AMNIOTIC MEMBRANE FOR THE TREATMENT OF A CORNEAL CHEMICAL BURN

INTRODUCTION

In order to deliver the best patient care possible an optometrist/ophthalmologist must have the best tools in their clinical toolbox to meet the needs of the various ocular conditions that walk into our offices every day. The tool I have been reaching for more and more in my practice is the Apollo Amniotic Membrane from Atlas Ocular. It is extremely useful in the treatment of a broad range of ocular conditions, including this emergency case involving a young lady who wanted to try false eyelashes with disastrous results.

CASE SUMMARY

A 23-year-old female with no significant ocular or medical history presented with a chief complaint of a an extremely red and painful left eye with marked loss of visual acuity and moderate photophobia. The symptoms started the day prior after she went to the salon to have false eyelashes glued on to get ready for an upcoming wedding that she was a bridesmaid in. Shortly after the treatment she began to feel some discomfort OS which she thought would go away on its own, so she took 400 mg ibuprofen and went to bed. The next morning her OS felt much worse. The eye was watery, red and she had trouble keeping her eye open. She was also very aware that the vision in that eye had dropped which prompted the visit to my office.

CLINICAL ASSESSMENT

Her BCVA was OD 20/20 and OS 20/200. Slit Lamp exam showed a very angry looking OS. 3+ pan-corneal, confluent SPK was present along with 2+ hyperemia on both nasal and temporal conjunctiva. Trace cell/flare were noted in the anterior chamber. Several fake eyelashes were in place on the superior eyelid margin but none of them appeared to be physically abrading the cornea or conjunctiva upon blinking. I got a pH strip and tested the tear film in the lower cul-de-sac. A pH of 8.5 was recorded. My impression was that the glue/adhesive used to attach the fake eyelashes somehow got into the eye the day before and caused an alkali burn on both the conjunctiva and cornea.

TREATMENT/RESULTS

I flushed the eye with copious sterile saline solution until I registered a pH of 7.5. At that point I inserted an Apollo Amniotic Membrane (12.0 mm inside of an Alcon Total 30 contact lens) and

had her start Tobradex tid OS. I kept her on the ibuprofen 400mg po tid as well. I saw her the next morning and the Membrane was still in place. Her pain level had decreased, and the redness was clearly improved. VA's OS improved to 20/60 and the SPK was still present but much improved. I reassured her and kept the Membrane and BCL in place. I saw her again 2 days later and by this time the Membrane had completely absorbed. Her VA's had returned to 20/20 and the eye was white and quiet. SPK was trace, and the anterior chamber was quiet. I felt comfortable taking the contact lens off and to discontinue the Tobradex.

POST-TREATMENT OBSERVATIONS

The patient was extremely grateful that I was able to get her eye looking and feeling normal in time for the wedding. Given the severity of the alkali burn I don't know of another treatment that would have healed the eye as quickly and as cleanly as the Amniotic Membrane did. Having a supply of these dehydrated Amniotic Membranes on hand in the office is a no-brainer. They can be stored at room temperature and have a long shelf life. In hindsight I would have used the larger 14.0mm membrane to get more conjunctival coverage, but at the time of this case I only had the 12.0 mm membrane in the office.

Dr. Jay Mashouf grew up in Palos Verdes, CA and currently practices in San Diego, CA. His clinical interests include specialty contact lenses, dry eye treatment, and myopia control. He is currently an investigator for a number of clinical trials in the myopia control and presbyopia space. He also does contact lens research for Alcon.

He earned his Doctorate of Optometry from UC Berkeley and has a B.S. in Bio-Chemistry from UC San Diego.

Dr. Mashouf is not affiliated with, nor is he a paid consultant for Atlas Ocular.