

Purpose

To determine the **efficacy** of compounding topical tacrolimus treatments for SEIs after Adenovirus keratoconjunctivitis.

Material and Methods

Retrospective
study

- Tacrolimus 0.03% eye drops twice daily
- Tacrolimus 0.2% ointment once daily

The data were analyzed in the IBM Microsoft SPSS® Statistics version 22.0.

The parameters measured were:

The **visual acuity** before and after treatment

- Measured by LogMAR

Intraocular pressure before, during and at the end of treatment

- Measured by Perkin's tonometer

Treatments before tacrolimus

Result of **SEIs** after treatment

Results

DEMOGRAPHIC

63 patients (99 eyes)
57.1% with bilateral affection.
Middle age: 46.85 years (SD=14.93).

TREATMENT

37 patients (58.7%)
tacrolimus 0.03% eye drops
26 patients (41.3%)
were treated with
Tacrolimus 0.02% ointment and

FOLLOW UP

The mean **duration of treatment** was 105 days (rank: 55-199)
The mean **follow up** 112.5 days (57.25-426.75).

SEIS

- Decrease in the SEIs 56.56% of the eyes
- In 19.19% disappeared the SEIs
The mean intraocular pressure (IOP) was reduced in the right eyes based on the media data.

VISUAL ACUITY

In 17 eyes (53.1%) increment with a mean of 0.331 (rank: 0.1-0.7)
In 3 eyes (9.37%) decreased in 0.1
There is not differences in 12 eyes (37.5%).

Discussion

Epidemic keratoconjunctivitis (EKC) is a highly contagious infection that mainly involves the surface of the eye. Keratitis may appear, approximately 10 days after the onset of the follicular conjunctivitis, with the formation of sub-epithelial corneal infiltrates (SEIs), usually bilaterally and asymmetric. The SEIs have the potential to cause significant ocular morbidity, with reduced vision, photophobia, glare, halos, and foreign body sensation, and can persist for months or years after the initial infection. Tacrolimus has demonstrated effectiveness in this ocular pathology in some studies.

Conclusions

Topical tacrolimus eye drops and ointment, which are compounding in the Pharmacy Service, seems to be an **effective treatment** in SEIs after adenovirus keratoconjunctivitis.