
ARTHROGRAPHIS KALRAE: FIRST CASE IN CHINA OF ETHMOID SINUSITIS AND EYE INVOLVEMENT

Xi L¹, Takizawa K², Lu C¹, Fukushima K², Liao R³ and Nishimura K²

¹ Department of Dermatology, The Second Affiliated Hospital, Sun Yat-Sen University, Guangzhou, China

² Research Center for Pathogenic Fungi and Microbial Toxicoses, Chiba University, Japan

³ Department of Ophthalmology, The First Affiliated Hospital, Sun Yat-Sen University, Guangzhou, China

This is the first case of human disease caused by the fungus *Arthrographis kalrae* in China. The patient had fungal panophthalmitis and invasive sinusitis involving the maxillary and ethmoid sinuses. He was an apparently healthy male before he had trauma to his left eye. He complained of pain and lost his visual acuity in the injured eye with redness, edema and eventually discharging pus. His symptoms became more severe after taking several kinds of antibiotics agents and steroids. CT scan of the left eye revealed that maxillary and ethmoid sinuses were involved. A smear of purulent material from left eye orbit revealed fungal elements and fungal cultures were positive. The isolate was identified as *A. kalrae*. Gross and microscopic morphology, biological aspects and DNA sequence analysis of the isolates were used to identify the fungus. The patient accepted amphotericin B intravenously, itraconazole orally, and allitridum atomizing with oxygen in a mask. The openings of the sinus tracts were washed with 0.2% fluconazole daily and topical 0.2% fluconazole was applied to injured eye. The maxillary, ethmoid, paranasal sinus and skin fistula, the eyeball, lacrimal sac and granuloma of the orbit were removed surgically. He was healed but with the loss of his left eye. This case reminds ophthalmologists to consider fungal infections when anti bacterial antibiotics have no effect and the patient's disease becomes worse. Not only common fungi as *Fusarium* and *Phycomycetes* species can cause this disease.

Key words: *Arthrographis kalrae*, mycoses, panophthalmitis, Sinusitis