India

Steroids for Corneal Ulcers Treatment (SCUT)
Infectious corneal ulcers are a major cause of vision loss worldwide. In South India, studies indicate that approximately half of corneal ulcers are bacterial, and there is evidence that this proportion is often higher in the United States and Europe. Clearance of the infectious agent is bacterial keratitis is usually successful, but patients are frequently left with poor visual outcomes. Scarring is thought to be largely responsible for this visual impairment, and some argue that treating bacterial corneal ulcers with adjunctive corticosteroids could reduce immune-mediated tissue damage and help improve clinical outcomes like visual acuity. The use of corticosteroids for bacterial keratitis has been extensively debated due to the potential negative effects of corticosteroids such as enhanced infection, corneal thinning, and corneal perforation. The Steroids for Corneal Ulcers Trial (SCUT) was a randomized controlled trial funded by the National Eye Institute (NEI) at the National Institutes of Health (NIH). In this trial, we compared corticosteroids as adjunctive treatment for bacterial corneal ulcers to placebo among patients treated with antibiotics. This project was a collaboration between the F. I. Proctor Foundation at UCSF, Dartmouth Medical School[1] and Aravind Eye Hospitals[2] in India. For more information, please see:
http://clinicaltrials.gov/ct2/show/NCT00324168[3]

Mycotic Ulcer Treatment Trial (MUTT)
Fungal corneal ulcers tend to have very poor outcomes with commonly used treatments. There has only been a single randomized trial of anti-fungal therapy for mycotic keratitis, and no new ocular anti-fungal medications have been approved by the FDA since the 1960s. The triazole voriconazole has recently become the treatment of choice for systemic fungal infections such as pulmonary aspergillosis. The use of topical ophthalmic preparations of voriconazole has been described in numerous case reports, however there has been no systematic attempt to determine whether it is more or less clinically effective than natamycin. Additionally, there have been many case reports of the use of oral voriconazole in the treatment of fungal corneal ulcers, however there has been no systematic attempt to determine if it improves outcomes in severe ulcers.
This study is a randomized, double-masked, placebo-controlled trial to determine if the use natamycin or voriconazole results in better outcomes for fungal corneal ulcers. 368 fungal corneal ulcers with baseline visual acuity between 6/12 (20/40, logMAR 0.3) and 6/120 (20/400, logMAR 1.3) presenting to the Aravind Eye Hospitals and the UCSF Proctor Foundation will be randomized to receive either topical natamycin or topical voriconazole. The primary outcome is best spectacle-corrected logMAR visual acuity three months after enrollment, using best spectacle-corrected enrollment visual acuity as a co-variate. For more information, please see:
https://clinicaltrials.gov/ct2/show/NCT00996736?term=MUTT&rank=1[4]

Links

[1] http://geiselmed.dartmouth.edu/
[2] http://www.aravind.org/
[3] http://clinicaltrials.gov/ct2/show/NCT00324168
[4] https://clinicaltrials.gov/ct2/show/NCT00996736?term=MUTT&rank=1