

## Commentary: Dematiaceous fungal keratitis: Is it different?

Filamentous fungi are important etiological agents of keratitis globally. Hyaline hyphomycetes including *Fusarium* and *Aspergillus* spp. are most common, but dematiaceous fungi such as *Curvularia* and *Bipolaris* spp. though less common constitute approximately 20% of cases.<sup>[1]</sup> Commonly reported signs of fungal keratitis include feathery edges, raised lesions, hypopyon, stromal infiltrates, and less frequently, satellite lesions and ring infiltrates.<sup>[1]</sup> Lesions with macroscopic pigmentation presented with pigmented plaque like raised infiltrates are more commonly seen in dematiaceous keratitis compared to those seen in fungal keratitis of hyaline origin.<sup>[1]</sup> There occurs surface colonization of pigmented fungal filaments associated with mild-to-moderate inflammation and tissue destruction of the underlying corneal stroma. *Aspergillus* spp. is more likely to have a ring infiltrate, and *Fusarium* spp. are less likely to have a raised lesion or an endothelial plaque.<sup>[1]</sup>

Commonest isolate from dematiaceous fungal keratitis being *Curvularia*, reported from previous and current study.<sup>[2,3]</sup> *Alternaria*, *Scedosporium*, and *Ulocladium* being other less common causative agents. Trauma with vegetative matter

has been reported as the commonest cause for this keratitis. *Curvularia* keratitis has been clustered and reported under warm and humid climatic conditions,<sup>[4]</sup> whereas this study has correlated it with harvest season in autumn and winter.<sup>[3]</sup> Diagnosis of this keratitis is not challenging and septate hyphae are commonly seen on scraping. When presenting early, response to topical natamycin is good, as minimal inhibitory concentration (MIC) of natamycin for *curvularia* keratitis is not high.<sup>[5]</sup> Management of *Ulocladium* and *Scedosporium* keratitis being challenging might need penetrating keratoplasty or evisceration in severe cases.

Comparative analysis of diagnosis and management of dematiaceous keratitis and hyaline keratitis in future may give better idea of prognosis and outcomes.

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