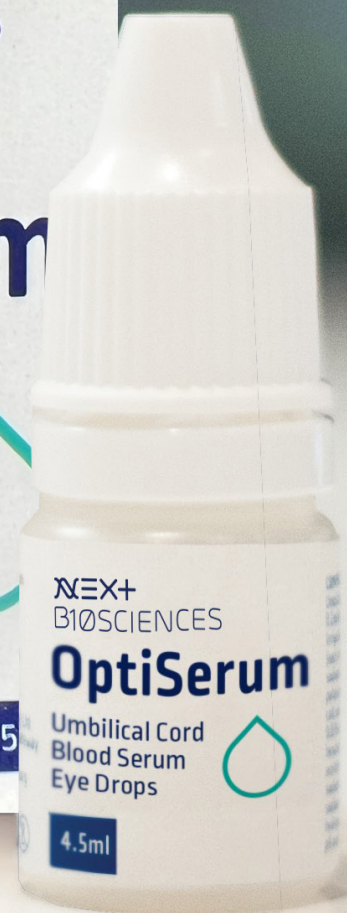


# OptiSerum



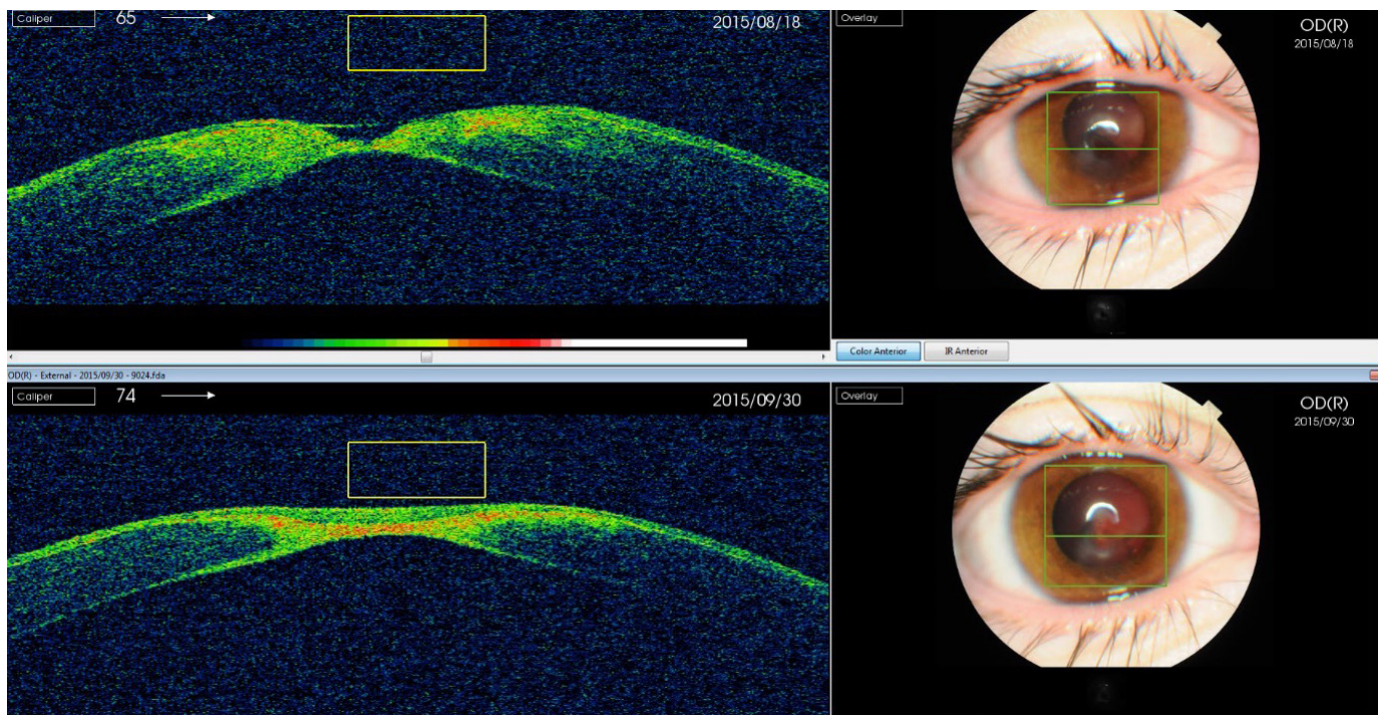
# Dellen Ulcer in 10 year old female child

Dr Burnet Meyer,  
Durbanville, Cape Town

## Introduction

10-year-old girl presented with a history of corneal ulcer with scarring. She presented for the first time with a Dellen Ulcer\* (Please see first OCT image).

She was treated with OptiSerum, 2 hourly for 4 weeks, and the ulcer healed successfully (last OCT image).



**Dellen Ulcer** - are localized areas of thinning, or drying, of the peripheral cornea. Dellen ulcers are usually located adjacent to an area of tissue swelling, tissue growth, inflammation, or eyelid abnormality.

These abnormalities may alter the eye's normal ability to spread the tear layer uniformly over the cornea. Initial treatment involves the use of eye lubrication with artificial tears, and/or ointments. Occasionally bandage contact lenses are used to protect the cornea and promote healing.

# Bacterial Corneal Ulcer in Neurotrophic Eye

Dr M.I. Motala, Isipingo,  
Kwa-Zulu Natal

## Introduction

A 67-year-old male developed a bacterial corneal ulcer in a previously blind neurotrophic eye. Microbiological cultures identified the causative organism as *Streptococcus pneumoniae*. Intensive, compounded antibiotic therapy resulted in gradual resolution of the stromal infiltrate, hypopyon and partial closure of the epithelial defect (figure 1 to 7). All available treatment options for neurotrophic keratitis were offered to the patient including bandage contact lenses, eye patching, botulinum toxin induced ptosis, autologous serum eye drops, temporary tarsorrhaphy and lubricants.

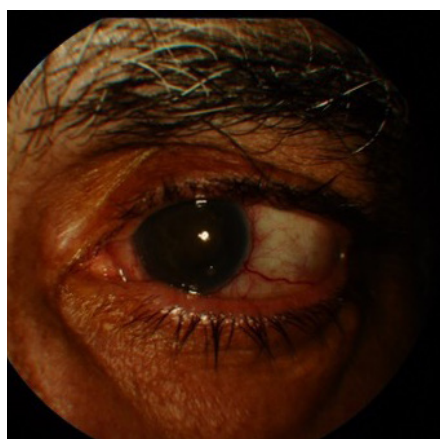
## Diagnosis and Treatment

Optiserum umbilical cord serum eye drops were initiated early on during the healing phase (day 4) to speed up corneal epithelial healing and to reduce inflammation.

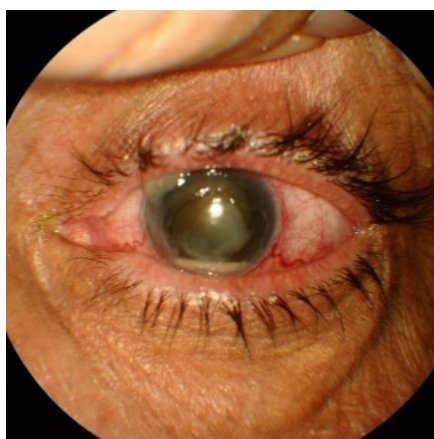
The epithelial defect and hypopyon had resolved by day 50 after presentation. The treatment of bacterial keratitis and preexisting neurotrophic keratitis remains a challenge and will require more than one approach. Commercially available cord blood serum eye drops have been demonstrated to be an effective treatment in this condition, however further research is required.

These abnormalities may alter the eye's normal ability to spread the tear layer uniformly over the cornea.

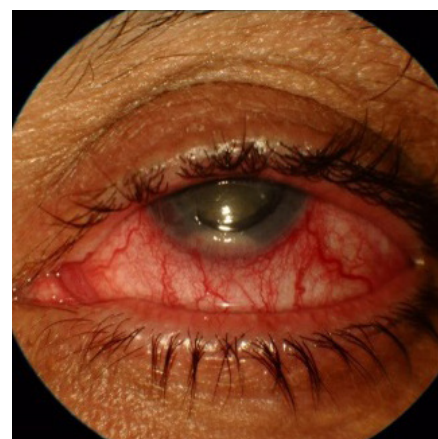
Initial treatment involves the use of eye lubrication with artificial tears, and/or ointments. Occasionally bandage contact lenses are used to protect the cornea and promote healing.



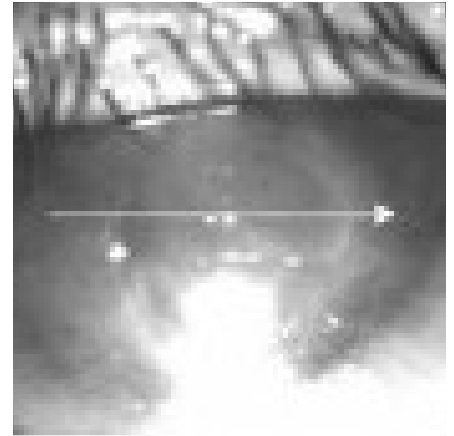
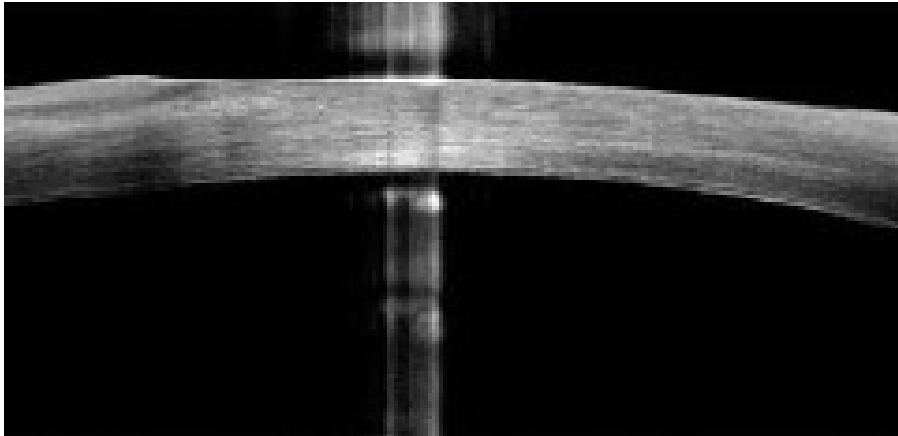
**Figure 1:** Corneal photo several months prior to the presentation with a corneal ulcer.



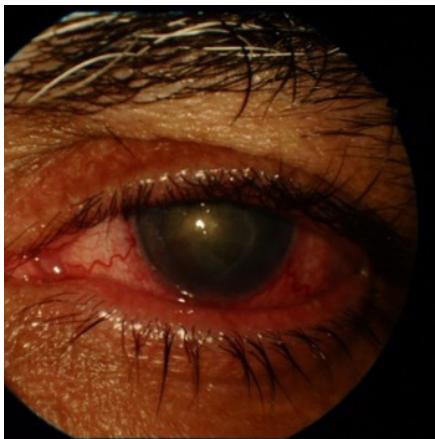
**Figure 2:** Corneal ulcer on presentation



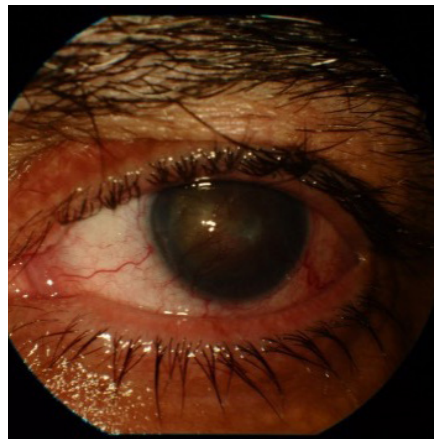
**Figure 3:** Corneal ulcer about 10 days after presentation



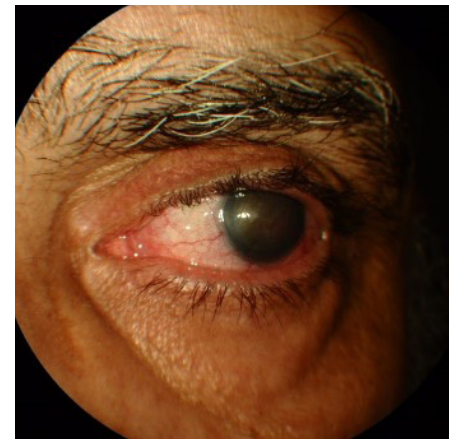
**Figure 4:** Anterior segment ocular coherence tomography demonstrating heaping up of the corneal epithelium at the edge of the epithelial defect.



**Figure 5:** Corneal ulcer at day 35.



**Figure 6:** Corneal appearance at day 110



**Figure 7:** Corneal appearance at 10 months with corneal scarring, residual neovascularization, lipid deposition and diminished conjunctival injection

# Non-Sjogren Keratoconjunctivitis Sicca (KCS)

Dr S Bawa, Netcare  
Linksfield Hospital

## Introduction

Mrs VA is 68-year-old lady who has been suffering with dry eye for more than 6 years. She is retired and lives in the south of Johannesburg.

She complained of blurred vision and an associated burning and gritty sensation in both eyes for that period. She has been treated with numerous commercially prepared lubricants with no significant relief of her symptoms.

Mrs VA is a known Glaucoma patient on Latanoprost topical treatment. She did not report previous eye surgery or previous eye trauma. There is no history of contact lens wear. Systemic enquiry revealed no known autoimmune diseases or other dry eye related systemic diseases; however, she is on treatment for hypertension.

## Significant clinically findings

Best Corrected Visual Acuity: 0.5 and 0.3 respectively.  
Examination of the eyelids revealed no evidence of meibomian gland disease or lagophthalmos.  
Tear break up time of 4 seconds in both corneas  
Fluorescein staining of diffuse punctate erosions in the interpalperable and inferior cornea of both eyes.

## Significant clinically findings

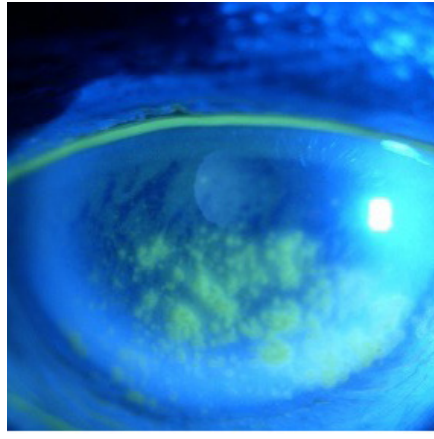
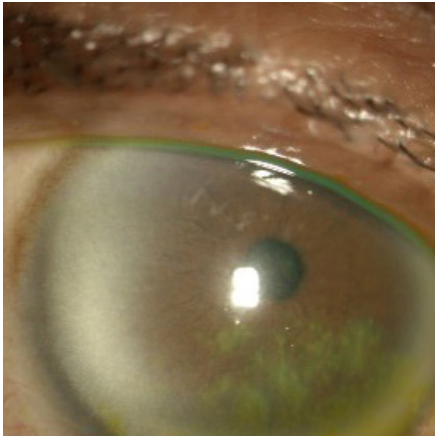
- Best Corrected Visual Acuity: 0.5 and 0.3 respectively.
- Examination of the eyelids revealed no evidence of meibomian gland disease or lagophthalmos.
- Tear break up time of 4 seconds in both corneas
- Fluorescein staining of diffuse punctate erosions in the interpalperable and inferior cornea of both eyes.

## Diagnosis and Treatment

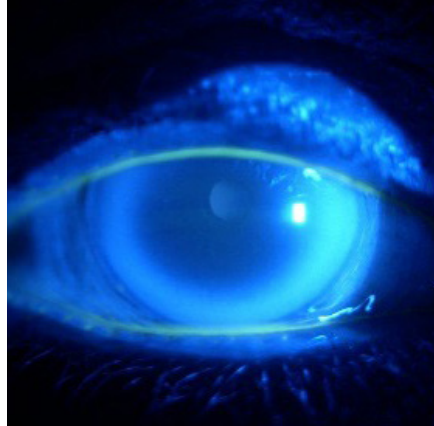
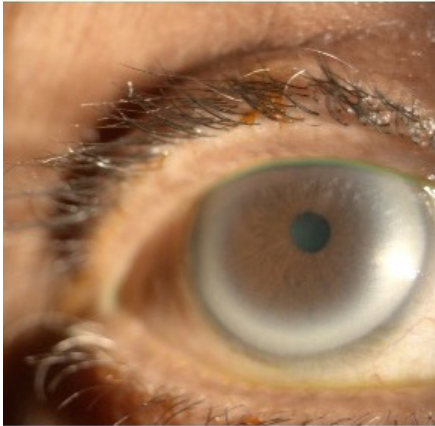
- An initial diagnosis of non Sjogren Keratoconjunctivitis sicca (KCS) was made.
- Previous treatment with topical lubricants had not been successful and therefore it was decided to treat her with cord blood serum eye drops.
- OptiSerum was prescribed, one drop 4 times a day for 7 days and she was requested to follow up after 7 days.

## At Follow up consultation

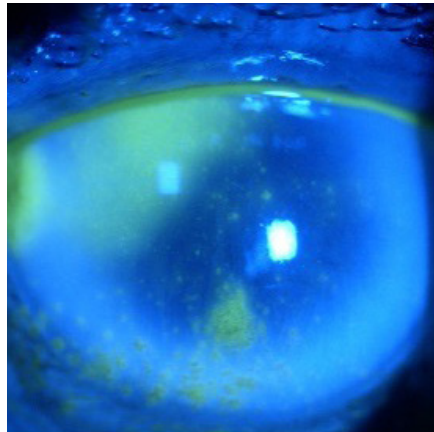
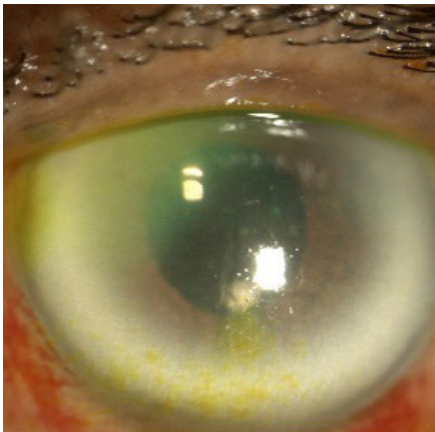
- Mrs VA had no symptomatic complaints and said that her vision had improved dramatically.
- Her BCVA improved to 1.0 in both eyes
- Fluorescein punctate staining had dramatically improved.
- Tear break up time had improved to 8 seconds in both eyes.



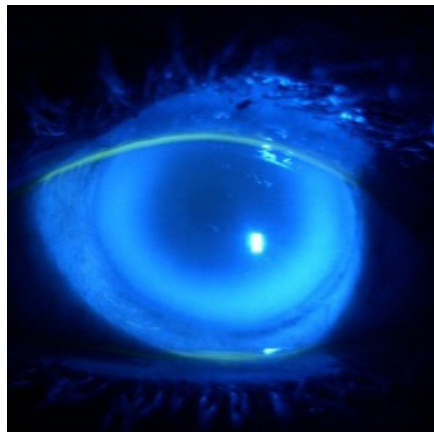
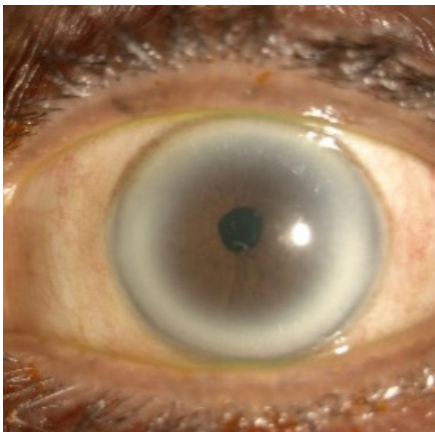
**Right eye before treatment**



**Right eye post treatment**



**Left eye before treatment**



**Left eye post treatment**

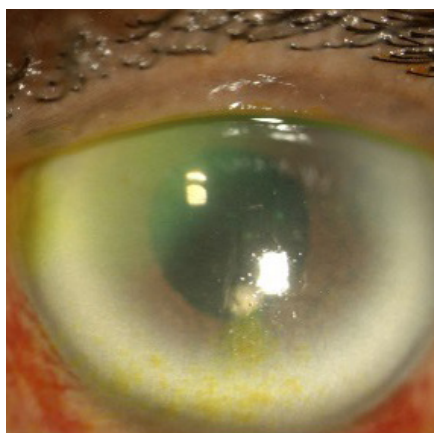
# Extreme Dry Eye and Glaucoma

Dr Ed Hodgson-Jervis,  
Alberton

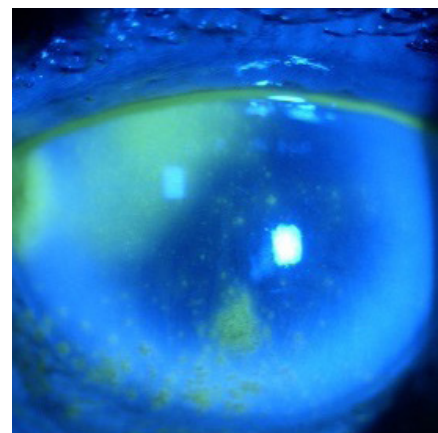
## Introduction

65-year-old female patient with glaucoma and dry macula degeneration as co-morbid diseases, has suffered with extreme dry for 15 years. Treatment with lubricants and tear substitutes had all been unsuccessful. The patient was started on OptiSerum, 4 times daily for a period of 30 days.

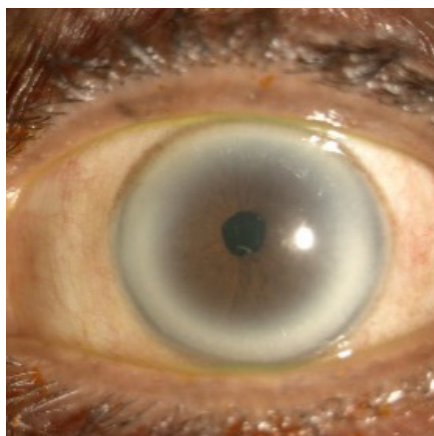
The patient's symptoms improved dramatically and her vision improved from 0.1 to 0.25 and 0.32 which enabled her to step out of her house and start living again!



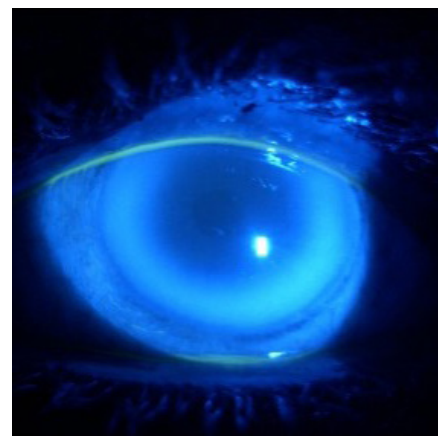
Left eye before treatment



Right eye before treatment



Left eye post 30 days of treatment



Right eye post 30 days of treatment

**Figure 1:** Anterior segment photographs using fluorescein dye to demonstrate epithelial cells which had undergone apoptosis. After 30 days there was significant regeneration of the epithelium.