

Document Title	Protocol Topical Brolene 0.1% (Propamidine isetionate) for Acanthamoeba Keratitis	
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Acronyms

AK	Acanthamoeba Keratitis
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Définitions :

- Keratitis: inflammation of the cornea , can be infectious or non-infection.

**Protocol Topical Brolene 0.1% (Propamidine isetionate)
for Acanthamoeba Keratitis**

Introduction

Acanthamoeba Keratitis is fatal parasite infection that primarily affects people who wear contact lenses. It is frequently characterized by late clinical development of a ring-shaped infiltration of stroma and pain that is out of proportion to findings. It is challenging to diagnose as well as to treat. Topical neomycin sulfate, other imidazoles, and propamidine isethionate (Brolene) 0.1% eye drops—a member of the diamidine family—are among the recommended courses of treatment.

At Al-Nahdha Brolene is not available, at present the only treatment used is chlorhexidine 0.02%- can be prepared for ocular use by clinical pharmacists. This medication works in combination with other medication for better effective management and response. Multi-therapy helps in preventing the devastating complications like conceal melting and perforation that leads to therapeutic corneal transplant, which itself is very costly and requires lengthy management and follow up.

As eluded above, Brolene 0.1% is effective, safe and is easy to use. One drop into the affected eye(s) every 1 hour. Then depending on the clinical response- tapering will be adjusted. Often acanthamoeba keratitis requires long term therapy for full recovery.

Aim(s) and objectives

To develop guidelines in the effective management of acanthamoeba keratitis, and prevent it's possible complications in patients at Al Nahdha Hospital.

Methods and procedures:

1. When to consider Brolene (0.1%)
 - 1.1. In cases presented with clinical suspicious of acanthamoeba keratitis
 - 1.2. In cases confirmed by conceal scrapping culture and sensitivity for the presence of
A. castellanii and A polyphaga Protozoa.
2. Who can instill the eye Brolene 0.1%

2.1. The patient him/herself, caregivers, allied health staff

3. Dosage:

One drop into the affected eye(s) every 1 hour initially. Then the frequency will be tapered down.

No dilution is needed.

4. Monitoring:

depending on the clinical response- which may take 2 weeks- the frequency can be reduced to every 3 hours for 3-4 weeks. Some even advocate to 6-12 months of treatment. Close observation is required when the treatment is discontinued to rule out recurrence. Please see the flow chart in **figure 1**

Requirements:

- Brolene 0.1% is not available at Al-Nahdha Hospital. It is expected that with the start of using Brolene with other anti-amoebic agents, the hospital stay for treating acanthamoeba keratitis will be reduced along with the complications and their expenses.
- No additional human/non-human resources are needed.
- See the flow-chart above on how brolene 0.1% is going to be used.

Document History and Version Control

Version	Description	Review Date
1	Initial Release	

References:

1. https://eyewiki.aao.org/Acanthamoeba_Keratitis
2. G Brasseur, L Favennec, D Perrine, J P Chenu, and P Brasseur, case report: Successful treatment of Acanthamoeba keratitis by hexamidine, 1994 Sep. PMID: 7995072
3. Medscape, Acanthamoeba Keratitis
4. Will's eye manual 7th edition, acanthamoeba keratitis, page 145-157

Figure 1

