

Cross-linking (CXL) treatment for recurrent post-LASIK keratitis: case report



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INTRODUCTION

- Ocular infections after LASIK procedures are rare but can lead to a serious reduction of visual acuity ¹⁻³
- Incidence of infection after LASIK can vary widely (0-1.5 %) ⁴
- *Propionibacterium acnes* is a ubiquitous gram-positive anaerobic pleomorphic rod, present in nearly 44% of healthy conjunctivae and in peripheral lung tissue, mediastinal lymph nodes, and intestine ^{5,6}
- *P. acnes* has been associated with conjunctivitis, orbital and preseptal cellulitis infectious keratitis in a corneal graft, delayed-onset endophthalmitis, keratitis after LASIK and after implantation of Ahmed glaucoma valve. ⁷⁻¹¹
- In several case series (N=2 to 16), riboflavin/UVA was reportedly effective against infectious keratitis. ^{12,13}

CASE PRESENTATION

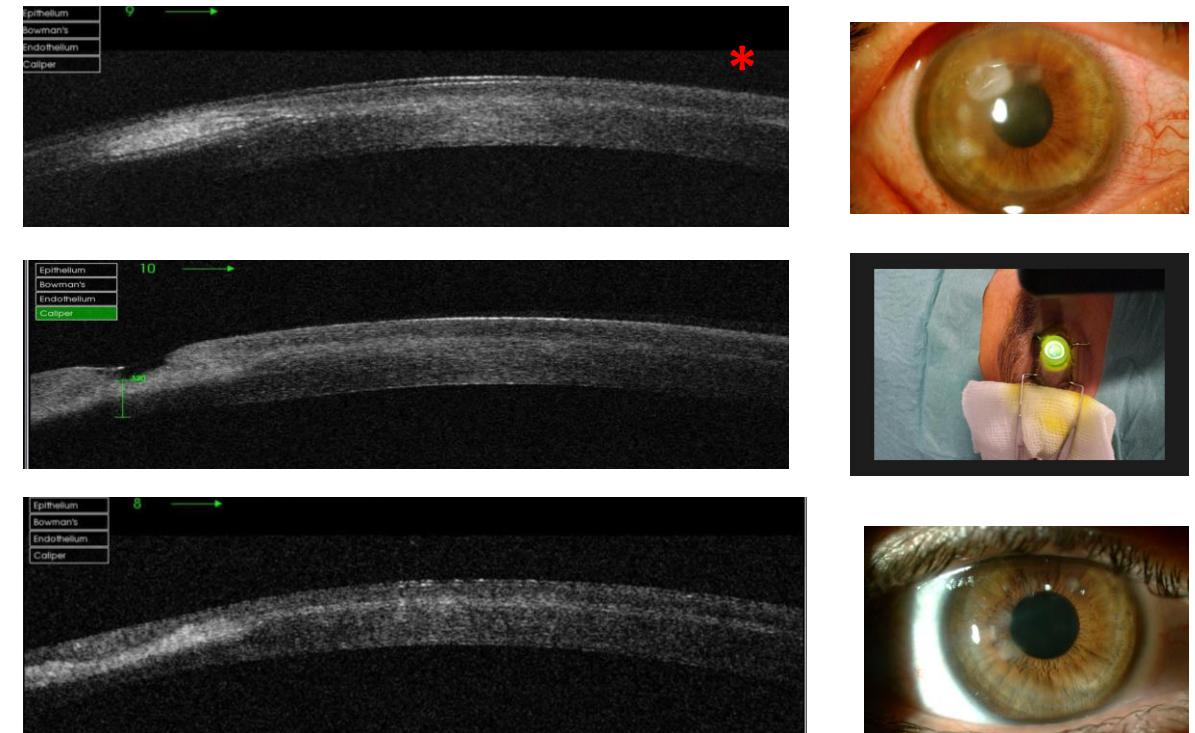
P.Acnes Post Lasik Keratitis

- 12/2012 OU LASIK
- OD 3 days post op keratitis
- OD epi ingrowth at 7 month PO
- 11/2013 OD Recurrent Keratitis *
- CXL STANDARD PROTOCOL
- 5 month FU OD UCDVA 20/40

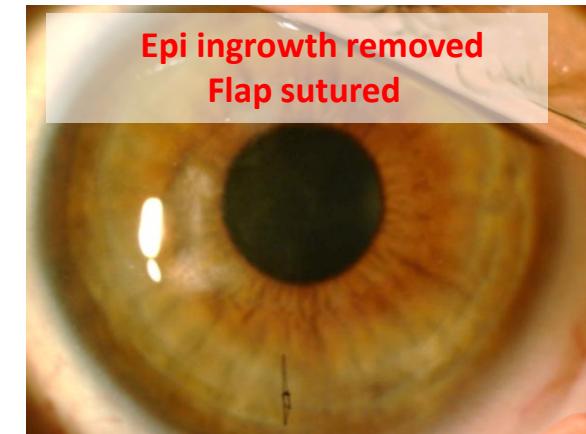


RICROLIN[®] TE
RIBOFLAVIN 0,1% + Enhancer
Package
1 monodose sterile dispenser filled
with 1 ml solution
1 sterile single-use cannula needle

AS-OCT pre-intra-post CXL 11 months afterLASIK



P. ACNES POST LASIK KERATITIS : FULL EVOLUTION



CONCLUSION

- The thinnest point were 380 µm
- Topical fortified antibiotic were not discontinued
- We found that the photoactivated riboflavin treatment did not seem to cause any additional complication
- Further study is needed to elucidate mechanisms of action involved in treatment of infectious keratitis with photoactivated riboflavin
- Photoactivated riboflavin may hold promise as a one-time treatment for superficial corneal infection and may help address problems with antibiotic-resistant organisms, patient compliance



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