

ISOLATION OF *ACANTHAMOEBA* SPP. FROM PATIENTS WITH KERATITIS IN SRI LANKA

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Acanthamoeba spp. are free-living amoebae that are known to cause chronic amoebic keratitis in humans. Both trophozoite and cysts have been shown in tissues of the cornea, iris and the ciliary body. Trauma and exposure to contaminated water and soil, use of soft contact lenses are recognized as risk factors to infection. Although chronic keratitis is common in Sri Lankans especially in those in agricultural communities the role of *Acanthamoeba* spp. in the aetiology of keratitis is yet to be determined.

Corneal scrapings or corneal biopsy from patients with chronic keratitis presenting at the Centre for Sight in Kandy were cultured for *Acanthamoeba* in non-nutrient agar plates with an overlay of *Escherichia coli*. Plates were incubated at room temp.(24-28C) and examined every 24 hours for 6 days for *Acanthamoeba* trophozoites and cysts. During November 2000 to August 2001, 13 samples from 11 patients were examined. One corneal biopsy showed growth of *Acanthamoeba* at 72 hours culture. while in a second patient the corneal scrapings became portive after two weeks. The first patient was a 62-year-old male farmer who presented with a central corneal ulcer of one years duration, which was refractory to antibacterial and antifungal therapy. Following the isolation the patient was treated with ketoconazole, gentamycin and neomycin, which are second line anti-acanthamoebic drugs.

This isolate is being maintained in subculture in the laboratory and hyperimmune sera in rabbits is being prepared using organisms harvested from cultures. Material is also processed for electron microscopy to characterize the isolate.

This is the first isolation of *Acanthamoeba* spp. from a Sri Lankan patient.