

INTRODUCTION

Fungal keratitis is an important ophthalmologic problem especially in outdoor workers in tropics. It is an important cause of corneal blindness and usually carries an unfavorable prognosis due to its prolonged course and requirement of specific therapy.⁽¹⁾

Incidence of fungal keratitis has increased over the last few years. The increased incidence of mycotic infection may be due to the extensive use of systemic and /or topical corticosteroids and of broad spectrum antibiotics.^(2,3)

It is important to consider fungi as possible causes of infectious keratitis. These can cause devastating ocular damage if it is not diagnosed and treated effectively. Unfortunately, delayed diagnosis is common, primarily because of lack of suspicion and even if the diagnosis is made accurately, management remains a challenge due to poor corneal penetration and limited commercial availability of antifungal drugs.⁽⁴⁾

Trauma particularly by vegetative or soil matter, seems to be the most common predisposing factor for fungal keratitis.⁽⁵⁾

Fungal keratitis is an important serious complication of contact lens wear especially extended wear. Contact lenses appear to cause epithelial micro trauma and hypoxia. Contamination of lenses and solutions and poor lens hygiene are other factors in contact lenses-related fungal keratitis.⁽⁶⁾

More than 60 fungal species have been reported as pathogenic to

The cornea, but the great majority of cases of keratomycosis are caused by *Fusarium*, *Aspergillus* and *Candida* species.⁽⁷⁾

Fungi are opportunistic agent of infection. They rarely infect the healthy intact cornea, but in a compromised or immunosuppressed cornea, almost any fungal species is capable of inducing infection.⁽⁸⁾

Systemic and local underlying diseases make the corneal tissues susceptible to infection with these organisms. Dry eye, surgical ocular procedures and systemic infection as well as any disease associated with immunodeficiency as diabetes mellitus are considered risk factors for fungal keratitis.⁽⁹⁾

Successful management of fungal keratitis necessitates five steps: (1) Clinical suspicion and clinical diagnosis. (2) Initiating the antifungal therapy based on the history and clinical suspicion. (3) Performing the proper laboratory procedures. (4) Modifying the initial therapy based on the clinical response. (5) Deciding correctly when and how to terminate therapy⁽⁴⁾

Three groups of compounds have become the principal drugs for the treatment of fungal diseases. These are the polyenes, the azoles (imidazoles and triazoles) and the pyrimidine.⁽¹⁰⁾

Therapeutic penetrating keratoplasty (PKP) is an effective treatment for fungal keratitis that dose not respond to antifungal medication.⁽⁴⁾

Early surgical intervention before the disease becomes advanced is recommended.⁽¹¹⁾