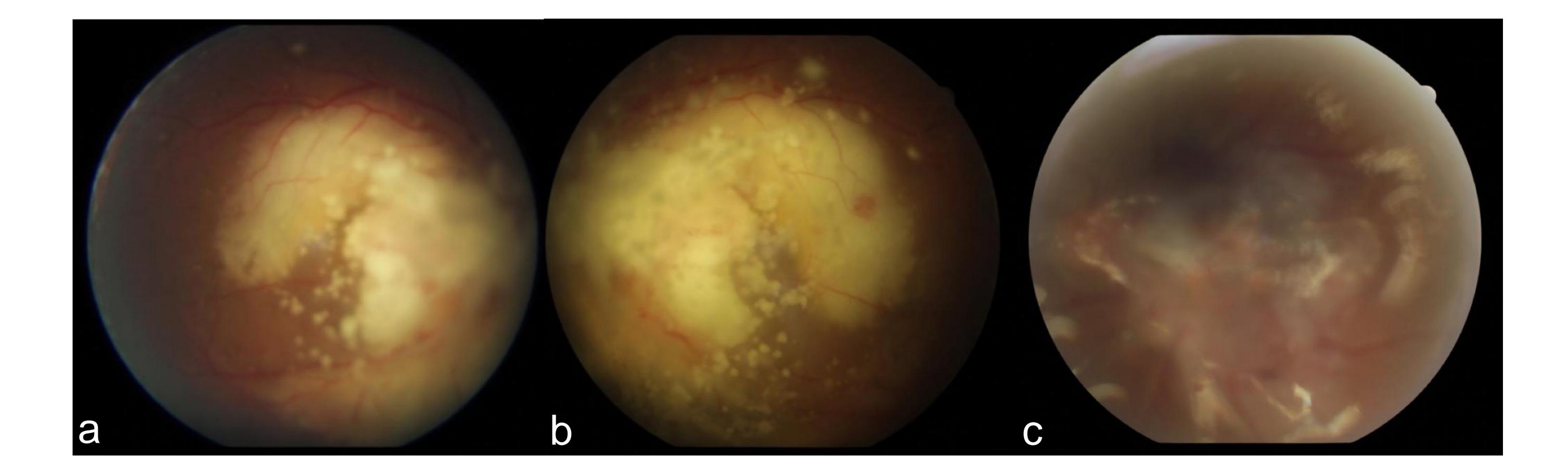


Figure 1: Fundus photograps of the patients' left eye showing an exophytic yellowish-white subretinal mass in the macula at presentation (a), appearing string of pearls 1 weeks after presentation (b), after surgery (c).