The etiologic categories for entropion and ectropion are similar, but not identical. *Come up with all 6.*
The etiologic categories for entropion and ectropion are similar, but not identical. *Come up with all 6.*

- **Entropion**
  - Congenital
  - Involutional
  - Paralytic
  - Cicatricial
  - Mechanical
  - Acute Spastic

- **Ectropion**
The etiologic categories for entropion and ectropion are similar, but not identical. *Come up with all 6. Divide ‘em up (some will be used for both)*

**Entropion**
- Congenital
- Involutional
- Paralytic
- Cicatricial
- Mechanical
- Acute Spastic

**Ectropion**
- Congenital
- Involutional
- Paralytic
- Cicatricial
- Mechanical
- Acute Spastic
The etiologic categories for entropion and ectropion are similar, but not identical. *Come up with all 6. Divide ‘em up (some will be used for both)*

**Entropion**
- Congenital
- Involutional
- Cicatricial
- Acute Spastic

**Ectropion**
- Congenital
- Involutional
- Paralytic
- Cicatricial
- Mechanical
The etiologic categories for entropion and ectropion are similar, but not identical. **Come up with all 6.** *Divide ‘em up (some will be used for both)*

<table>
<thead>
<tr>
<th>Entropion</th>
<th>Ectropion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital</td>
<td>Congenital</td>
</tr>
<tr>
<td>Involutional</td>
<td>Involutional</td>
</tr>
<tr>
<td>Paralytic</td>
<td>Paralytic</td>
</tr>
</tbody>
</table>

Let’s look at **cicatricial ectropion in more detail**…

<table>
<thead>
<tr>
<th>Cicatricial</th>
<th>Mechanical</th>
</tr>
</thead>
</table>

| Acute Spastic           |                          |
In a nutshell, what is the pathogenesis of…
--Cicatricial ectropion?
In a nutshell, what is the pathogenesis of…
--Cicatricial ectropion? Scarring of the lid’s anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward
In a nutshell, what is the pathogenesis of…
--Cicatricial ectropion? Scarring of the lid’s anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward
--Cicatricial entropion?
*In a nutshell, what is the pathogenesis of…*

--*Cicatricial ectropion*? Scarring of the lid’s anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward.

--*Cicatricial entropion*? Scarring of the lid’s posterior lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward.
In a nutshell, what is the pathogenesis of…
--Cicatricial ectropion? Scarring of the lid’s **anterior** lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward
--Cicatricial entropion? Scarring of the lid’s **posterior** lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward

Note this subtle-but-crucial difference!
In a nutshell, what is the pathogenesis of…
--Cicatricial ectropion? Scarring of the lid’s anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward
--Cicatricial entropion? Scarring of the lid’s posterior lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward

Note this subtle-but-crucial difference!
This one too!
Anterior lamella

Skin and orbicularis muscle

Posterior lamella

Tarsal plate and conjunctiva

In a nutshell, what is the pathogenesis of...

--Cicatricial ectropion? Scarring of the lid's anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward.

--Cicatricial entropion? Scarring of the lid's posterior lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward.

‘Anterior lamella’? ‘Posterior lamella’? How many layers does an eyelid have?
In a nutshell, what is the pathogenesis of... --Cicatricial ectropion? Scarring of the lid's... anterior lamella, which causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward --Cicatricial entropion? Scarring of the lid's... posterior lamella, which causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward.

‘Anterior lamella’? ‘Posterior lamella’? How many layers does an eyelid have? Well, the lids have a number of layers (the precise count depends on whether it’s an upper vs lower lid, as well as the distance from the margin at which one does the counting). However, from a surgical perspective, at the level of the tarsal plates it’s useful to think of them as having two--an anterior lamella, and a posterior lamella.
In a nutshell, what is the pathogenesis of...

--- *Cicatricial ectropion*? Scarring of the lid's *anterior lamella* causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward.

--- *Cicatricial entropion*? Scarring of the lid's *posterior lamella* causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn *inward*.

*Anterior lamella*? *Posterior lamella*? *How many layers does an eyelid have?*

Well, the lids have a number of layers (the precise count depends on whether it's an upper vs lower lid, as well as the distance from the margin at which one does the counting). However, from a surgical perspective, at the level of the tarsal plates it's useful to think of them as having two--an *anterior lamella*, and a *posterior lamella*. 
In a nutshell, what is the pathogenesis of…
--Cicatricial ectropion? Scarring of the lid's anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward
--Cicatricial entropion? Scarring of the lid's posterior lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward

‘Anterior lamella’? ‘Posterior lamella’? How many layers does an eyelid have?
Well, the lids have a number of layers (the precise count depends on whether it’s an upper vs lower lid, as well as the distance from the margin at which one does the counting). However, from a surgical perspective, at the level of the tarsal plates it’s useful to think of them as having two--an anterior lamella, and a posterior lamella.

What structures comprise each lamella?
Anterior:
Posterior:
Anterior lamella’? ‘Posterior lamella’? How many layers does an eyelid have?
Well, the lids have a number of layers (the precise count depends on whether it’s an upper vs lower lid, as well as the distance from the margin at which one does the counting). However, from a surgical perspective, at the level of the tarsal plates it’s useful to think of them as having two—an anterior lamella, and a posterior lamella.

What structures comprise each lamella?
Anterior: Skin and orbicularis muscle
Posterior: Tarsal plate and conjunctiva
What about beyond the tarsal plates (i.e., above the plate in the upper lid, and below the plate in the lower)? How many lamella are conceptualized in these locations?

In a nutshell, what is the pathogenesis of —Cicatricial ectropion?

—Cicatricial ectropion occurs when the lid margin turns outward due to scarring of the lamella.

—Cicatricial entropion occurs when the lid margin turns inward due to scarring of the lamella.

What about beyond the tarsal plates (i.e., above the plate in the upper lid, and below the plate in the lower)? How many lamella are conceptualized in these locations?

Well, the lids have a number of layers (the precise count depends on whether it’s an upper vs lower lid, as well as the distance from the margin at which one does the counting). However, from a surgical perspective, it’s useful to think of them as having two—anterior lamella and posterior lamella.

What structures comprise each lamella?

**Anterior:** Skin and orbicularis muscle

**Posterior:** Tarsal plate and conjunctiva
What about beyond the tarsal plates (ie, above the plate in the upper lid, and below the plate in the lower)? How many lamella are conceptualized in these locations? Three: Anterior, middle and posterior.

In a nutshell, what is the pathogenesis of... Cicatricial ectropion? Scarring of the lid's anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward.

Cicatricial entropion? Scarring of the lid's posterior lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward.

‘Anterior lamella’? ‘Posterior lamella’? How many layers does an eyelid have? Well, the lids have a number of layers (the precise count depends on whether it’s an upper vs lower lid, as well as the distance from the margin, at which one does the counting). However, from a surgical perspective, it’s useful to think of them as having two--an anterior lamella, and a posterior lamella.

What about beyond the tarsal plates (ie, above the plate in the upper lid, and below the plate in the lower)? How many lamella are conceptualized in these locations?
Three: Anterior, middle and posterior

OK then, what structures comprise each of these three lamellae beyond the tarsal plates?

In a nutshell, what is the pathogenesis of... — Cicatricial ectropion?
Scarring of the lid’s anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward.

— Cicatricial entropion?
Scarring of the lid’s posterior lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward.

‘Anterior lamella’? ‘Posterior lamella’? How many layers does an eyelid have?
Well, the lids have a number of layers (the precise count depends on whether it’s an upper vs lower lid, as well as the distance from the margin at which one does the counting). However, from a surgical perspective, at the level of the tarsal plates it’s useful to think of them as having two— an anterior lamella, and a posterior lamella.

What structures comprise each lamella?
Anterior: Skin and orbicularis muscle?
Posterior: Tarsal plate and conjunctiva?

Middle lamella: ?
**Anterior lamella**
- Skin
- Orbicularis muscle

**Posterior lamella**
- Tarsal plate
- Conjunctiva

What about beyond the tarsal plates (i.e., above the plate in the upper lid, and below the plate in the lower)? How many lamella are conceptualized in these locations?

Three: Anterior, middle and posterior

OK then, what structures comprise each of these three lamellae beyond the tarsal plates?

---

The anterior lamella doesn’t change; it’s still skin and orbicularis.

---

Obviously, beyond the location of the tarsal plate, the tarsal plate itself is no part of the posterior lamella, so it (the posterior lamella) consists only of the conjunctiva.

---

The newly-arisen middle lamella is composed of the eyelid retractors and orbital septum, as well (in the lower lid) of the eyelid fat pads.

In a nutshell, what is the pathogenesis of…

---

Cicatricial ectropion?

Scarring of the lid’s anterior lamella causes it (the anterior lamella) to shorten, which in turn causes the lid margin to turn outward.

---

Cicatricial entropion?

Scarring of the lid’s posterior lamella causes it (the posterior lamella) to shorten, which in turn causes the lid margin to turn inward beyond the tarsal plates.

---

Middle lamella: Eyelid retractors, orbital septum, eyelid fat pads (lower lid)
Common causes of cicatricial ectropion:
Common causes of cicatricial ectropion:
- Trauma
- Burn
- Iatrogenic
- Actinic skin changes
- Inflammatory disease
- Rosacea
Managing cicatricial ectropion of the lower lid involves three steps:

1) **Release/relax**… *(finish the thought)*
2) 
3)
Managing cicatricial ectropion of the lower lid involves three steps:

1) **Release/relax**...the traction caused by the cicatrix
2)
3)
Managing cicatricial ectropion of the lower lid involves three steps:

1) **Release/relax** … the traction caused by the cicatrix
2) **Lengthen** … *(ditto)*
3)
Managing cicatricial ectropion of the lower lid involves three steps:

1) **Release/relax**... the traction caused by the cicatrix
2) **Lengthen**... the lid *vertically* (with a FTSG) *(full-thickness skin graft)*
3)
Managing cicatricial ectropion of the lower lid involves three steps:

1) **Release/relax**… the traction caused by the cicatrix
2) **Lengthen**… the lid *vertically* (with a FTSG)
3) **Shorten**… *(ditto)*
Managing cicatricial ectropion of the lower lid involves three steps:

1) **Release/relax**...the traction caused by the cicatrix
2) **Lengthen**...the lid *vertically* (with a FTSG)
3) **Shorten**...the lid *horizontally* (with a lateral tarsal strip)
Managing cicatricial ectropion of the lower lid involves three steps:

1) **Release/relax** …the traction caused by the cicatrix
2) **Lengthen** …the lid *vertically* (with a FTSG)
3) **Shorten** …the lid *horizontally* (with a lateral tarsal strip)

*Which of these steps are involved in repair of UPPER lid cicatricial ectropion?*
Managing cicatricial ectropion of the lower lid involves three steps:
1) **Release/relax**...the traction caused by the cicatrix
2) **Lengthen**...the lid *vertically* (with a FTSG)
3) **Shorten**...the lid *horizontally* (with a lateral tarsal strip)

Which of these steps are involved in repair of **UPPER lid cicatricial ectropion**?
1 and 2, but **not** 3: The upper lid generally does not suffer horizontal laxity, so tightening is not required
The etiologic categories for entropion and ectropion are similar, but not identical. *Come up with all 6.* *Divide ‘em up (some will be used for both)*

<table>
<thead>
<tr>
<th>Entropion</th>
<th>Ectropion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital</td>
<td>Congenital</td>
</tr>
<tr>
<td>Involutional</td>
<td>Involutional</td>
</tr>
<tr>
<td>Cicatricial</td>
<td>Paralytic</td>
</tr>
<tr>
<td>Acute Spastic</td>
<td>Mechanical</td>
</tr>
</tbody>
</table>

Now let’s look at cicatricial entropion…
In another nutshell, what is the pathogenesis of cicatricial entropion?
In another nutshell, what is the pathogenesis of cicatricial entropion?

Vertical tarsoconjunctival contracture → in-rotation of the lid margin

Q/A

start with this one
In another nutshell, what is the pathogenesis of cicatricial entropion?

<table>
<thead>
<tr>
<th>two-words</th>
<th>two-words</th>
</tr>
</thead>
</table>

Vertical tarsocconjunctival contracture →

next
In another nutshell, what is the pathogenesis of cicatricial entropion?

Vertical tarsal conjunctival contracture → in-rotation of the

two words

finally
In another nutshell, what is the pathogenesis of cicatricial entropion?

*Vertical tarsal conjunctival contracture → in-rotation of the lid margin*
In another nutshell, what is the pathogenesis of cicatricial entropion? **How does this lead to cornea problems?**

- **Vertical tarsconjunctival contracture** →
  - **in-rotation of the lid margin** →
    - **two-words of the**
    - **one word**

*answer these simultaneously*
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

- Vertical tarsocconjunctival contracture →
- in-rotation of the lid margin →
- in-rotation of the eyelashes → cornea problems
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

Vertical tarsconjunctival contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems

‘In-rotation of the eyelashes’? Why not just say ‘trichiasis’?
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

Vertical tarsocconjunctival contracture $\rightarrow$ in-rotation of the lid margin $\rightarrow$ in-rotation of the eyelashes $\rightarrow$ cornea problems

‘In-rotation of the eyelashes’? Why not just say ‘trichiasis’?
Because trichiasis is not present
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

Vertical tarsocconjunctival contracture \(\rightarrow\) in-rotation of the lid margin \(\rightarrow\) \textit{in-rotation of the eyelashes} \(\rightarrow\) cornea problems

‘In-rotation of the eyelashes’? Why not just say ‘trichiasis’?
Because trichiasis is not present

\textit{Huh? But the lashes are touching the cornea--isn’t that the definition of trichiasis?}
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

**Vertical tarsconjunctival contracture** → **in-rotation of the lid margin** → **in-rotation of the eyelashes** → cornea problems

‘In-rotation of the eyelashes’? Why not just say ‘trichiasis’?
Because trichiasis is not present.

Huh? But the lashes are touching the cornea—isn’t that the definition of trichiasis?
No, it isn’t. Trichiasis is defined as the inward-directing of lashes _that originate from a normally-positioned lid margin_. In any form of entropion (ie, not just cicatricial), the position of the lid margin is rotated inward, and therefore not normal. Thus, the term _trichiasis_, while often employed, is technically incorrect.
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

Vertical tarsocular contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems

‘In-rotation of the eyelashes’? Why not just say ‘trichiasis’?
Because trichiasis is not present.

Technically incorrect, sure. But in fairness, many clinicians aren’t this persnickety about the term trichiasis--and neither are the BCSC books. So this is not the hill you want to die on when taking the Boards.
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

**Vertical tarsal conjunctival contracture** → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems

**Q**

How does distichiasis differ from trichiasis?

‘In-rotation of the eyelashes’? Why not just say ‘trichiasis’? Because trichiasis is not present.

Huh? But the lashes are touching the cornea—Isn’t that the definition of trichiasis?

No, it isn’t. **Trichiasis is defined as the inward-directing of lashes that originate from a normally-positioned lid margin.** In any form of entropion (ie, not just cicatricial), the position of the lid margin is rotated inward, and therefore **not** normal. Thus, the term **trichiasis**, while often employed, is technically incorrect.
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

Vertical tarsconjunctival contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems

How does distichiasis differ from trichiasis?
In trichiasis, the lashes are growing from their usual location (albeit in an abnormal direction), whereas in distichiasis, lashes are growing from meibomian gland orifices.

Huh? But the lashes are touching the cornea—isn’t that the definition of trichiasis? No, it isn’t. Trichiasis is defined as the inward-directing of lashes that originate from a normally-positioned lid margin. In any form of entropion (ie, not just cicatricial), the position of the lid margin is rotated inward, and therefore not normal. Thus, the term trichiasis, while often employed, is technically incorrect.
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

**Vertical tarsconjunctival contracture** →
**in-rotation of the lid margin** →
**in-rotation of the eyelashes** →
cornea problems

How does distichiasis differ from trichiasis?
In trichiasis, the lashes are growing from their usual location (albeit in an abnormal direction), whereas in distichiasis, lashes are growing from meibomian gland orifices.

Isn’t the lashes touching the cornea in trichiasis? Yes, but... Trichiasis is defined as the inward-directing of lashes *that originate from a normally-positioned lid margin*. In any form of entropion (ie, not just cicatricial), the position of the lid margin is rotated inward, and therefore not normal. Thus, the term trichiasis, while often employed, is technically incorrect.
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

*Vertical tarsocconjunctival contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems*

**How does distichiasis differ from trichiasis?**
In trichiasis, the lashes are growing from their usual location (albeit in an abnormal direction), whereas in distichiasis, lashes are growing from meibomian gland orifices.

**Is distichiasis congenital, or acquired?**

*Huh? But the lashes are touching the cornea—isn’t that the definition of trichiasis?*
No, it isn’t. **Trichiasis is defined as the inward-directing of lashes that originate from a normally-positioned lid margin.** In any form of entropion (ie, not just cicatricial), the position of the lid margin is rotated inward, and therefore not normal. Thus, the term *trichiasis*, while often employed, is technically incorrect.
In another nutshell, what is the pathogenesis of cicatricial entropion? How does this lead to cornea problems?

**Vertical tarsconjunctival contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems**

*How does distichiasis differ from trichiasis?*

In trichiasis, the lashes are growing from their usual location (albeit in an abnormal direction), whereas in distichiasis, lashes are growing from meibomian gland orifices.

*Is distichiasis congenital, or acquired?*

It can be either.

Huh? But the lashes are touching the cornea—isn’t that the definition of trichiasis? No, it isn’t. **Trichiasis is defined as the inward-directing of lashes that originate from a normally-positioned lid margin.** In any form of entropion (ie, not just cicatricial), the position of the lid margin is rotated inward, and therefore **not** normal. Thus, the term *trichiasis*, while often employed, is technically incorrect.
In another nutshell, what is the pathogenesis of *cicatricial entropion*? How does this lead to cornea problems?

Vertical tarsconjunctival contracture \(\rightarrow\) in-rotation of the lid margin \(\rightarrow\) in-rotation of the eyelashes \(\rightarrow\) cornea problems

When evaluating cicatricial entropion, for what crucial question must an adequate answer be determined?
In another nutshell, what is the pathogenesis of **cicatricial entropion**? How does this lead to cornea problems?

- Vertical tarsoconjunctival contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems

*When evaluating cicatricial entropion, for what crucial question must an adequate answer be determined?*

That question is: What is the underlying etiology of the cicatrix—that is, what caused the scarring in the first place?
In another nutshell, what is the pathogenesis of **cicatricial entropion**? How does this lead to cornea problems?

*Vertical tarsal conjunctival contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems*

> When evaluating cicatricial entropion, for what crucial question must an adequate answer be determined?

That question is: What is the underlying etiology of the cicatrix—that is, what caused the scarring in the first place?

What is the DDx for cicatricial entropion?
In another nutshell, what is the pathogenesis of **cicatricial entropion**? How does this lead to cornea problems?

Vertical tarsconjunctival contracture → in-rotation of the lid margin → in-rotation of the eyelashes → cornea problems

When evaluating cicatricial entropion, for what crucial question **must** an adequate answer be determined? That question is: What is the underlying etiology of the cicatrix—that is, what caused the scarring in the first place?

What is the DDx for cicatricial entropion? Glad you asked…
Common causes of cicatricial entropion:

- OCP
- SJS
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic (e.g., post Fasanella-Servat)
● Common causes of cicatricial entropion:
  ● Ocular cicatricial pemphigoid (OCP)
  ● Stevens-Johnson syndrome (SJS)
  ● Trachoma
  ● Trauma
  ● Sarcoid
  ● Iatrogenic
Common causes of cicatricial entropion:

- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

*If the cause is inflammatory, make sure that process is completely quiescent before attempting repair!*
Common causes of cicatricial entropion:

- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide?

It is the #1 cause of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected?

The Middle East.

Which ethnic group in the US is most likely to be affected?

Native Americans.

Does trachoma result from a single infectious episode?

No, recurrent infections are required.

When limbal follicles scar, what exam finding results?

Herbert's pits.

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)?

Arlt's line.

What corneal finding is associated with trachoma?

Superior pannus.
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide?
It is the #1 cause of preventable/infectious blindness.
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide? It is the **#1 cause** of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected? The Middle East

Which ethnic group in the US is most likely to be affected? Native Americans

Does trachoma result from a single infectious episode? No, recurrent infections are required.

When limbal follicles scar, what exam finding results? **Herbert's pits**

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)? **Arlt's line**

What corneal finding is associated with trachoma? **Superior pannus**
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide? It is the #1 cause of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected? The Middle East.

Where does trachoma rank as a cause of blindness worldwide? It is the #1 cause of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected? The Middle East.
Common causes of cicatricial entropion:

- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide? It is the **#1 cause** of preventable/infectious blindness

Patients from what part of the world are most likely to be affected? The Middle East

Which ethnic group in the US is most likely to be affected? Native Americans

When limbal follicles scar, what exam finding results? **Herbert's pits**

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)? **Arlt's line**

What corneal finding is associated with trachoma? **Superior pannus**
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide? It is the **#1 cause** of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected? The Middle East.

Which ethnic group in the US is most likely to be affected? Native Americans.
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide? It is the #1 cause of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected? The Middle East.

Which ethnic group in the US is most likely to be affected? Native Americans.

Does trachoma result from a single infectious episode?
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide?
It is the #1 cause of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected?
The Middle East.

Which ethnic group in the US is most likely to be affected?
Native Americans.

Does trachoma result from a single infectious episode?
No, recurrent infections are required.
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide?
It is the **#1 cause** of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected?
The Middle East.

Which ethnic group in the US is most likely to be affected?
Native Americans.

Does trachoma result from a single infectious episode?
No, recurrent infections are required.

When limbal follicles scar, what exam finding results?
Herbert's pits

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)?
Arlt's line

What corneal finding is associated with trachoma?
Superior pannus.
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide?
It is the #1 cause of preventable/infectious blindness

Patients from what part of the world are most likely to be affected?
The Middle East

Which ethnic group in the US is most likely to be affected?
Native Americans

Does trachoma result from a single infectious episode?
No, recurrent infections are required

When limbal follicles scar, what exam finding results?
Herbert’s pits

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)?
Arlt’s line

What corneal finding is associated with trachoma?
Superior pannus
Common causes of cicatricial entropion:
- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide? It is the **#1 cause** of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected? The Middle East.

Which ethnic group in the US is most likely to be affected? Native Americans.

Does trachoma result from a single infectious episode? No, recurrent infections are required.

When limbal follicles scar, what exam finding results? Herbert’s pits.

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)?
Where does trachoma rank as a cause of blindness worldwide? It is the #1 cause of preventable/infectious blindness

Patients from what part of the world are most likely to be affected? The Middle East

Which ethnic group in the US is most likely to be affected? Native Americans

Does trachoma result from a single infectious episode? No, recurrent infections are required

When limbal follicles scar, what exam finding results? Herbert’s pits

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)? Arlt’s line
Common causes of cicatricial entropion:

- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide?
It is the #1 cause of preventable/infectious blindness

Patients from what part of the world are most likely to be affected?
The Middle East

Which ethnic group in the US is most likely to be affected?
Native Americans

Does trachoma result from a single infectious episode?
No, recurrent infections are required

When limbal follicles scar, what exam finding results?
Herbert’s pits

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)?
Arlt’s line

What corneal finding is associated with trachoma?
Common causes of cicatricial entropion:

- Ocular cicatricial pemphigoid (OCP)
- Stevens-Johnson syndrome (SJS)
- Trachoma
- Trauma
- Sarcoid
- Iatrogenic

Where does trachoma rank as a cause of blindness worldwide? It is the #1 cause of preventable/infectious blindness.

Patients from what part of the world are most likely to be affected? The Middle East.

Which ethnic group in the US is most likely to be affected? Native Americans.

Does trachoma result from a single infectious episode? No, recurrent infections are required.

When limbal follicles scar, what exam finding results? Herbert's pits.

When upper-lid tarsal follicles scar, what exam finding results (other than cicatricial entropion, that is)? Arlt's line.

What corneal finding is associated with trachoma? Superior pannus.
How would you correct cicatricial entropion in cases of:

- **Mild disease:**
- **Moderate disease:**
- **Severe disease:**
How would you correct cicatricial entropion in cases of:

- **Mild disease**: Anterior lamellar resection
- **Moderate disease**: 
- **Severe disease**: 
How would you correct cicatricial entropion in cases of:

- **Mild disease**: Anterior lamellar resection
- **Moderate disease**:  
- **Severe disease**: 
How would you correct cicatricial entropion in cases of:

- **Mild disease**: Anterior lamellar resection
- **Moderate disease**: Tarsal fracture procedure
- **Severe disease**: Excise/replace scarred tissues
How would you correct cicatricial entropion in cases of:

- **Mild disease**: Anterior lamellar resection
- **Moderate disease**: Tarsal fracture procedure
- **Severe disease**: 

Q
How would you correct cicatricial entropion in cases of:

- *Mild disease*: Anterior lamellar resection
- *Moderate disease*: Tarsal fracture procedure
- *Severe disease*: Excise/replace scarred tissues