

Bilateral Simultaneous Acanthamoeba Keratitis: Clinical Management



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September 2014

Clinical-Case

**January
2013**

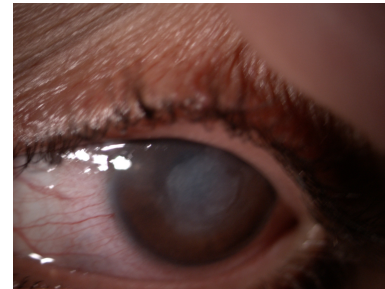
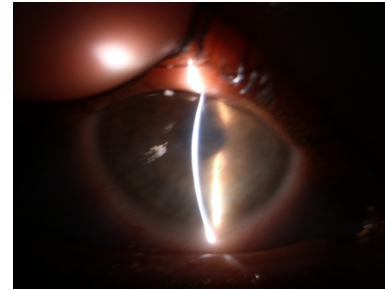
- 27 y-o.
- Female.
- Regular disposable contact lens user. No ophthalmic disease history.

**Clinical
signs**

- Photophobia + Ocular Pain + Bilateral redness
 - Bilateral keratitis + ring infiltrate OS
- Bilateral Acanthamoeba confirmed by PCR

Treatment

- Chlorohexidine 0.02% + Propamidine isethionate 0.1%
- Moxifloxacin + Neomicine + Voriconazole + Dexamethasone



Clinical Progression

April 2013

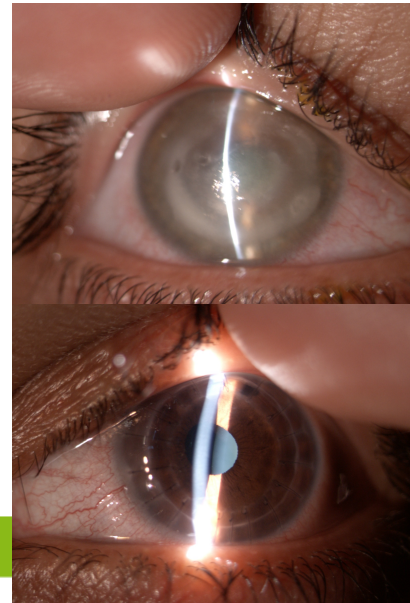
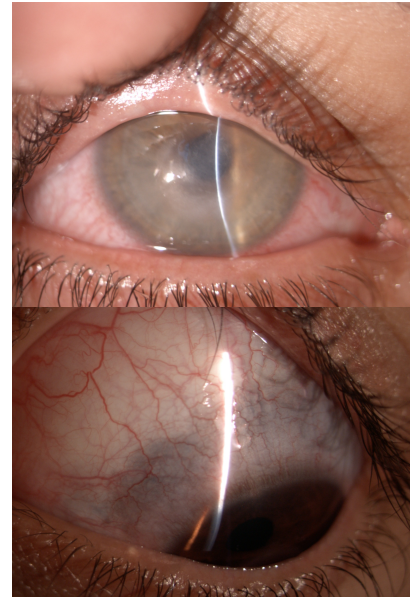
- Good response to therapy

October 2013

- **RE:** +++ Corneal leukoma;
VA < +1.0 logMAR
- **LE:** Uveal effusion;
VA = CF

February 2014

- **LE:** Descemetocoele → Urgent Penetrating Keratoplasty.
No acanthamoeba recurrence.



Acanthamoeba Keratitis



Rare disease - described in 1973. **BILATERAL** involvement is even **RARER**.

Acanthamoeba spp. are a ubiquitous free-living protozoa commonly found in soil, fresh or brackish water and upper respiratory tract.

Cystic form: highly resilient → appropriate environment → cysts turn **trophozoites** → **tissue penetration and destruction**.

Blurred vision and severe and disproportionate **pain**.

Irregular and greyish epithelial surface + **pseudodendritis**.

Limbitis and **perineural infiltrates***

Gradual enlargement infiltrates to form a **ring abscess** → Cornea **melting**

Acanthamoeba Keratitis



Diagnosis: Clinical Suspicious !!!

Clinical smear + histopathology. PCR.

Confocal microscopy

Treatment: Chlorhexidine 0.02% + propamidine isethionate 0.1%

Voriconazole + Neomicine

Corticosteroids?

Prognosis: The sooner the better!

Penetrating keratoplasty with high recurrences: ! If active disease!

Complications: Recurrence, graft rejection, glaucoma, persistent epithelial defect, endophthalmitis.