# STERILE CORNEAL ULCER IN A PATIENT WITH SCLERODERMA -- A CASE REPORT

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Purpose: To report a case of scleroderma with sterile corneal ulcer masqueraded as infectious keratitis.

Method: Interventional case report.

Results: A 51-year-old woman with scleroderma had dry eye and blepharospasm. After injecting botulinum toxin type A in the left eye, her eye became red and painful. Though topical artificial tear and antibiotics were used and therapeutic soft contact lens were worn, corneal erosion persisted in the left eye. Paracentral corneal melting, ring infiltrate and hypopyon developed 3 weeks later. Topical antibiotics were given but of no effect. Later, the results of corneal smears and cultures of bacteria, fungus, acanthamoeba and virus were all negative. Topical dexamethasone 0.1 %, cyclosporine 0.05%, and autologous serum 20% were given 4 times daily in combination with oral prednisolone and tetracycline. Owing to progression of corneal melting and lagophthalmos, amniotic membrane transplantation and tarsorrhaphy were performed. Corneal melting halted and inflammation subsided gradually in 3 months.

Conclusion: Scleroderma may involve sterile corneal ulcer presenting with corneal melting, ring infiltrate and hypopyon. Combination of topical steroid and cyclosporine, oral prednisolone and tetracycline, amniotic membrane transplantation and tarsorrhaphy may save the vision.

Keywords: scleroderma, sterile corneal ulcer, amniotic membrane transplantation, tarsorrhaphy

Scleroderma, also known as progressive systemic sclerosis or systemic sclerosis, is a chronic multisystem disorder characterized by inflammatory, fibrotic, degenerative, and vascular changes in the skin, vessels, synovium, and internal organs such as gastrointestinal tract, lung, kidney, and heart. It affects women more frequently than men. Although the pathogenesis is not entirely understood, it is known that an autoimmune process and abnormalities of connective tissue systems are linked to the widespread vasculopathy and variable

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