



## Cladosporium species –a rare etiological agent of corneal ulcer

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### ABSTRACT

*Saprophytic fungi can invade the cornea and result in Keratomycosis. Ocular surfaces which have been suffered trauma predispose this condition. Fungal etiology may vary depending on geographical location and climatic temperature. Due to the profound use of steroids and antibiotic, its incidence has increased over the years.<sup>1</sup> Diagnosis and treatment of keratomycosis has become a challenge to ophthalmologists because of its resistance to treatment. Dematiaceous fungi are one of the fungal etiologies of corneal ulcer.<sup>2</sup> As they are the contaminants, it is necessary to confirm the pathogenesis of such etiological agents. Repeated sample collection and other procedures to demonstrate the invasion is difficult in corneal ulcer. In this case etiological role of Cladosporium species is confirmed by improvement of the clinical condition*

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### INTRODUCTION

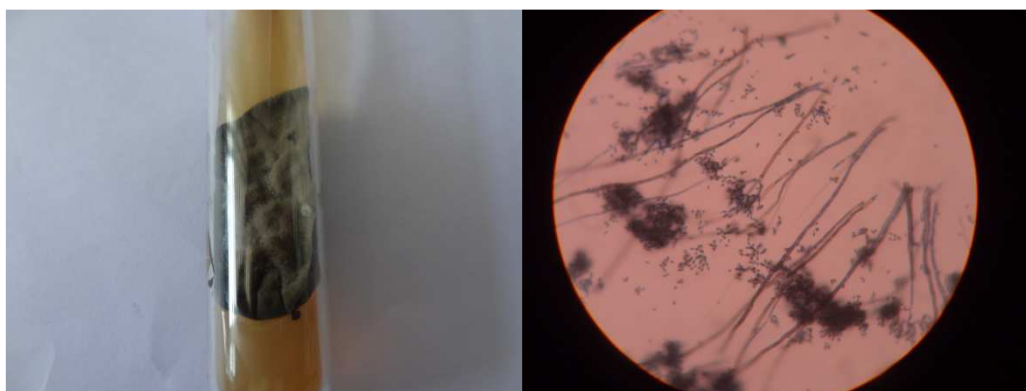
Saprophytic fungi can invade the cornea and result in Keratomycosis. Ocular surfaces which have been suffered trauma predispose this condition. Fungal etiology may vary depending on geographical location and climatic temperature. Due to the profound use of steroids and antibiotic, its incidence has increased over the years.<sup>1</sup> Diagnosis and treatment of keratomycosis has become a challenge to ophthalmologists because of its resistance to treatment. Dematiaceous fungi are one of the fungal etiologies of corneal ulcer.<sup>2</sup> As they are the contaminants, it is necessary to confirm the pathogenesis of such etiological agents. Repeated sample collection and other procedures to demonstrate the invasion is difficult in corneal ulcer. In this case etiological role of Cladosporium species is confirmed by improvement of the clinical condition.

### MATERIALS AND METHOD

Scrapings from the corneal ulcer of 30 years male patient was received by Microbiology lab of KIMS hospital, Narketpally, for culture and identification of etiological agent. History revealed that lesion was not responding to anti bacterial treatment. Corneal scrapings were inoculated on plain sabouraud's dextrose agar after KOH wet mount examination. Culture tube was incubated at room temperature.

## RESULTS AND DISCUSSION

No hyphal elements seen in KOH wet mount. The growth was observed on Sabouraud's dextrose agar at room temperature after 10 days and the texture is velvety to powdery. Similar to the other dematiaceous fungi, the color is olivaceous green to black from the front and black from the reverse. Tease mount in lactophenol cotton blue has shown septate brown hyphae, erect and pigmented conidiophores, and conidia. It was identified as *Cladosporium* species by colony morphology and microscopic features. *Cladosporium* spp. is rare among dematiaceous fungi causing keratomycosis. Patient had improved after antifungal treatment. This confirms the etiological role of *Cladosporium* species in this case<sup>4,5</sup>.



A

B

A. Colony morphology: Texture is velvety to powdery. the color is olivaceous green to black from the front and black from the reverse.

B. Microscopy : Septate brown hyphae, erect and pigmented conidiophores, and conidia. Conidia of *Cladosporium* spp. are elliptical to cylindrical in shape, pale to dark brown in color and have dark hila.

## CONCLUSION

- *Cladosporium* species is one of the dematiaceous fungal etiologies of corneal ulcer which is rare<sup>2,4</sup>.
- Improvement with anti fungal treatment can be considered for confirmation of etiological role.
- In early infections absence of fungal elements in KOH mount cannot rule out the presence of fungi<sup>5</sup>.
- Some slow growing fungi require long incubation time. So fungal cultures should be incubated minimum four weeks before discarding as negative.<sup>5</sup>

## REFERENCES

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