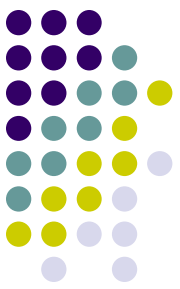


Q

The Jacked-up Angle



- Three types of post-trauma angle changes:

1) one type of angle change

2) another type of angle change

3) a third type of angle change

A

The Jacked-up Angle



- Three types of post-trauma angle changes:

1) *Angle recession*

2) *Cyclodialysis cleft*

3) *Iridodialysis*

Q

The Jacked-up Angle



- Three types of post-trauma angle changes:

- 1) *Angle recession*

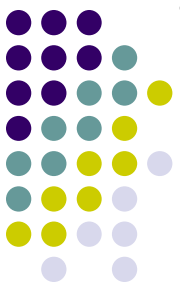
- Tear between orientation *and* orientation CB fibers (CB = ciliary body)

- 2) *Cyclodialysis cleft*

- 3) *Iridodialysis*

A

The Jacked-up Angle



- Three types of post-trauma angle changes:

- 1) *Angle recession*

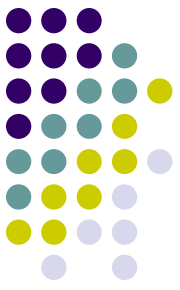
- Tear between longitudinal and circular CB fibers

- 2) *Cyclodialysis cleft*

- 3) *Iridodialysis*

Q

The Jacked-up Angle



- Three types of post-trauma angle changes:

- 1) *Angle recession*

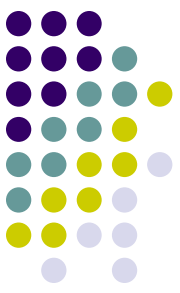
- Tear between longitudinal and circular CB fibers
- Classic description on gonio: adjective CBB (*CBB = ciliary body band*)

- 2) *Cyclodialysis cleft*

- 3) *Iridodialysis*

A

The Jacked-up Angle



- Three types of post-trauma angle changes:

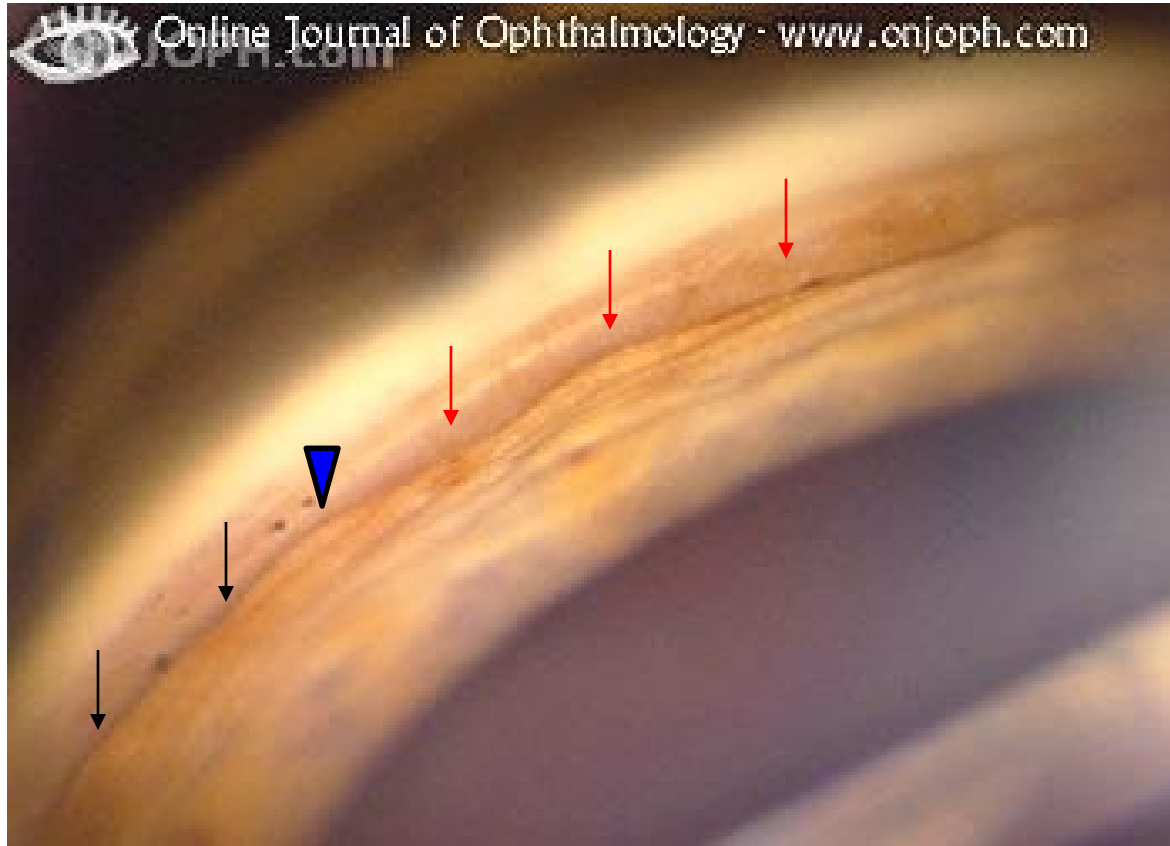
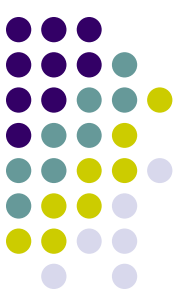
1) *Angle recession*

- Tear between longitudinal and circular CB fibers
- Classic description on gonio: Wide CBB

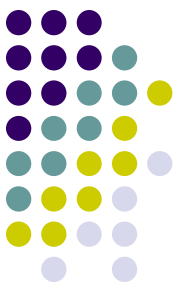
2) *Cyclodialysis cleft*

3) *Iridodialysis*

The Jacked-up Angle



Angle recession. Note the portion of normal angle with narrow CBB (black arrows), the point at which the recession starts (arrowhead), and the subsequent segment of recessed angle with widened CBB (red arrows)



Q

The Jacked-up Angle

- Three types of post-trauma angle changes:

1) *Angle recession*

- Tear between longitudinal and circular CB fibers
- Classic description on gonio: Wide CBB

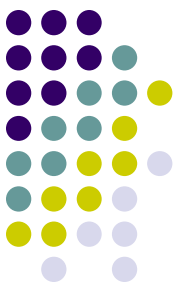
2) *Cyclodialysis cleft*

- separates from

3) *Iridodialysis*

A

The Jacked-up Angle



- Three types of post-trauma angle changes:

- 1) *Angle recession*

- Tear between longitudinal and circular CB fibers
- Classic description on gonio: Wide CBB

- 2) *Cyclodialysis cleft*

- CB separates from SS (SS = scleral spur)

- 3) *Iridodialysis*



Q

The Jacked-up Angle

- Three types of post-trauma angle changes:

1) *Angle recession*

- Tear between longitudinal and circular CB fibers
- Classic description on gonio: Wide CBB

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- CB separates from SS
- Classic description on gonio: adjective SS

3) *Iridodialysis*

A

The Jacked-up Angle



- Three types of post-trauma angle changes:

1) *Angle recession*

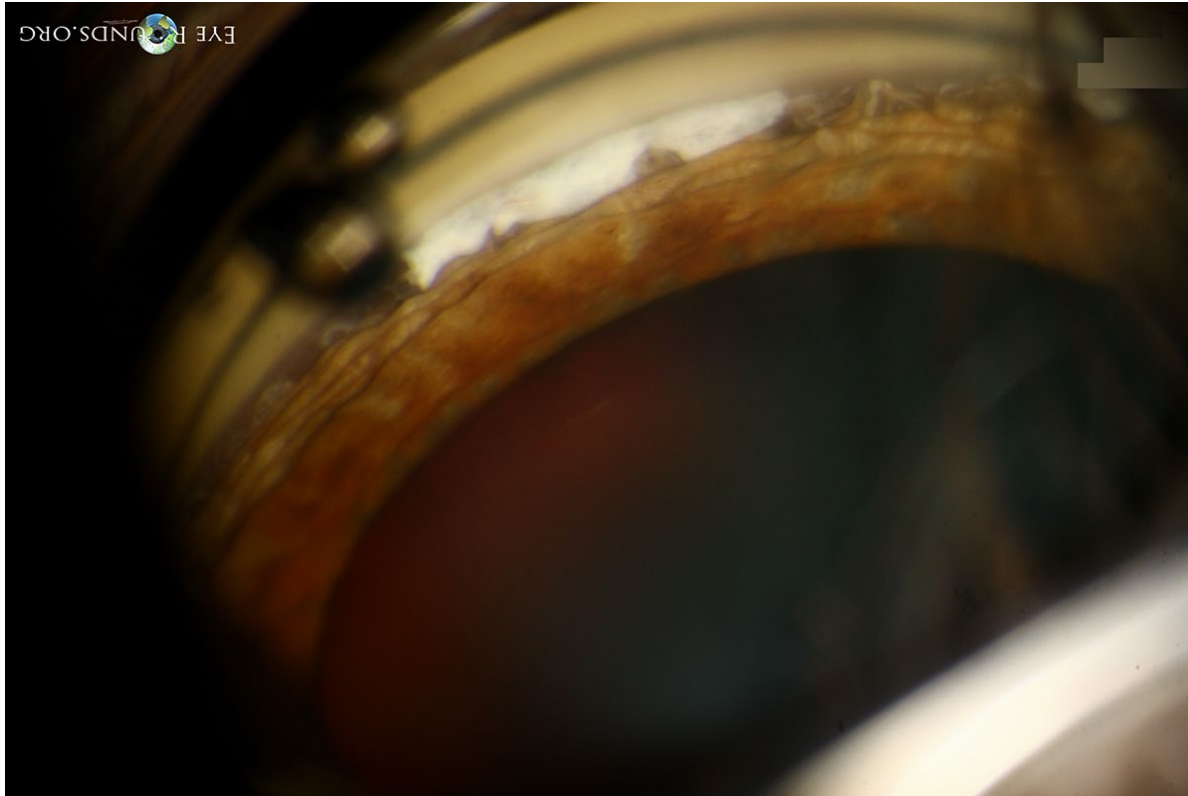
- Tear between longitudinal and circular CB fibers
- Classic description on gonio: Wide CBB

2) *Cyclodialysis cleft*

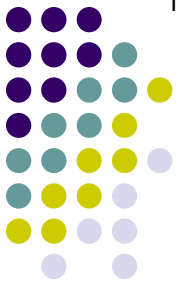
- CB separates from SS
- Classic description on gonio: Glistening SS

3) *Iridodialysis*

The Jacked-up Angle



Cyclodialysis cleft. Racquetball vs eye. The broad white band is the cleft. Note the presence of angle recession on either side of the cleft.



Q

The Jacked-up Angle

- Three types of post-trauma angle changes:

1) *Angle recession*

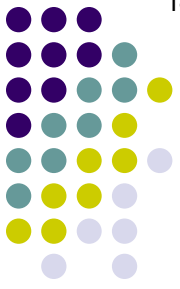
- Tear between longitudinal and circular CB fibers
- Classic description on gonio: Wide CBB

2) *Cyclodialysis cleft*

- CB separates from SS
- Classic description on gonio: Glistening SS

3) *Iridodialysis*

- Tear at



A

The Jacked-up Angle

- Three types of post-trauma angle changes:

1) *Angle recession*

- Tear between longitudinal and circular CB fibers
- Classic description on gonio: Wide CBB

2) *Cyclodialysis cleft*

- CB separates from SS
- Classic description on gonio: Glistening SS

3) *Iridodialysis*

- Tear at iris root

The Jacked-up Angle



Iridodialysis

Q

The Jacked-up Angle



1) *Angle recession glaucoma?*

2) *Cyclodialysis cleft glaucoma?*

3) *Iridodialysis glaucoma?*

All three can be associated with the subsequent development of glaucoma, but for which of them is the association especially strong?

A

The Jacked-up Angle

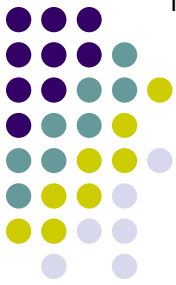


Angle recession glaucoma

All three can be associated with the subsequent development of glaucoma, but for which of them is the association especially strong?
Angle recession

Q

The Jacked-up Angle

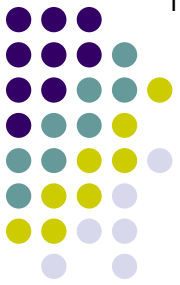


Angle recession glaucoma

What is the temporal relationship between the inciting trauma and the subsequent development of angle-recession glaucoma?

A

The Jacked-up Angle



Angle recession glaucoma

What is the temporal relationship between the inciting trauma and the subsequent development of angle-recession glaucoma?

It can be immediate, or delayed by months to many years

Q

The Jacked-up Angle



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What is the classic presentation?



Angle recession glaucoma

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What is the classic presentation?

A pt with what seems to be unilateral POAG



Angle recession glaucoma

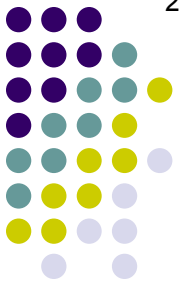
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Is there a correlation between the extent of angle recession and the risk of developing glaucoma?



Angle recession glaucoma

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Yes



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Is there a correlation between angle-recession glaucoma in one eye and the development of elevated IOP in the fellow eye?



Angle recession glaucoma

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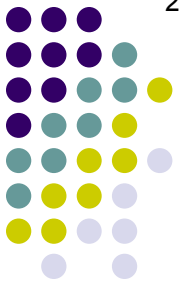
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Is there a correlation between the extent of angle recession and the risk of developing glaucoma?

Yes

Is there a correlation between angle-recession glaucoma in one eye and the development of elevated IOP in the fellow eye?

Yes—it will occur in as many as % of fellow eyes



Angle recession glaucoma

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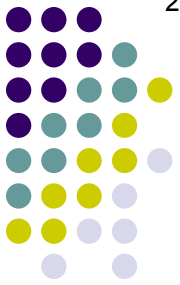
A pt with what seems to be unilateral POAG

Is there a correlation between the extent of angle recession and the risk of developing glaucoma?

Yes

Is there a correlation between angle-recession glaucoma in one eye and the development of elevated IOP in the fellow eye?

Yes—it will occur in as many as half of fellow eyes



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What is the classic presentation?

A pt with what seems to be unilateral POAG

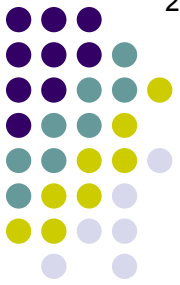
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What does this fact suggest about eyes with angle-recession glaucoma?



Angle recession glaucoma

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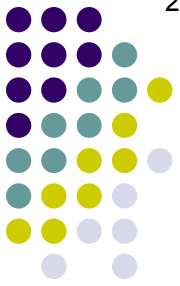
Yes

Is there a correlation between angle-recession glaucoma in one eye and the development of elevated IOP in the fellow eye?

Yes—**it will occur in as many as half of fellow eyes**

What does this fact suggest about eyes with angle-recession glaucoma?

It suggests they live in the head of a person who was predisposed to develop glaucoma in the first place



Angle recession glaucoma

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What is the classic presentation?

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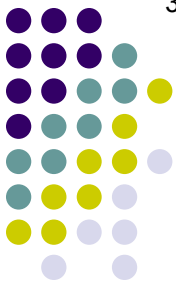
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How should angle-recession glaucoma be managed?



Angle recession glaucoma

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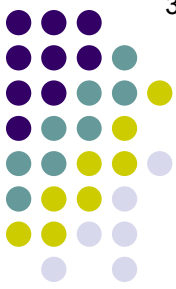
Yes

Is there a correlation between angle-recession glaucoma in one eye and the development of elevated IOP in the fellow eye?

Yes—it will occur in as many as half of fellow eyes

How should angle-recession glaucoma be managed?

With the standard complement of topical hypotensives



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Yes

Is there a correlation between angle-recession glaucoma and the subsequent development of elevated IOP in the fellow eye?

Yes—it will occur in as many as half of fellow eyes

What about SLT?

How should angle-recession glaucoma be managed?

With the standard complement of topical hypotensives, *or* SLT?



Angle recession glaucoma

What is the temporal relationship between the inciting trauma and the subsequent development of angle-recession glaucoma?

It can be immediate, or delayed by months to many years

What is the classic presentation?

A pt with what seems to be unilateral POAG

Is there a correlation between the extent of angle recession and the risk of developing glaucoma?

Yes

Is there a correlation between angle-recession and the subsequent development of elevated IOP in the fellow eye?

Yes—it will occur in as many as half of fellow eyes

What about SLT?

While not contraindicated, it is of limited usefulness in angle-recession eyes

How should angle-recession glaucoma be managed?

With the standard complement of topical hypotensives, or SLT? *Nah*

The Jacked-up Angle



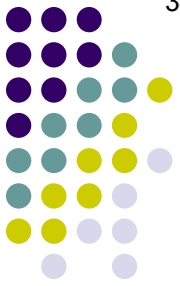
1) *Angle recession*

2) *Cyclodialysis cleft*

3) *Iridodialysis*

Finally, an important sidebar: As mentioned, all three can be associated with the development of glaucoma after blunt trauma.

(No question yet—proceed when ready)



Q

The Jacked-up Angle

1) *Angle recession?*

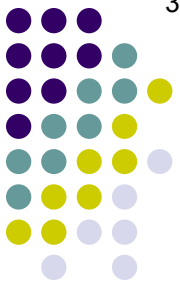
2) *Cyclodialysis cleft?*

3) *Iridodialysis?*

*Finally, an important sidebar: As mentioned, all three can be associated with the development of glaucoma after blunt trauma. But only one of them can result in prolonged **hypotony**. Which one?*

A

The Jacked-up Angle

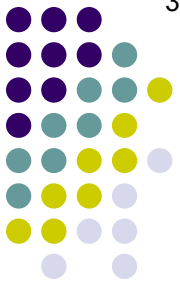


Cyclodialysis cleft

*Finally, an important sidebar: As mentioned, all three can be associated with the development of glaucoma after blunt trauma. But only one of them can result in prolonged **hypotony**. Which one? Cyclodialysis cleft*

Q

The Jacked-up Angle



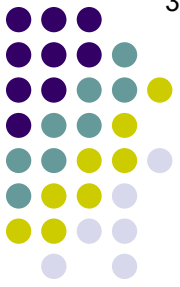
Cyclodialysis cleft can be a difficult dx to cinch in a hypotonus eye—why?

Cyclodialysis cleft

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Cyclodialysis cleft*

A

The Jacked-up Angle



Cyclodialysis cleft can be a difficult dx to cinch in a hypotonus eye—why?
Because the shallowed AC makes gonioscopy difficult

Cyclodialysis cleft

Finally, an important sidebar: As mentioned, all three can be associated with the development of glaucoma after blunt trauma. But only one of them can result in prolonged hypotony. Which one?
Cyclodialysis cleft



Q

The Jacked-up Angle

*Cyclodialysis cleft can be a difficult dx to cinch in a hypotonus eye—why?
Because the shallowed AC makes gonioscopy difficult*

In such a situation, what alternatives to gonioscopy should be considered?

Cyclodialysis cleft

*Finally, an important sidebar: As mentioned, all three can be associated with the development of glaucoma after blunt trauma. But only one of them can result in prolonged hypotony. Which one?
Cyclodialysis cleft*

A

The Jacked-up Angle



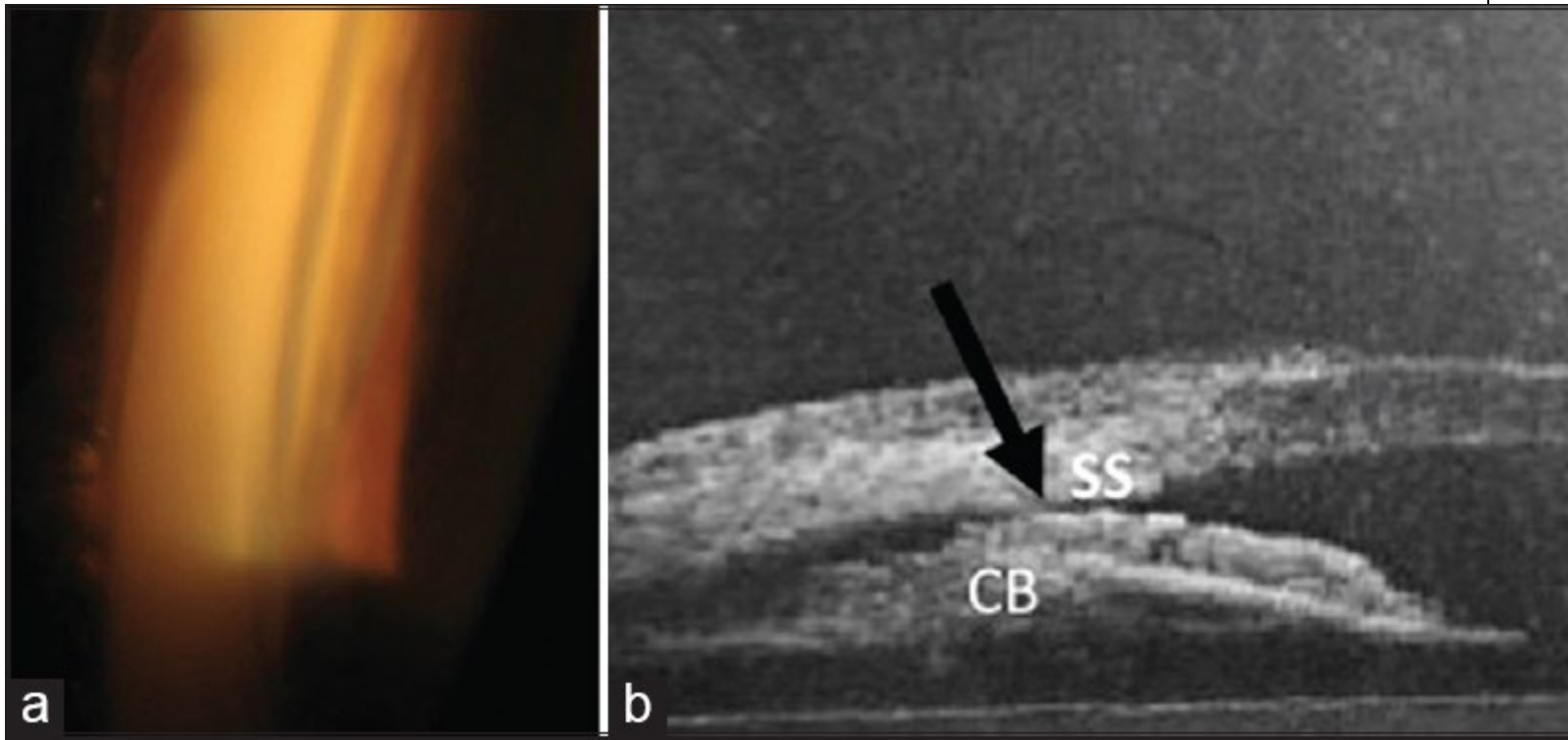
Cyclodialysis cleft can be a difficult dx to cinch in a hypotonus eye—why?
Because the shallowed AC makes gonioscopy difficult

In such a situation, what alternatives to gonioscopy should be considered?
Anterior-seg OCT and/or ultrasound biomicroscopy may better visualize the cleft

Cyclodialysis cleft

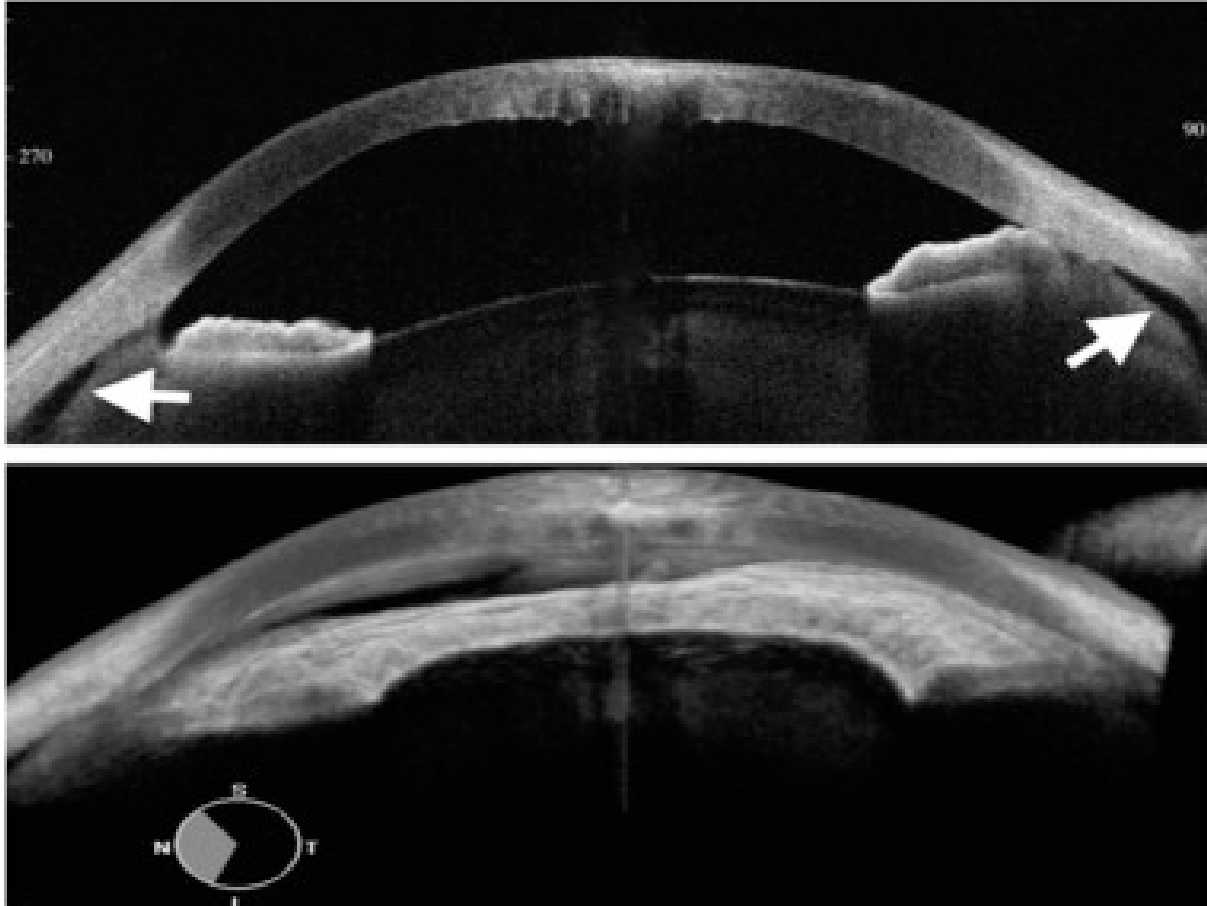
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Cyclodialysis cleft

The Jacked-up Angle



(a) Gonioscopy of cyclodialysis cleft. (b) Ultrasound biomicroscopy of cyclodialysis cleft demonstrating disinsertion of the ciliary body from the scleral spur (arrow).

The Jacked-up Angle



Swept source AS-OCT showing iridodialysis in 4 clock-hours and cyclodialysis in 7