Images in Mycology

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Slit-lamp Examination of Mycotic Keratitis

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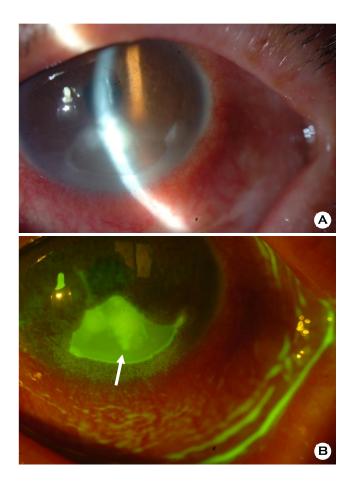


Fig. 1. A, In slit lamp examination, raised edges overlying epithelial defect and hyphate edges are shown in the lower part of the corneal ulcer. B, In fluorescein staining, the center of ulcer shows a homogenous natured feathery border (White arrow).

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Mycotic keratitis (MK) is a fungal infection to the cornea and has been recognized prevalently in young outdoor workers¹. MK typically arises from filamentous fungi including *Fusarium*, *Aspergillus*, *Phaeohyphomycetes* and yeast-forming candidal species¹. Prominent clinical feature of MK presents in ulcerative changes which may progress into irreversible corneal damage. Imaging techniques such as confocal microscopy and anterior segment optical coherence tomography may be used to construe MK¹. However, mycological evaluation particularly microscopic examination under potassium hydroxide mount and culture of corneal material still remain the cornerstones of diagnosis¹.

In slit lamp examination, raised edges overlying epithelial defect and hyphate edges are shown in the lower part of the corneal ulcer and conjunctival injection is also pronounced (Fig. 1A). Other features of mycotic keratitis reveal a whitish to grayish infiltrates with feathery borders². Satellite lesions of hypopyon, conjunctival injection and purulent secretions may be noticed as well². Ulcers caused by yeasts present in plaques with slightly more defined borders similar to that of bacterial keratitis². Fluorescein staining may be conducive in identifying corneal epithelial defects. The fluorescein dye retention, observed in green, is more intense and uniform across the ulcers in fungal infeciton³. As presented in this image, the center of ulcer shows a homogenous nature indicative of MK (Fig. 1B).

Although, fungal infection must be confirmed through microscopic evaluation under potassium hydroxide mount and fungal cultures, slit lamp examination and fluorescein staining generate a sound evaluative measure for MK.

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Key Words: Fungal keratitis, Mycotic keratitis, Slit lamp examination

Conflict of interest

In relation to this article, I declare that there is no conflict of interest.

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