

# Recurrent Corneal Erosion

### Case Presentation:

A 55 year old female with history of mascara brush trauma several years prior has been suffering repeated bouts of recurrent erosions. She reports at this visit complaining of difficulty upon waking with redness, tearing, photophobia, pain and blurred vision OD.

### Objective Findings:

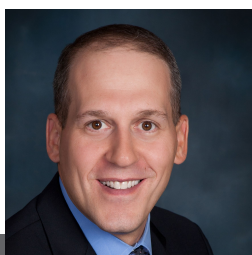
Best corrected vision 20/30 OD, 20/20 OS. Slit lamp examination revealed irregular epithelium with a large epithelial defect OD. She was diagnosed with a recurrent corneal erosion, and we discussed combining four treatment modalities together, including AmbioDisk dehydrated amniotic membrane for our plan. The patient agreed and we therefore debrided loose areas of epithelium, followed by the application of a 12mm AmbioDisk along with a BSCL. The patient was additionally started on a topical corticosteroid and oral doxycycline.

### Pathophysiology:

The basement membrane is made of three layers and composed of laminin, type IV collagen, and fibronectin, the same components found in Amniotic Membrane tissue. Normal adherence of the basement membrane to the basal epithelium is made through adhesion complexes. In patients with recurrent erosions, upregulated matrix metalloproteinases (MMP's) break down these adhesion complexes, and degrade the basement membrane. AmbioDisk decreases these MMP's, and allows for a more regular adherence of the epithelium to the basement membrane.

### Outcome:

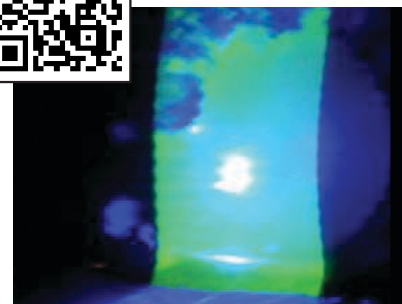
The patient had been suffering micro and macroform recurrent erosions almost weekly since her injury, and is now symptom free and 20/20 OD for over 6 months since combining therapies utilizing the AmbioDisk. The patient is ecstatic about her outcome and very pleased.



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Watch Dr. Colatrella's Video



Pre-application



Application of AmbioDisk  
"IOP" toward cornea



Insertion of Contact Lens