FONSECAEA PEDROSOI – Unusual Cause for Corneal Ulcer – A Case Report

Dr Bindu N Das MS, Dr Jalal P M DO

Introduction:

Fonsecaea pedrosoi, a dermataceous fungi is the commonest causative agent of chromoblastomycosis – a chronic mycotic cutaneous and subcutaneous infections which primarily occurs in the humid tropical regions.

Corneal infection due to Fonsecaea pedrosoi is very rare and a few cases of infection are reported in the literature. Treatment of this mycosis is challenging not only because of scarcity of effective antifungals but also due to the need for the prolonged periods of treatment, either with medications or surgery.

Here we present a case of corneal ulcer due to Fonsecaea pedrosoi which showed necrotizing features, both in cornea and conjunctiva which responded to topical and systemic antifungals

Case Report:

A 59-year old male patient was referred to our OPD in June 2009 with a corneal ulcer of the left eye 3 weeks after trauma with a tree twig. Patient had been treated with topical antibiotics, antifungals and cyclopentolate for two weeks without any clinical improvement.

His distant visual acuity was 6/36 in the left eye and 6/9 in the right eye at the time of presentation. IOP measured was normal. There was a 3mm X 3mm sized corneal ulcer over the temporal cornea (Figure 1) with regular borders with infiltration upto the anterior stromal area. Surrounding cornea was hazy.

Anterior chamber showed mild inflammatory reaction with few KP’s over the endothelium with mild flare. Posterior segment examination was within normal limits.

Because of clinical features and findings – a diagnostic possibility of non healing corneal ulcer due to fungi or low virulent bacteria were made. Topical antibiotics was changed to fortified cefazolin and gentamicin, antifungal Natamycin.
Corneal scrapings were collected for fungus and bacteriologic microscopic examination and culture. Wet mount of KOH were positive for fungal filaments. No clinical improvement was noticed. There was associated severe conjunctival reaction, chemosis and lid signs on the subsequent days. There was no progression or worsening of ulcers but corneal thinning. Topical medication was reduced in frequency. Ulcer perforated which was managed with pressure bandage and other symptomatic measures. Meanwhile on Sabouraud’s agar culture growth of Fonsecaea pedrosoi was confirmed as slow growing, velvety, spreading olivaneous green colonies with a blackish reverse (Figure 2, 3).

Treatment was modified with addition of Itraconazole topically and Ketoconazole orally twice daily. Patient improved well with newer medications, conjunctival signs decreased, ulcer started healing and the surrounding cornea also cleared very well. At the time of discharge his visual acuity was 6/12 LE – 6/9 RE with corneal thinning and pigmentation over the healed ulcer (Figure 4).

Combination of systemic and topical antifungal may provide best option for cure in corneal chromoblastomycosis.

References:


