

INTRODUCTION

- This case covers multiple ocular surface complications following self-induced trauma of the eyelid
- During the conjunctival healing process, sequelae can arise that must be addressed
- Manipulation of ocular tissues is high risk and leads to cyclical complications, similar to Mucus Fishing Syndrome (MFS)



Dr. Nahyoung Grace Lee, MD

CASE DESCRIPTION:  
initial oculoplastics visit

- 41 yo F presents to an oculoplastics specialist, CC “left upper eyelid pain”
- POH: MGD OU, h/o chalazia
- PMH: anxiety, depression, ADHD
- HPI:
  - months of persistent chalazia, manually drained with sharp tweezers
  - “hard, crystal-like formations” that would scratch against her eye, further causing the need for manipulation with tweezers
- VA 20/20-2 OD, 20/30-2 OS
- Exam OS:

Lids	Splitting of eyelid internally on medial aspect with active granulation tissue. Loss of tarsus nasal. Loss of marginal structures medial 2/3 of upper lid with scarring at "margin". Peaking of upper lid centrally. Noninflamed chalazion laterally. 3 trichiatic lashes medial UL.
Conjunctiva /Sclera	Upper palpebral conj fissure medially with scarring. Chronic boggy injection and thickening throughout. Inferior sclera/bulbar normal. No symblepharon.
Cornea	Mild SPK
Anterior Chamber	Normal

- **Assessment:** LUL eyelid injury and diffuse meibomian gland damage/destruction/effacement of margin in the setting of self-surgery for chalazia
- **Plan:**
  - Lid reconstruction after healing
  - Kontur BCL placed OS
  - Moxifloxacin QID OS
  - Follow up 3 weeks

CLINICAL COURSE

3-week Oculoplastics follow-up 11/16/20	Improvement in ocular surface with BCL in place, tarsus healing. Recommended to heal over next 6-12 months and then perform surgery. Removed BCL
7 months later: Emergency Dept. 6/14/21	Picking again – scleral melt. Consult with oculoplastics and cornea services
Cornea follow-ups 6/15/21 – 6/18/21	Treatment for scleral melt, new nasal and superior corneal epi defects – defects due to visible hardened granules, removed in office
Cornea follow-up 6/21/21	New symblepharon. BCL placed – Kontur 16.0 / 8.6
Cornea follow-up 6/29/21	Symblepharon stable, corneal defects improving – continue BCL
Oculoplastics and Cornea follow-ups 7/12/21	Significant entropion and symblepharon – plan for fornix reconstruction surgery. New corneal pannus superior. Continue BCL
Cornea follow-up 7/27/21	Worsening of symblepharon – advancement to limbus. Unable to maintain BCL

CASE DESCRIPTION:  
subsequent corneoscleral complications



Dr. Jo-Ann Haney-Tilton, MD

Complication	Treatment
Scleral melt	Cultures obtained, fortified vancomycin & tobramycin q1h, subconjunctival ceftazidime, doxycycline 100mg PO BID
Corneal epithelial defects	Moxifloxacin QID OS, bacitracin ung qhs
Symblepharon	BCL placed – Kontur 16 / 8.6
Entropion	Continue BCL
Corneal pannus	Continue BCL
Advancement of symblepharon	Unable to maintain BCL

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DISCUSSION

- Functions of the conjunctiva<sup>1</sup>:
  1. Physical barrier
  2. Lubrication
  3. Normal eye motility
- Conjunctival wound healing follows a four-step course that includes formation of granulation tissue<sup>1</sup>:
  1. Inflammation: days 1-2
  2. Fibroblast activation: peak at day 3
  3. Extracellular matrix remodeling and deposition: day 3 and onwards
  4. Wound contracture: day 3 and onwards
- Complications<sup>1</sup> of poor conjunctival healing:
  - Persistent epithelial defects
  - Fibrosis of the ocular surface
  - Blindness
- In this case, as the tarsus was healing from damage, granulation formed that the patient then dug out, creating a cascading cycle.
- This is analogous to the cyclical nature of Mucus Fishing Syndrome (MFS)<sup>2</sup>:

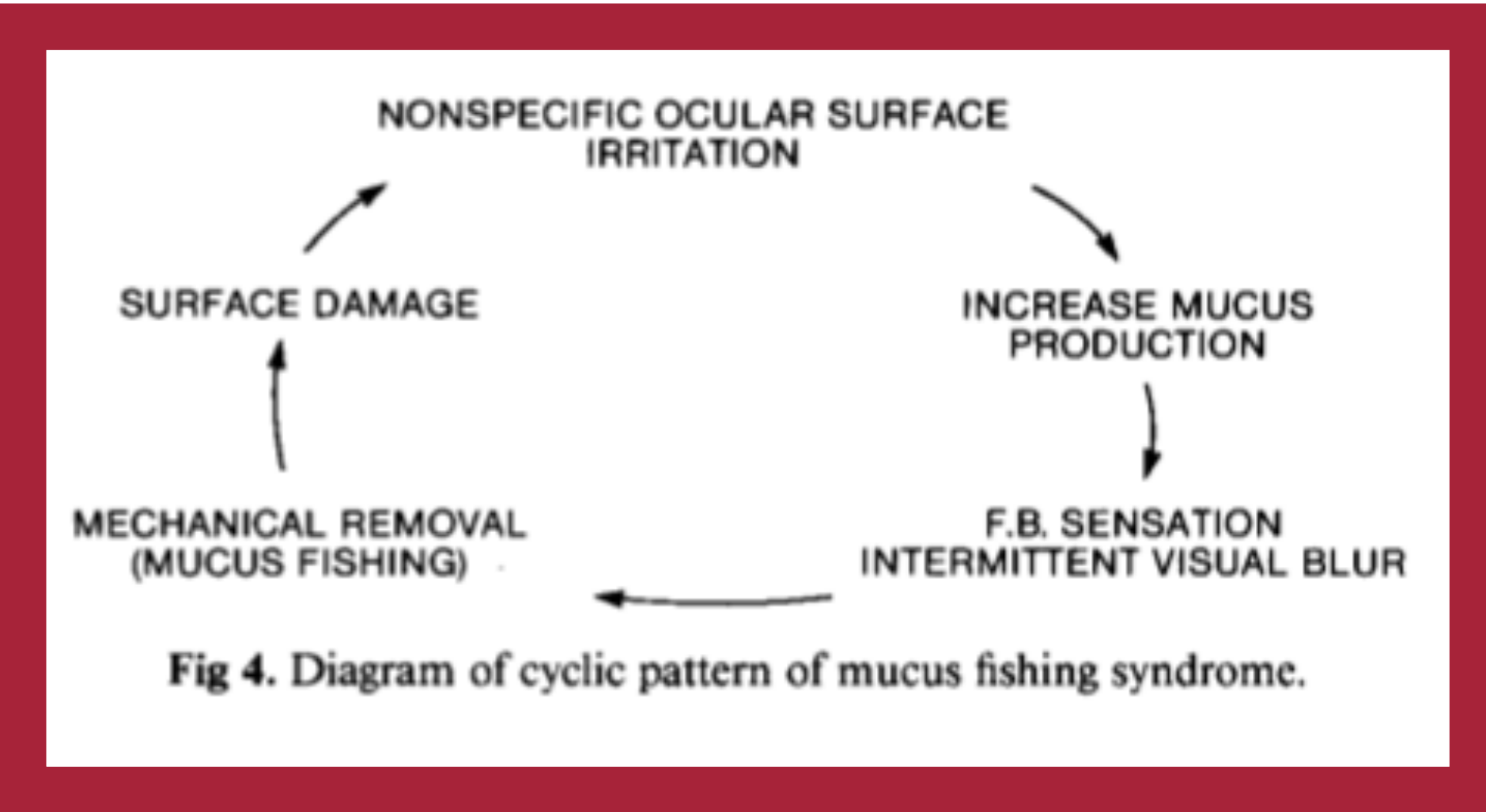


Fig 4. Diagram of cyclic pattern of mucus fishing syndrome.

- In MFS, the patient finds evidence of foreign bodies when they pick out mucus strands. In this case, the patient was digging out conjunctival granules, which corroborated her feeling that something in her eye needed to be picked out.
- MFS has been described as a Body-Focused Repetitive Behavior<sup>3</sup>, which falls under the broader category of psychodermatological conditions, a relatively new field of research that combines psychiatry and dermatology<sup>4</sup>
- Psychodermatological conditions have a high co-morbidity with depression and having both diagnoses is associated with more severe symptoms of Body-Focused Repetitive Behaviors<sup>5</sup>
- The patient in this case also has anxiety and depression, and acknowledged increased stress as a partial trigger for re-picking at her conjunctiva

CONCLUSIONS

- Damage to conjunctival architecture can have just as devastating effects to the ocular surface as corneal pathology
- Consideration of psychiatric co-morbidities could help mitigate and prevent more severe complications from self-induced trauma to the ocular surface

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