Anterior Basement
Membrane
Dystropy
What?
So What?
Now What?



Anterior Basement Membrane Dystrophy (ABMD) is a common condition that affects the front window of the eye (cornea) where the epithelium corneal layer adheres irregularly.

Acknowledgments: Samuel, A., Kumar, A., Baig, K., Sabeti, S.

### What causes ABMD?

- The **cornea** is the clear, dome-shaped surface at the front of the eye that helps focus light on the retina.
  - ABMD is a disorder that affects the epithelial cells of the cornea, which make up the surface protective layer.
  - In ABMD, the epithelial cells are irregular and do not properly adhere to the underlying basement membrane.
    - This results in irregular patterns on clinical exam, resembling maps, dots, or fingerprints.
      - ABMD is also known as map-dot-fingerprint dystrophy

#### Risk Factors:

- Family history
- Previous trauma to ocular surface (corneal abrasions, surgery)

### How does ABMD present?

Although ABMD may not cause any symptoms in all patients, some patients may present with:

- Blurry or fluctuating vision
- Eye discomfort / irritation
- Foreign body sensation
- Increased light sensitivity
- Painful episodes if corneal surface cells slough off

# Why is ABMD important?

ABMD is important to manage and treat to prevent complications and improve vision and comfort.

- Left untreated, pain and increased risk of infection can occur due to recurrent corneal erosions.
- Before cataract surgery, ABMD may need to be treated for optimal intraocular lens calculations.

Early intervention through a comprehensive eye exam can greatly improve long-term visual health.

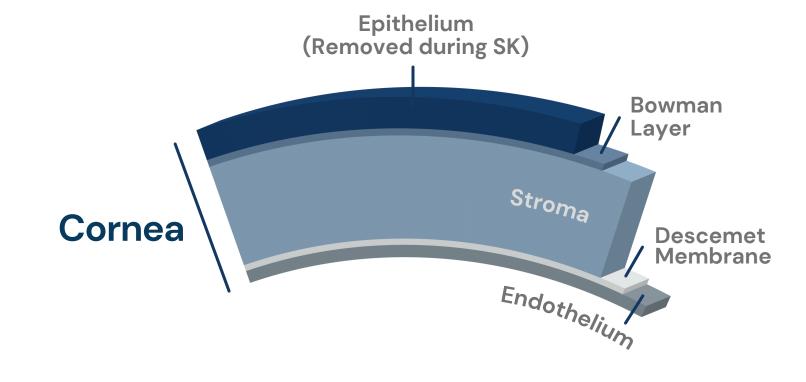
## What are my treatment options?

#### **Topical Medications:**

- Lubricating Eye Drops
  - o Can relieve dryness and associated discomfort.
- Topical Medications
  - Can reduce inflammation while promoting corneal healing.

<u>Surgical Options - Superficial Keratectomy (SK):</u>

- WHAT is a superficial keratectomy?
  - A minor surgical procedure where the abnormal epithelial layer is removed from the cornea, resulting in a smoother ocular surface.
- WHY is a superficial keratectomy performed?
  - o To treat corneal dystrophies, scars, and irregularities
  - To improve vision and reduce visual disturbances
  - To prepare the eye for cataract surgery, if indicated
- HOW is a superficial keratectomy performed?
  - Specialized instruments are used to carefully remove the targeted epithelial layer of the cornea under local anesthesia (you will be awake, but your eye will be numb).
  - ∘ Takes ~5–10 minutes to complete.
- The decision to perform a superficial keratectomy with or without polish or the use of additional topical agents is typically based on the specific needs of the patient and is made on a case-by-case basis.







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### **Preoperative Instructions**

#### • Procedure Location:

• The superficial keratectomy procedure will take place in a dedicated minor procedure room.

#### • Anesthesia:

- To ensure your comfort throughout the procedure, both topical and subconjunctival anesthetic will be administered.
- These anesthetics will numb the ocular surface, minimizing any potential discomfort during the surgery.

#### • Sedation:

- Please note that no sedation will be provided for this procedure.
- You will be awake throughout, but the anesthetics will ensure you experience minimal discomfort.

#### • Duration:

 Typically, the superficial keratectomy procedure takes approximately 5-10 minutes.

#### • Eye Patching:

- After the procedure, your eye will be patched to protect it and promote healing.
- Your surgeon will provide specific instructions on when and how to remove the patch. It is crucial to follow their guidance to ensure proper recovery.

### **Postoperative Instructions**

- 1) Use prescribed eye drops as directed by your doctor to prevent infection and promote healing:
  - Eye drops will be prescribed to prevent infection, reduce inflammation, and help the cornea heal properly. Follow the recommended dosage and frequency.
- 2) Avoid rubbing or touching your eyes:
  - Rubbing or touching your eyes can irritate the surgical site and disrupt the healing process.
- 3) Wear protective eyewear, such as sunglasses, to shield your eyes from dust, wind, and bright light:
  - Protecting your eyes from environmental factors can help prevent complications and promote a comfortable healing process.
- 4) Avoid swimming or exposing your eyes to water for 2 to 4 weeks, as advised by your doctor:
  - Water can introduce bacteria into the eyes and increase the risk of infection. Your doctor will inform you when it is safe to resume these activities.

# **Patient Surgery Journey Video**



### **Your Minor Procedure Details**

•	Date:
•	Time:
•	Location: <u>Precision Cornea Centre</u>
•	Surgeon:
•	Follow Up:
•	Additional Notes:



