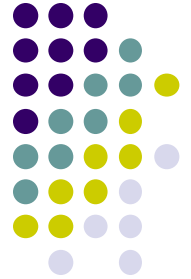
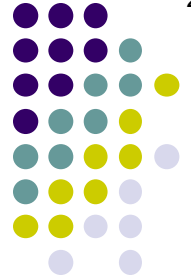


# Corneal Dystrophies



*How many categories of corneal dystrophies are listed in the Cornea book?*

## Corneal Dystrophies



*How many categories of corneal dystrophies are listed in the Cornea book?*

**Four**

# Corneal Dystrophies



?

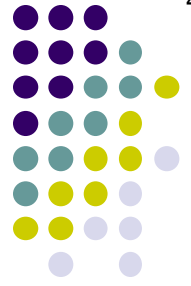
?

*What are the four categories of corneal dystrophies?*

?

?

# Corneal Dystrophies



**Epithelial and Subepithelial Dystrophies**

**Epithelial-Stromal *TGFBI* Dystrophies**

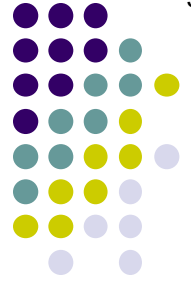
*What are the four categories of corneal dystrophies?*

**Stromal Dystrophies**

**Endothelial Dystrophies**

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies



## Epithelial-Stromal *TGFBI* Dystrophies

*What are the four categories of corneal dystrophies?*

## Stromal Dystrophies

Flip back and forth between those first two slides until you have all four categories on lock!

## Endothelial Dystrophies

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

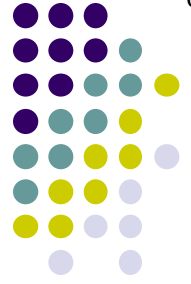
- 1) ?
- 2) ?
- 3) ?
- 4) ?
- 5) ?
- 6) ?

*What are the six epithelial/subepithelial corneal dystrophies?*

## Epithelial-Stromal *TGFBI* Dystrophies

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

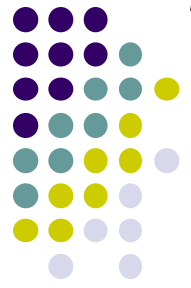
- 1) Epithelial basement membrane dystrophy
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- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
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- 6) Subepithelial mucinous corneal dystrophy

*What are the six epithelial/subepithelial corneal dystrophies?*

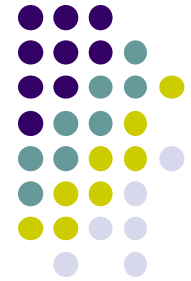
## Epithelial-Stromal *TGFBI* Dystrophies

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies



## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

} The *Cornea* book pays these no mind, so you shouldn't either

## Epithelial-Stromal *TGFBI* Dystrophies

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies



## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

But make sure you know these four!  
They're blanked out on the next slide so  
you can flip back and forth between that  
one and this one until you've got 'em

## Epithelial-Stromal *TGFBI* Dystrophies

## Stromal Dystrophies

## Endothelial Dystrophies

# Corneal Dystrophies



## Epithelial and Subepithelial Dystrophies

- 1) ?
- 2) ?
- 3) ?
- 4) ?
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

But make sure you know these four!  
They're blanked out on the next slide so you can flip back and forth between that one and this one until you've got 'em

## Epithelial-Stromal *TGFBI* Dystrophies

## Stromal Dystrophies

## Endothelial Dystrophies

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
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- 5) Epithelial recurrent erosion dystrophies
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## Epithelial-Stromal **TGFBI** Dystrophies

*What does TGFBI stand for in this context?*

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
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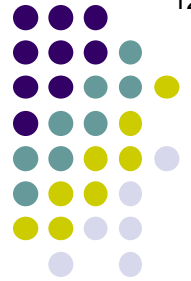
## Epithelial-Stromal **TGFBI** Dystrophies

*What does TGFBI stand for in this context?*

'Transforming growth factor beta induced.' It refers to the gene that codes for the (faulty) protein responsible for the dystrophy.

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal **TGFBI** Dystrophies

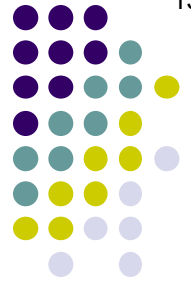
*What does TGFBI stand for in this context?*

'Transforming growth factor beta induced.' It refers to the gene that codes for **the (faulty) protein responsible for the dystrophy.**

*What is the name of the protein involved in the TGFBI dystrophies?*

Stromal D

Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal **TGFBI** Dystrophies

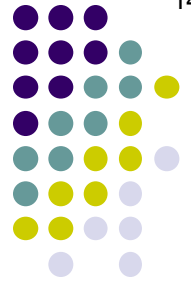
*What does TGFBI stand for in this context?*

'Transforming growth factor beta induced.' It refers to the gene that codes for **the (faulty) protein responsible for the dystrophy.**

Stromal D

*What is the name of the protein involved in the TGFBI dystrophies?*  
**Keratoepithelin** (the *Cornea* book refers in passing to the TGFBI conditions as *keratoepithelin dystrophies*)

Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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- 5) Epithelial recurrent erosion dystrophies
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## Epithelial-Stromal **TGFBI** Dystrophies

*What does TGFBI stand for in this context?*

'Transforming growth factor beta induced.' It refers to the gene that codes for **the (faulty) protein responsible for the dystrophy.**

## Stromal D

*What is the name of the protein involved in the TGFBI dystrophies?*  
**Keratoepithelin** (the *Cornea* book refers in passing to the TGFBI conditions as *keratoepithelin dystrophies*)

*What is the clinical hallmark of the keratoepithelin dystrophies?*

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal **TGFBI** Dystrophies

*What does TGFBI stand for in this context?*

'Transforming growth factor beta induced.' It refers to the gene that codes for **the (faulty) protein responsible for the dystrophy.**

## Stromal D

*What is the name of the protein involved in the TGFBI dystrophies?*

**Keratoepithelin** (the *Cornea* book refers in passing to the TGFBI conditions as *keratoepithelin dystrophies*)

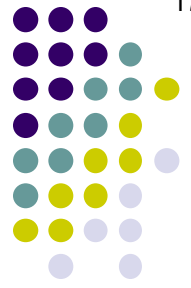
*What is the clinical hallmark of the keratoepithelin dystrophies?*

Recurrent epithelial erosions

## Endothelial Dystrophies







# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
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## Epithelial-Stromal **TGFBI** Dystrophies

What does TGFBI stand for in this context?  
 'Transforming growth factor beta induced.' It refers to the gene that codes for **the (faulty) protein responsible for the dystrophy.**

Stromal Dystrophies  
 What is the name of the protein involved in the TGFBI dystrophies?  
**Keratoepithelin** (the *Cornea* book refers in passing to the TGFBI conditions as *keratoepithelin dystrophies*)

**What is the clinical hallmark of the keratoepithelin dystrophies?**  
**Recurrent epithelial erosions**

The *Cornea* book considered this factoid important enough to make it one of three 'Highlights' for the Dystrophy chapter—take note of it!

## Endothelial Dystrophies

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) ?
- 2) ?
- 3) ?
- 4) ?
- 5) ?
- 6) ?

*What are the six epithelial-stromal TGFBI corneal dystrophies?*

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
- 5) Granular type 1
- 6) Granular type 2

## Stromal Dystrophies

## Endothelial Dystrophies

*What are the six epithelial-stromal TGFBI corneal dystrophies?*



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

*How do you pronounce this?*

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) **Reis-Bücklers** corneal dystrophy
- 2) **Thiel-Behnke** corneal dystrophy
- 3) Lattice, type 1
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- 5) Granular type 1
- 6) Granular type 2

*How do you pronounce this?*

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
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- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

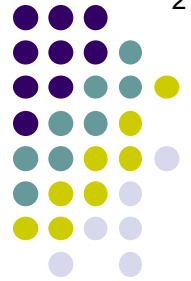
- 1) **Reis-Bücklers** corneal dystrophy
- 2) **Thiel-Behnke** corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, IIIB, IV)
- 5) Granular type 1
- 6) Granular type 2

*How do you pronounce this?*  
*RICE BOO-kler*

*How do you pronounce this?*  
*TEAL BEN-key*

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

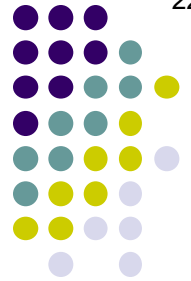
- 1) **Reis-Bücklers corneal dystrophy**
- 2) **Thiel-Behnke corneal dystrophy**
- 3) Lattice, type 1

*What is the histologic hallmark of Reis-Bückler and Thiel-Behnke?*

0) Granular type 2

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

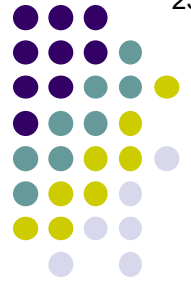
- 1) **Reis-Bücklers corneal dystrophy**
- 2) **Thiel-Behnke corneal dystrophy**
- 3) Lattice, type 1

*What is the histologic hallmark of Reis-Bückler and Thiel-Behnke?*  
**Disruption/fragmentation of Bowman's layer**

3) Lattice, type 2

## Stromal Dystrophies

## Endothelial Dystrophies





## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
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### Epithelial-Stromal *TGFBI* Dystrophies

- 1) **Reis-Bücklers corneal dystrophy**
- 2) **Thiel-Behnke corneal dystrophy**
- 3) Lattice, type 1

*What is the histologic hallmark of Reis-Bückler and Thiel-Behnke?*

**Disruption/fragmentation of Bowman's layer**

*The corneal-dystrophy section of the Cornea book underwent a major revision recently. In what 'category of corneal dystrophy' were Reis-Bückler and Thiel-Behnke in previous editions?*

### Endothelial Dystrophies





## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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### Epithelial-Stromal *TGFBI* Dystrophies

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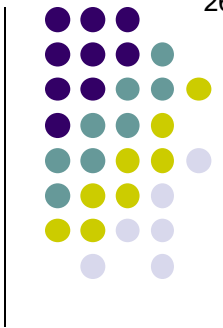
*What is the histologic hallmark of Reis-Bückler and Thiel-Behnke?*

**Disruption/fragmentation of Bowman's layer**

*The corneal-dystrophy section of the Cornea book underwent a major revision recently. In what 'category of corneal dystrophy' were Reis-Bückler and Thiel-Behnke in previous editions?*  
**The 'Corneal Dystrophies of Bowman's'**

### Endothelial Dystrophies

# Corneal Dystrophies



## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
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- 5) Epithelial recurrent erosion dystrophies
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## Epithelial-Stromal TGFBI Dystrophies

- 1) Reis-Bücklers corneal dystrophy
  - 2) Thiel-Behnke corneal dystrophy
  - 3) Lattice, type 1
  - 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
  - 5) Granular type 1
  - 6) Granular type 2
- These two primarily involve Bowman's membrane
- There are two 'lattice' sets
- Two are 'granular' forms

**Stromal** As a way to help remember them, think of the TGFBI dystrophies as consisting of three pairs of conditions: Two **Bowman's** dystrophies, two **lattice** dystrophies, and two **granular** dystrophies

## Endothelial Dystrophies

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
  - 2) Thiel-Behnke corneal dystrophy
  - 3) Lattice, type 1
  - 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
  - 5) Granular type 1
  - 6) Granular type 2
- Remembering the two *granular* types is easy—there's a type 1, and a type 2

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

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- 5) Granular type 1
- 6) Granular type 2

For *lattice*, there's type 1, and type 'everything else' (which weirdly does **not** include a type 2)

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

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## Stromal Dystrophies

- 1) ?
- 2) ?
- 3) ?
- 4) ?
- 5) ?
- 6) ?

## Endothelial Dystrophies

*What are the six non-TGFBI stromal dystrophies?*



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

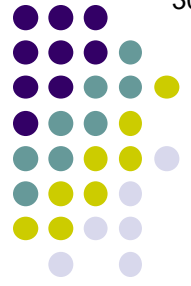
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## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

*What are the six non-TGFBI stromal dystrophies?*



## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
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### Epithelial-Stromal *TGFBI* Dystrophies

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### Stromal Dystrophies

- 1) **Macular corneal dystrophy**
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

The *Cornea* book addresses all six of these, but **Macular** is covered in greatest detail

### Endothelial Dystrophies



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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- 4) Fleck corneal dystrophy
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- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

Note that, conveniently, there are six conditions in these categories (this will help you remember how many names you have to come up with for each)





# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

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## Stromal Dystrophies

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- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) ?
- 2) ?
- 3) ?

*What are the three endothelial dystrophies?*



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
- 5) Granular type 1
- 6) Granular type 2

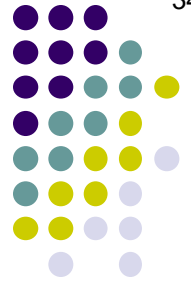
## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy

*What are the three endothelial dystrophies?*



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

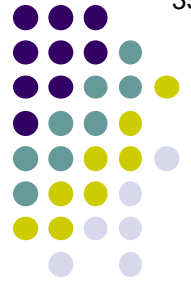
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- 5) Granular type 1
- 6) Granular type 2

St All three of these are important, albeit for different reasons.

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy



## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

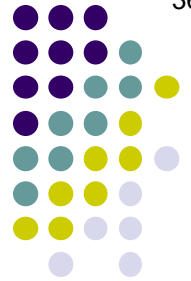
### Epithelial-Stromal *TGFBI* Dystrophies

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- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
- 5) Granular type 1
- 6) Granular type 2

St All three of these are important, albeit for different reasons. Being both common and devastating, *Fuchs* gets the most coverage in the *Cornea* book.

### Endothelial Dystrophies

- 1) **Fuchs endothelial corneal dystrophy**
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy



## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

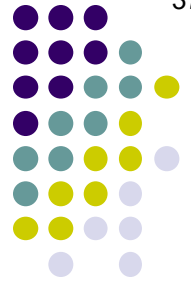
### Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
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- 5) Granular type 1
- 6) Granular type 2

St All three of these are important, albeit for different reasons. Being both common and devastating, *Fuchs* gets the most coverage in the *Cornea* book. *PPMD* gets a fair amount of ink as well.

### Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) **Posterior polymorphous corneal dystrophy**
- 3) Congenital hereditary endothelial dystrophy



## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

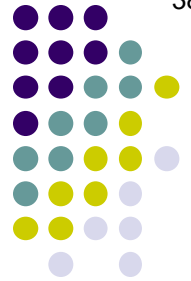
### Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
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- 6) Granular type 2

St All three of these are important, albeit for different reasons. Being both common and devastating, *Fuchs* gets the most coverage in the *Cornea* book. *PPMD* gets a fair amount of ink as well. *CHED* gets less attention, but is important for another reason: It is on the Ddx for infantile cloudy cornea (it's the *E* in the infamous **STUMPED** mnemonic). See slide-set *K9* for further info on this important topic.

### Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) **Congenital hereditary endothelial dystrophy**



## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
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### Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
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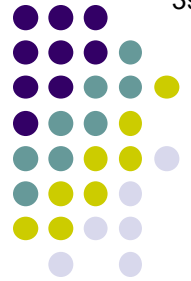
*Which is/are inherited AR?*

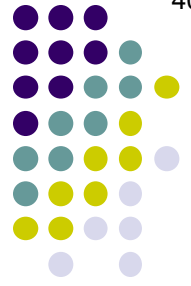
### Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

### Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy





## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) **Gelatinous droplike corneal dystrophy--AR**
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

### Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
- 5) Granular type 1
- 6) Granular type 2

*Which is/are inherited AR?*

### Stromal Dystrophies

- 1) **Macular corneal dystrophy--AR**
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

### Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) **Congenital hereditary endothelial dystrophy--AR**



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy--AR
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
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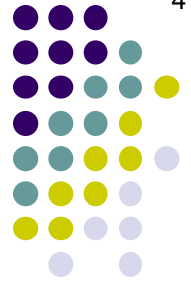
*Which is/are inherited X-dominant?*

## Stromal Dystrophies

- 1) Macular corneal dystrophy--AR
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy--AR



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) **Lisch epithelial corneal dystrophy--X-linked dominant**
- 4) Gelatinous droplike corneal dystrophy--AR
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
- 5) Granular type 1
- 6) Granular type 2

*Which is/are inherited X-dominant?*

## Stromal Dystrophies

- 1) Macular corneal dystrophy--AR
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy--AR



## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy--X-linked dominant
- 4) Gelatinous droplike corneal dystrophy--AR
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

### Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
- 5) Granular type 1
- 6) Granular type 2

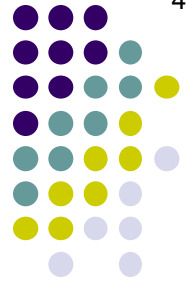
*For which is the inheritance as yet unestablished?*

### Stromal Dystrophies

- 1) Macular corneal dystrophy--AR
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

### Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy--AR



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) **Epithelial basement membrane dystrophy--unestablished**
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy--X-linked dominant
- 4) Gelatinous droplike corneal dystrophy--AR
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, variant types (III, IIIA, I/IIIA, IV)
- 5) Granular type 1
- 6) Granular type 2

*For which is the inheritance as yet unestablished?*

## Stromal Dystrophies

- 1) Macular corneal dystrophy--AR
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) **Pre-Descemet corneal dystrophy--unestablished**

## Endothelial Dystrophies

- 1) **Fuchs endothelial corneal dystrophy--unestablished**
- 2) Posterior polymorphous corneal dystrophy
- 3) Congenital hereditary endothelial dystrophy--AR





## Corneal Dystrophies

### Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy--unestablished
- 2) **Meesmann epithelial corneal dystrophy--AD**
- 3) Lisch epithelial corneal dystrophy--X-linked dominant
- 4) Gelatinous droplike corneal dystrophy--AR
- 5) **Epithelial recurrent erosion dystrophies--AD**
- 6) **Subepithelial mucinous corneal dystrophy--AD**

### Epithelial-Stromal *TGFBI* Dystrophies

- 1) **Reis-Bücklers corneal dystrophy--AD**
- 2) **Thiel-Behnke corneal dystrophy--AD**
- 3) **Lattice, type 1--AD**
- 4) **Lattice, variant types (III, IIIA, I/IIIA, IV)--AD**
- 5) **Granular type 1--AD**
- 6) **Granular type 2--AD**

*Takeaway: The most common inheritance pattern is **AD***

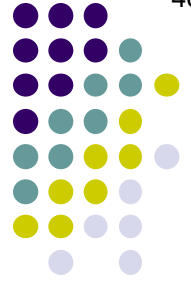
### Stromal Dystrophies

- 1) Macular corneal dystrophy--AR
- 2) **Schnyder corneal dystrophy--AD**
- 3) **Congenital stromal corneal dystrophy--AD**
- 4) **Fleck corneal dystrophy--AD**
- 5) **Posterior amorphous corneal dystrophy -AD**
- 6) Pre-Descemet corneal dystrophy--unestablished

### Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy--unestablished
- 2) **Posterior polymorphous corneal dystrophy--AD**
- 3) Congenital hereditary endothelial dystrophy--AR

## Corneal Dystrophies



OK, review time. If you can't answer every question correctly, you need to spend more time with the slide-set. Get these basics down before tackling the other dystrophy-related slide-sets!

# Corneal Dystrophies



?

?

*What are the four categories of corneal dystrophies?*

?

?

# Corneal Dystrophies



## Epithelial and Subepithelial Dystrophies

## Epithelial-Stromal *TGFBI* Dystrophies

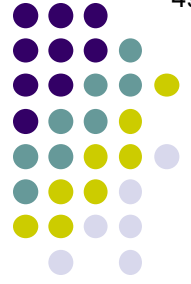
*What are the four categories of corneal dystrophies?*

## Stromal Dystrophies

## Endothelial Dystrophies



# Corneal Dystrophies



**Epithelial and Subepithelial Dystrophies**

**?**

**Epithelial-Stromal *TGFBI* Dystrophies**

**?**

*How many conditions are in each category?*

**Stromal Dystrophies**

**?**

**Endothelial Dystrophies**

**?**

# Corneal Dystrophies



## Epithelial and Subepithelial Dystrophies

- 1)
- 2)
- ?
- 3)
- 4)
- 5)
- 6)

## Epithelial-Stromal *TGFBI* Dystrophies

- 1)
- 2)
- ?
- 3)
- 4)
- 5)
- 6)

*How many conditions are in each category?*

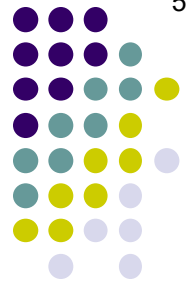
## Stromal Dystrophies

- 1)
- 2)
- ?
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- ?
- 2)
- 3)

# Corneal Dystrophies



## Epithelial and Subepithelial Dystrophies

- 1) ?
- 2) ?
- 3) ?
- 4) ?
- 5)
- 6)

*What are the four epithelial/subepithelial corneal dystrophies that must be learned?*

## Epithelial-Stromal *TGFBI* Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

*What are the four epithelial/subepithelial corneal dystrophies that must be learned?*



## Epithelial-Stromal *TGFBI* Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies *aka the...* *dystrophies*

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

*The Epithelial-Stromal TGFBI dystrophies are also known as the...*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies *aka the... keratoepithelin dystrophies*

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

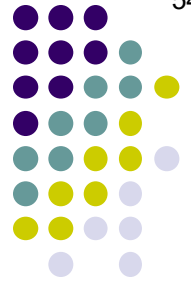
*The Epithelial-Stromal TGFBI dystrophies are also known as the... keratoepithelin dystrophies, named after the (defective) protein coded for by the TGFBI gene.*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal TGFBI Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...*

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

*The Epithelial-Stromal TGFBI dystrophies are also known as the... keratoepithelin dystrophies, named after the (defective) protein coded for by the TGFBI gene. They are notorious for causing...*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal TGFBI Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing... REEs*

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

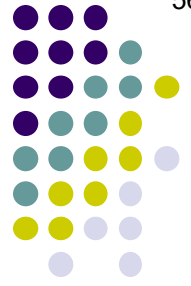
*The Epithelial-Stromal TGFBI dystrophies are also known as the... keratoepithelin dystrophies, named after the (defective) protein coded for by the TGFBI gene. They are notorious for causing... recurrent epithelial erosions (REE).*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)





# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy



## Epithelial-Stromal TGFBI Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...REEs*

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

Two primarily involve

There are two  sets

Two are  forms

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

*The TGFBI dystrophies can be grouped into three pairs of conditions. What is the common element for each pair?*

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal TGFBI Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing... REEs*

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

*Two primarily involve Bowman's membrane*

*There are two 'lattice' sets*

*Two are 'granular' forms*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

*The TGFBI dystrophies can be grouped into three pairs of conditions. What is the common element for each pair?*

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal TGFBI Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...REEs*

- 1) ?
- 2) ?
- 3)

**Two primarily involve Bowman's membrane**

**What are the two that primarily involve Bowman's?**

*two 'lattice' sets*

- 5)
- 6)

*Two are 'granular' forms*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal TGFBI Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...REEs*

- 1) **Reis-Bücklers corneal dystrophy**
  - 2) **Thiel-Behnke corneal dystrophy**
- Two primarily involve Bowman's membrane*

**What are the two that primarily involve Bowman's?**

*two 'lattice' sets*

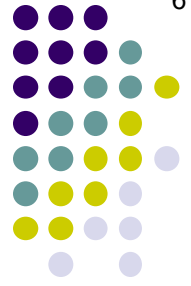
- 5) *Two are 'granular' forms*
- 6)

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...REEs*

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) ?
- 4) ?
- 5) ?

*Two primarily involve Bowman's membrane*

**There are two 'lattice' sets**

**What are the two Lattice sets?**

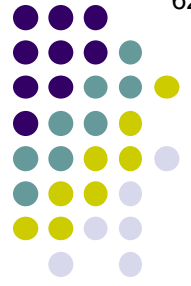
*'granular' forms*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...REEs*

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) **Lattice, type 1**
- 4) **Lattice, type everything else**
- 5)

*Two primarily involve Bowman's membrane*

**There are two 'lattice' sets**

**What are the two Lattice sets?**

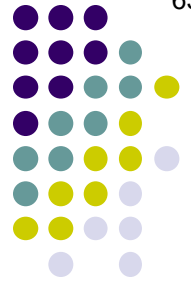
*'granular' forms*

## Stromal Dystrophies

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...REEs*

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, type everything else
- 5) ?
- 6) ?

*Two primarily involve Bowman's membrane*

*There are two 'lattice' sets*

**Two are 'granular' forms**

## Stromal **What are the two Granular forms?**

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies *aka the... keratoepithelin dystrophies, notorious for causing...REEs*

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, type everything else
- 5) **Granular type 1**
- 6) **Granular type 2**

*Two primarily involve Bowman's membrane*

*There are two 'lattice' sets*

*Two are 'granular' forms*

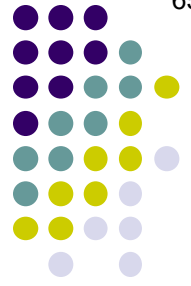
## Stromal **What are the two Granular forms?**

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

## Endothelial Dystrophies

- 1)
- 2)
- 3)





# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, type everything else
- 5) Granular type 1
- 6) Granular type 2

## Stromal Dystrophies

- 1) ?
- 2)
- 3)
- 4)
- 5)
- 6)

*Which of the stromal dystrophies is 'first among equals' with respect to importance?*

## Endothelial Dystrophies

- 1)
- 2)
- 3)

# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, type everything else
- 5) Granular type 1
- 6) Granular type 2

## Stromal Dystrophies

- 1) **Macular**
- 2)
- 3)
- 4)
- 5)
- 6)

*Which of the stromal dystrophies is 'first among equals' with respect to importance?*

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, type everything else
- 5) Granular type 1
- 6) Granular type 2

## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

*(Here's the rest of the 'stromal crew')*

## Endothelial Dystrophies

- 1)
- 2)
- 3)



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

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- 4) Lattice, type everything else
- 5) Granular type 1
- 6) Granular type 2

## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) ?
- 2)
- 3)

This endothelial dystrophy is common and often devastating:



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

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- 2) Thiel-Behnke corneal dystrophy
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- 5) Granular type 1
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## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2)
- 3)

This endothelial dystrophy is common and often devastating:



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
- 4) Gelatinous droplike corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
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- 5) Granular type 1
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## Stromal Dystrophies

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- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) ?
- 3)

This endothelial dystrophy is common and often devastating:  
This one is less common, less devastating:



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

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- 3) Lattice, type 1
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- 5) Granular type 1
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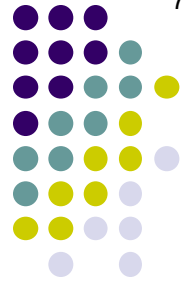
## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) **Posterior polymorphous corneal dystrophy**
- 3)

This endothelial dystrophy is common and often devastating:  
 This one is less common, less devastating:



# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
- 2) Meesmann epithelial corneal dystrophy
- 3) Lisch epithelial corneal dystrophy
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## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
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- 3) Lattice, type 1
- 4) Lattice, type everything else
- 5) Granular type 1
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## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) ?

This endothelial dystrophy is common and often devastating:  
 This one is less common, less devastating:

*This one is quite uncommon, but is important because of its place on the **STUMPED** mnemonic for infantile cloudy cornea:*





# Corneal Dystrophies

## Epithelial and Subepithelial Dystrophies

- 1) Epithelial basement membrane dystrophy
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- 4) Gelatinous droplike corneal dystrophy
- 5) Epithelial recurrent erosion dystrophies
- 6) Subepithelial mucinous corneal dystrophy

## Epithelial-Stromal *TGFBI* Dystrophies

- 1) Reis-Bücklers corneal dystrophy
- 2) Thiel-Behnke corneal dystrophy
- 3) Lattice, type 1
- 4) Lattice, type everything else
- 5) Granular type 1
- 6) Granular type 2

## Stromal Dystrophies

- 1) Macular corneal dystrophy
- 2) Schnyder corneal dystrophy
- 3) Congenital stromal corneal dystrophy
- 4) Fleck corneal dystrophy
- 5) Posterior amorphous corneal dystrophy
- 6) Pre-Descemet corneal dystrophy

## Endothelial Dystrophies

- 1) Fuchs endothelial corneal dystrophy
- 2) Posterior polymorphous corneal dystrophy
- 3) **Congenital hereditary endothelial dystrophy**

This endothelial dystrophy is common and often devastating:  
 This one is less common, less devastating:

*This one is quite uncommon, but is important because of its place on the **STUMPED** mnemonic for infantile cloudy cornea:*

