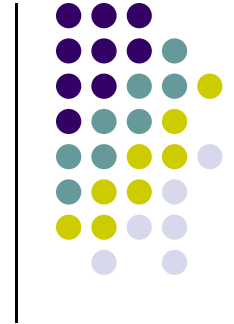


Q



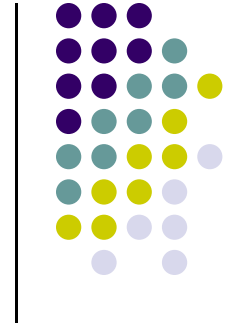
- Parinaud syndrome: Four main features:
 -
 -
 -
 -

A



- Parinaud syndrome: Four main features:
 - Impaired upgaze
 - Lid retraction
 - Convergence-retraction nystagmus
 - Light-near dissociation

Q



- Parinaud syndrome: Four main features:

- **Impaired upgaze**

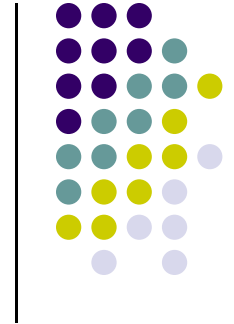
- **Lid retraction**

The combination of downward-deviated eyes + lid retraction produces an appearance that has resulted in this being known as the **two-words** *sign*

- Convergence-retraction nystagmus

- Light-near dissociation

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- Parinaud syndrome: Four main features:

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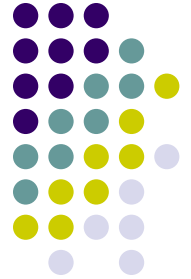
- **Lid retraction**

The combination of downward-deviated eyes + lid retraction produces an appearance that has resulted in this being known as the ***setting-sun sign***

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Q



- Parinaud syndrome: Four main features:

- Impaired upgaze
- **Lid retraction**
- Convergence-re
- Light-near dis

What is the eponymous name for lid retraction in Parinaud syndrome?

A



- Parinaud syndrome: Four main features:
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Collier's sign

Q



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What is the most common cause of lid retraction in adults? (Hint: It ain't Parinaud's)

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Thyroid eye disease

Q



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- L *Parinaud syndrome is characterized by tonic downward displacement of the eyes, with impaired upgaze. There is a clinical entity that is the opposite of this, that is, tonic*
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- L *What is this condition?*

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Oculogyric crisis

Q



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Oculogyric crisis

What is the etiology of oculogyric crisis?

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What is the etiology of oculogyric crisis?

It is an idiosyncratic drug reaction

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Which two classes of drugs are most commonly implicated and which is number one?

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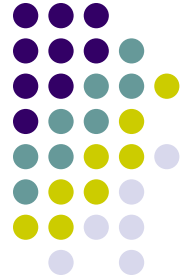
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The neuroleptics (#1), and the antiemetics

Q



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Which neuroleptic is most commonly implicated?

and which is number one?

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Oculogyric crisis

Which neuroleptic is most commonly implicated?

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Which antiemetic is most commonly implicated?

Metoclopramide

The neuroleptics (#1), and **the antiemetics**

Q



- Parinaud syndrome: Four main features:
 - Impaired upgaze
 - Lid retraction
 - **Convergence-retraction nystagmus**

What is convergence-retraction nystagmus?

A



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What is convergence-retraction nystagmus?

A phenomena in which attempted upgaze causes the globes to retract (ie, sink deeper into the orbit), converge, and 'shimmy' (for lack of a better word)

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If it's not a nystagmus, what is it?

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What's the difference between a nystagmus and a saccadic disorder?

Q/A



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By definition, a nystagmus commences with a movement away from fixation, whereas a saccadic disorder commences with a movement away from fixation

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A saccadic disorder

What's the difference between a nystagmus and a saccadic disorder?

By definition, a nystagmus commences with a *slow* movement away from fixation, whereas a saccadic disorder commences with a *fast* movement away from fixation

Q



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What is convergence-retraction nystagmus?

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What causes the eyes to retract?

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What causes the eyes to retract?

Attempted elevation causes the medial and lateral recti muscles to fire simultaneously, the net result of which is the globes being pulled back into the orbits--retracting, in other words

*(Note: Another source said **all** the recti muscles fire on attempted upgaze--not just the MR/LR. Caveat emptor.)*

Q



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Another well-known motility disorder involves simultaneous firing of the MR and LR, resulting in globe retraction. What is it?

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Duane syndrome (remember, the full name is Duane **retraction** syndrome)

Q



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OK, but if the MR and LR are both firing, why do the eyes converge?

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OK, but if the MR and LR are both firing, why do the eyes converge?

Because the medial recti are the strongest EOMs. Thus, in a battle royale among the recti, the MR are going to cause both eyes to adduct--to converge, in other words.

Q



- Parinaud syndrome: Four main features:
 - Impaired upgaze
 - Lid retraction
 - Convergence-retraction nystagmus
 - **Light-near dissociation**

What is light-near dissociation?

A



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A phenomena in which pupils miose less robustly in response to light than they do as part of the near response

Q



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What are the three general types (locations, really) of light-near dissociation?

--
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--

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--Afferent

--Central

--Peripheral

Q



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Damage to which type/location is implicated in the light-near dissociation associated with Parinaud's?

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What are the three general types (locations, really) of light near dissociation?

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*Where is the lesion in an **afferent** near-light dissociation?*

--Central

--Peripheral

Damage to which type/location is implicated in the light-near dissociation associated with Parinaud's?

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What is light-near dissociation?

A phenomena in which pupils miose less robustly in response to light than they do as part of the near response

What are the three general types (locations, really) of light near dissociation?

--**Afferent**

*Where is the lesion in an **afferent** near-light dissociation?*
Anywhere in the anterior visual pathway

--Central

--Peripheral

Damage to which type/location is implicated in the light-near dissociation associated with Parinaud's?

Central

Q



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What is light-near dissociation?

A phenomena in which pupils miose less robustly in response to light than they do as part of the near response.

*Where is the lesion in **peripheral** near-light dissociation?*

What are the types?

--Afferent

--Central

--**Peripheral**

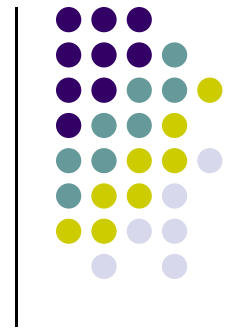
Damage to what structure is associated

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Central

ciated

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What is light-near dissociation?

A phenomena in which pupils miose less robustly in response to light than they do as part of the near response

*Where is the lesion in **peripheral** near-light dissociation?*

The ciliary ganglion, or the long ciliary nerves

What are the types of light-near dissociation?

--Afferent

--Central

--**Peripheral**

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associated

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What common condition is associated with ciliary ganglion damage?

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Adie's syndrome

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What is the pathophysiology of ciliary ganglion damage in Adie's?

Damage to which part of the visual pathway is associated with Parinaud's syndrome?
Central

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What is the pathophysiology of ciliary ganglion damage in Adie's?

Unknown; some authorities suspect a viral cause

Damage to which part of the visual pathway is associated with Parinaud's syndrome?
Central

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Q



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Damage to what part of the eye is associated with Parinaud's?

Central

What is the most common cause of damage to the long ciliary nerves?

(Hint: It's iatrogenic)

associated

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Panretinal photocoagulation (PRP)

associated

Q



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A phenomena in which pupils constrict less robustly in response to light than they do as part of the near response.

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Adie's syndrome

What is the pathophysiology of ciliary ganglion damage in Adie's?

Damage to the long ciliary nerves

with Parinaud syndrome

Central

How does PRP result in damage to the long ciliary nerves?

Panretinal photocoagulation (PRP)

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What is the pathophysiology of ciliary ganglion damage in Adie's?

Damage

with Parinaud

Central

How does PRP result in damage to the long ciliary nerves?

These nerves run fairly close to the inner wall of the eye, and thus are frequently impacted by thermal laser procedures that cover extensive portions of the retinal periphery

Panretinal photocoagulation (PRP)

Q



- Parinaud syndrome: Four main features:
 - Impaired upgaze
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 - Convergence-retraction nystagmus
 - Light-near dissociation

What is light-near dissociation?

A phenomenon where the light reflex is preserved but the near reflex is absent. More precisely, where does Parinaud syndrome localize to?

as

What

--Afferent

--Central

--Efferent

Damage to which type/location is implicated in the light-near dissociation associated with **Parinaud's**?

Central

A



- Parinaud syndrome: Four main features:
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 - Convergence-retraction nystagmus
 - Light-near dissociation

What is light-near dissociation?

A phe
part o

More precisely, where does Parinaud syndrome localize to?
The dorsal midbrain

as

What

--Affe

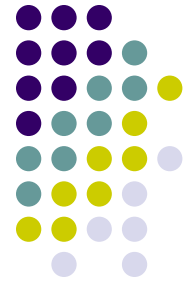
--Cen

--Peri

Damage to which type/location is implicated in the light-near dissociation associated with **Parinaud's**?

Central

Q



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What are the two noneponymous names for Parinaud syndrome?

- 1)
- 2)

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The etiology of a Parinaud syndrome is often a function of who the pt is. For each of these pts with Parinaud's, state the most likely cause:

--A child:

--A young man:

--A young woman:

--An **older** man:

A



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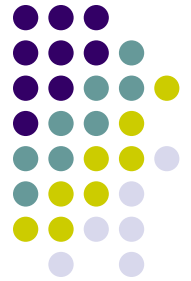
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Q



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What other signs will be present in an infant with hydrocephalus?

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A/Q



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--Enlarged

--Bulging

--Dilated

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What other signs will be present in an infant with hydrocephalus?

--Enlarged head

--Bulging fontanelle

--Dilated scalp vessels