What is the average age at diagnosis for neuroblastoma in general?
What is the average age at diagnosis for neuroblastoma in general?

2 years
What is the average age at diagnosis for neuroblastoma in general? 2 years

What proportion of Nb pts are diagnosed by age 5?
A

- What is the average age at diagnosis for neuroblastoma in general?
  2 years

- What proportion of Nb pts are diagnosed by age 5?
  About 90%

Orbital Neuroblastoma
What is the average age at diagnosis for neuroblastoma in general?  
2 years

What proportion of Nb pts are diagnosed by age 5?  
About 90%

Can Nb occur in adults?
A

● What is the average age at diagnosis for neuroblastoma in general?  
  2 years

Orbital Neuroblastoma

What proportion of Nb pts are diagnosed by age 5?  
About 90%

Can Nb occur in adults?  
Yes, although it is quite uncommon
Q

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer?

Orbital Neuroblastoma
• What is the average age at diagnosis for neuroblastoma in general? 2 years
• Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
Q

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets cancer in childhood? #1

Where does Nb rank as a cause of cancer in childhood?
A

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood? cancer? #1

Where does Nb rank as a cause of cancer in childhood? It is the most common cause of extracranial solid cancer (ie, not leukemia) in childhood.
Q

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

Where does Nb rank as a cause of cancer in childhood? It is the most common cause of extracranial solid cancer (ie, not leukemia) in childhood.

How about in infants (ie, prior to age 12 months)?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

Where does Nb rank as a cause of cancer in childhood? It is the most common cause of extracranial solid cancer (ie, not leukemia) in childhood.

How about in infants (ie, prior to age 12 months)? It is #1
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood? #1

Where does Nb rank as a cause of cancer in childhood? It is the most common cause of extracranial solid cancer (ie, not leukemia) in childhood

How about in infants (ie, prior to age 12 months)? It is #1

What proportion of peds cancer deaths are due to Nb?
- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood? #1

Where does Nb rank as a cause of cancer in childhood? It is the most common cause of extracranial solid cancer (ie, not leukemia) in childhood.

How about in infants (ie, prior to age 12 months)? It is #1

What proportion of peds cancer deaths are due to Nb? 20%
Q

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital cancer? #1

*Orbital Neuroblastoma*

*With regard to ophthalmic mets, a fundamental difference obtains between children and adults. What is it?*
Q/A

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital cancer? #1

_Orbital Neuroblastoma_

_with regard to ophthalmic mets, a fundamental difference obtains between children and adults. What is it? As a rule: In adults, mets go to the [ ] (specifically, to the [ ]); but in children, mets go to the [ ]._
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital cancer? #1

With regard to ophthalmic mets, a fundamental difference obtains between children and adults. What is it? As a rule: In adults, mets go to the eye (specifically, to the choroid); but in children, mets go to the orbit.
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

Of all orbital mets in children, what proportion are due to Nb?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

Of all orbital mets in children, what proportion are due to Nb? Almost 90%!
What is the average age at diagnosis for neuroblastoma in general?  
2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer?  
#1

What are the two locations for the primary?
What is the average age at diagnosis for neuroblastoma in general? 2 years
Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
What are the two locations for the primary? The adrenals, and the sympathetic chain
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

If the primary involves the superior portion of the cervical sympathetic chain, what clinical presentation might occur?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

If the primary involves the superior portion of the cervical sympathetic chain, what clinical presentation might occur? A Horner syndrome
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20
• What is the average age at diagnosis for neuroblastoma in general? 2 years
• Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
• What are the two locations for the primary? The adrenals, and the sympathetic chain
• What percent of neuroblastomas metastasize to the orbit? 20
• What is the classic presentation of orbital mets?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis
Q

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis? and/or eyelid ecchymosis?

Of the two, which is more common?
A

**Orbital Neuroblastoma**

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or **eyelid ecchymosis**

*Of the two, which is more common? Eyelid ecchymosis*
Q

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

Of the two, which is more common? Eyelid ecchymosis

Is the ecchymosis unilateral, or bilateral?
● What is the average age at diagnosis for neuroblastoma in general? 2 years
● Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
● What are the two locations for the primary? The adrenals, and the sympathetic chain
● What percent of neuroblastomas metastasize to the orbit? 20
● What is the classic presentation of orbital mets? Proptosis and/or **eyelid ecchymosis**

Of the two, which is more common? **Eyelid ecchymosis**

*Is the ecchymosis unilateral, or bilateral? It can be either*
Q

Orbital Neuroblastoma

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or **eyelid ecchymosis**
  
  Of the two, which is more common? **Eyelid ecchymosis**
  
  Is the ecchymosis unilateral, or **bilateral**? It can be either

  What critter-based description is used for the appearance of bilateral ecchymoses in Nb?
Orbital Neuroblastoma

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or **eyelid ecchymosis**

*Of the two, which is more common? **Eyelid ecchymosis***

*Is the ecchymosis unilateral, or **bilateral**? It can be either*

*What critter-based description is used for the appearance of bilateral ecchymoses in Nb? 'Raccoon eyes'*
What is the average age at diagnosis for neuroblastoma in general?
2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary?
The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets?
Proptosis and/or eyelid ecchymosis

Is the proptosis unilateral, or bilateral?
What is the average age at diagnosis for neuroblastoma in general? 2 years
Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
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What percent of neuroblastomas metastasize to the orbit? 20
What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

Is the proptosis unilateral, or bilateral? It can be either
Q

What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

Orbital Neuroblastoma

Is the proptosis unilateral or bilateral? It can be either.

What is the DDx for acute-onset unilateral proptosis in an infant/young child? --Neuroblastoma
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

Is the proptosis unilateral or bilateral? It can be either

What is the DDx for acute-onset unilateral proptosis in an infant/young child?
--Neuroblastoma
--Orbital inflammation
--Leukemia
--Orbital cellulitis
--Rhabdomyosarcoma
Q

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

Is the proptosis unilateral, or bilateral? It can be either

What is the DDx for acute-onset bilateral proptosis in an infant/young child?
--Neuroblastoma
--
--
--

What is the DDx for acute-onset unilateral proptosis in an infant/young child?
--Neuroblastoma
--Orbital inflammation
--Leukemia
--Orbital cellulitis
--Rhabdomyosarcoma
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

Is the proptosis unilateral, or bilateral? It can be either

What is the DDx for acute-onset unilateral proptosis in an infant/young child?
--Neuroblastoma
--Orbital inflammation
--Leukemia
--Orbital cellulitis
--Rhabdomyosarcoma

Orbital cellulitis and rhabdo are very, very unlikely to present bilaterally
Q

 Orbital Neuroblastoma

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis
- What if the child is <1 year at diagnosis—is the prognosis better or worse?
- What is the average age at diagnosis for neuroblastoma in general? 2 years
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- What are the two locations for the primary? The adrenals, and the sympathetic chain
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Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

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What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the difference in 5-year survival rates between cases that present prior to vs after age 1 year?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the difference in 5-year survival rates between cases that present prior to vs after age 1 year? It is cut roughly in half
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

By what other name is opsoclonus called?
A

**Orbital Neuroblastoma**

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis
- What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better
- What is the classic ocular paraneoplastic association? **Opsoclonus**

By what other name is opsoclonus called? **Saccadomania**
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

So opsoclonus is secondary to Nb metastasizing to the orbit?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

So opsoclonus is secondary to Nb metastasizing to the orbit? No--as indicated by the question, it is a paraneoplastic process, ie, it is related to antigen cross-reactivity, not tumor bulk.
What is the average age at diagnosis for neuroblastoma in general? 2 years.

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1.

What are the two locations for the primary? The adrenals, and the sympathetic chain.

What percent of neuroblastomas metastasize to the orbit? 20.

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis.

What if the child is <1 year at diagnosis—what is the prognosis? The prognosis is better.

What is the classic ocular paraneoplastic association? Opsoclonus.
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

Opsoclonus: A saccadic oscillation
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

What is opsoclonus, anyway?
A saccadic oscillation

Ah, so it’s a form of nystagmus, then? No, it’s a form of saccadic disorder
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

What’s the difference between a nystagmus and a saccadic disorder?
Orbital Neuroblastoma

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
- What are the two locations for the primary? The adrenals, and the sympathetic chain
- What percent of neuroblastomas metastasize to the orbit? 20
- What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis
- What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better
- What is the classic ocular paraneoplastic association? **Opsoclonus**

What's the difference between a nystagmus and a saccadic disorder? Both are involuntary repetitive eye movements. However, nystagmus initiates with a slow movement off the visual target, whereas a saccadic disorder initiates with a fast movement.
Q

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Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

In opsoclonus... in what direction(s) do the eyes move?

- Large
- Yes
- Yes

Opsoclonus
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

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What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

In opsoclonus…
...in what direction(s) do the eyes move? It is multivectorial, so they move in all directions

Opsoclonus
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? Opsoclonus

In opsoclonus...
...in what direction(s) do the eyes move? It is multivectorial, so they move in all directions
...are the movements of small, or large amplitude? Opsoclonus
What is the average age at diagnosis for neuroblastoma in general? 2 years.

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1.

What are the two locations for the primary? The adrenals, and the sympathetic chain.

What percent of neuroblastomas metastasize to the orbit? 20.

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis.

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better.

What is the classic ocular paraneoplastic association? Opsoclonus.

In opsoclonus...

...in what direction(s) do the eyes move? It is multivectorial, so they move in all directions.

...are the movements of small, or large amplitude? Opsoclonus.

Large
Q

**Orbital Neuroblastoma**

- What is the average age at diagnosis for neuroblastoma in general? 2 years
- Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1
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- What percent of neuroblastomas metastasize to the orbit? 20
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- What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better
- What is the classic ocular paraneoplastic association? Opsoclonus

**In opsoclonus…**

...*in what direction(s) do the eyes move?*
It is multivectorial, so they move in all directions

...*are the movements of small, or large amplitude?* Opsoclonus
Large

...*do the movements persist during:*
--eyelid closure?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

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What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

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In opsoclonus…

…in what direction(s) do the eyes move? It is multivectorial, so they move in all directions

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In opsoclonus...
...in what direction(s) do the eyes move? It is multivectorial, so they move in all directions
...are the movements of small, or large amplitude? Large
...do the movements persist during: --eyelid closure? Yes --sleep?
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

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What is the classic ocular paraneoplastic association? Opsoclonus

In opsoclonus…

…in what direction(s) do the eyes move? It is multivectorial, so they move in all directions

…are the movements of small, or large amplitude? Large

…do the movements persist during: eyelid closure? Yes

sleep? Yes
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? **Opsoclonus**

*Another Nb-related paraneoplastic process is a syndrome involving myoclonus and ataxia along with opsoclonus. What is it called?*
What is the average age at diagnosis for neuroblastoma in general? 2 years

Where does neuroblastoma rank as a cause of orbital mets in childhood cancer? #1

What are the two locations for the primary? The adrenals, and the sympathetic chain

What percent of neuroblastomas metastasize to the orbit? 20

What is the classic presentation of orbital mets? Proptosis and/or eyelid ecchymosis

What if the child is <1 year at diagnosis—is the prognosis better or worse? The prognosis is better

What is the classic ocular paraneoplastic association? **Opsoclonus**

*Another Nb-related paraneoplastic process is a syndrome involving myoclonus and ataxia along with opsoclonus. What is it called? It is called opsoclonus-myoclonus-ataxia syndrome (OMAS)*