

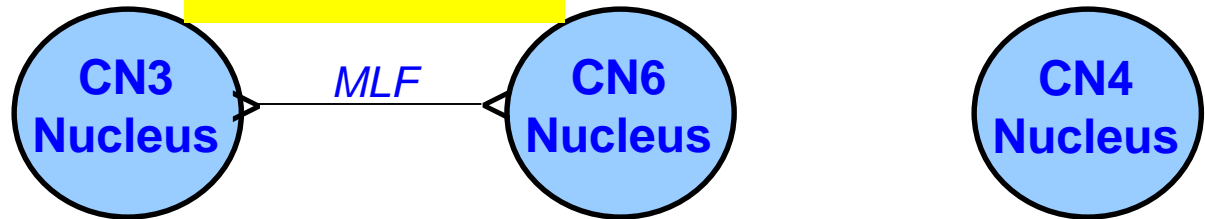
Motility Disorders: *Fascicular Syndromes*



Supranuclear

Nuclear

Internuclear



Infranuclear

Fascicular

Subarachnoid

Cavernous sinus

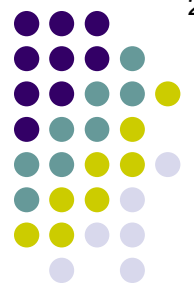
Orbital

Neuromuscular junction

Extraocular muscle

This slide captures one way to think about the motility disorders. If it is unfamiliar, I strongly suggest you review the slide-set entitled '*Motility disorders: Overview*' before proceeding.

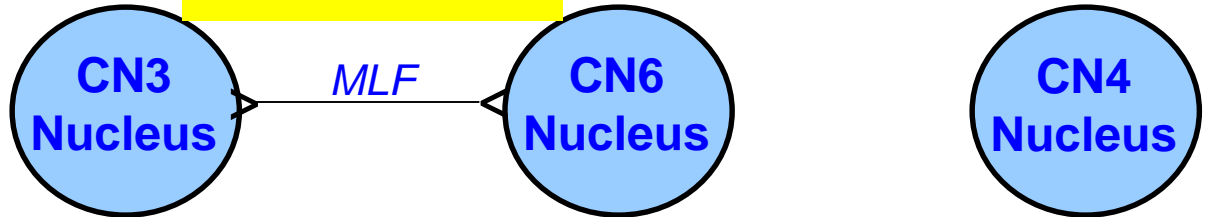
Motility Disorders: *Fascicular Syndromes*



Supranuclear

Nuclear

Internuclear



Fascicular

In this slide-set, we'll take a look at *fascicular syndromes*

Subarachnoid

Cavernous sinus

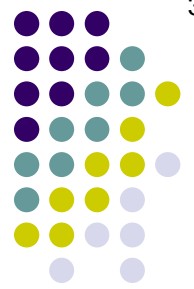
Orbital

Neuromuscular junction

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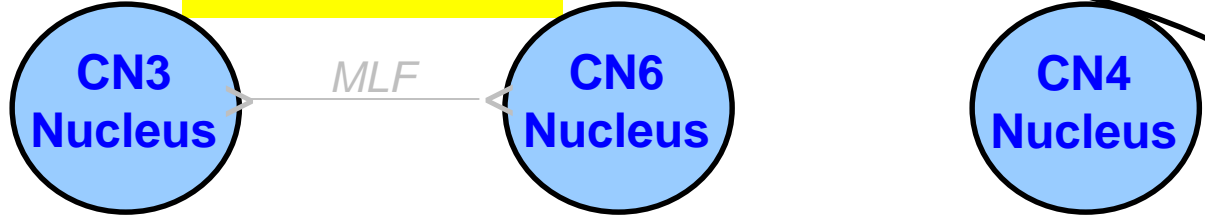
Motility Disorders: Fascicular Syndromes



Supranuclear

Internuclear

Nuclear



Fascicular

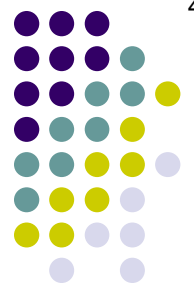
As mentioned in the *Overview* slide-set, the fascicles (along with the cranial-nerve nuclei) are located within the brainstem. Given this, it shouldn't come as a surprise that, generally speaking, lesions of the nuclei and/or fascicles do not present as *isolated* EOM abnormalities; ie, the ophthalmoparesis is almost always accompanied by **nonocular** signs and symptoms of CNS damage.

Infranuclear

Neuromuscular junction

Extraocular muscle

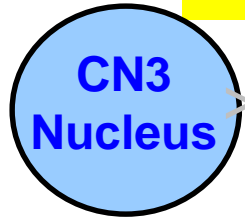
Motility Disorders: *Fascicular Syndromes*



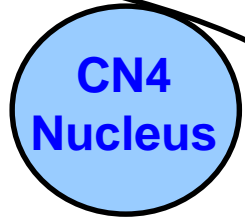
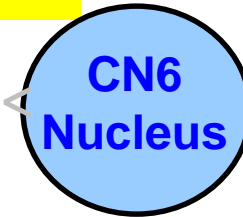
Supranuclear

Internuclear

Nuclear



MLF

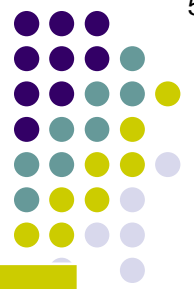


Fascicular

Infranuclear

As mentioned in the *Overview* slide-set, the fascicles (along with the cranial-nerve nuclei) are located within the brainstem. Given this, it shouldn't come as a surprise that, generally speaking, lesions of the nuclei and/or fascicles do not present as *isolated* EOM abnormalities; ie, the ophthalmoparesis is almost always accompanied by nonocular signs and symptoms of CNS damage.

As we will see, the fascicular syndromes are defined by the nonocular CNS signs/symptoms that accompany the ophthalmoparesis



Motility Disorders: Fascicular Syndromes

Q

CN3 Fascicular Syndromes

Syndrome		
?		
?		
?		
?		

The BCSC Neuro book discusses four CN3 fascicular syndromes. What are their names?

A

Motility Disorders: *Fascicular Syndromes*



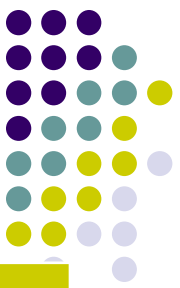
CN3 Fascicular Syndromes

Syndrome		
<i>Weber</i>		
<i>Benedikt</i>		
<i>Claude</i>		
<i>Nothnagel</i>		

The BCSC Neuro book discusses four CN3 fascicular syndromes. What are their names?

Q

Motility Disorders: Fascicular Syndromes



CN3 Fascicular Syndromes

Syndrome	<i>Ipsi- vs contralateral</i> 3 rd	
<i>Weber</i>		
<i>Benedikt</i>		
<i>Claude</i>		
<i>Nothnagel</i>		

Each is composed in part by a third nerve palsy. Is the palsy ipsilateral, or contralateral to the side of the lesion?

A

Motility Disorders: *Fascicular Syndromes*



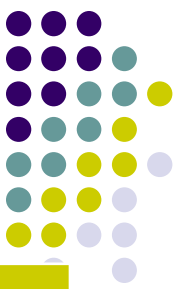
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd	
<i>Weber</i>		
<i>Benedikt</i>		
<i>Claude</i>		
<i>Nothnagel</i>		

Each is composed in part by a third nerve palsy. Is the palsy ipsilateral, or contralateral to the side of the lesion?

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Motility Disorders: Fascicular Syndromes



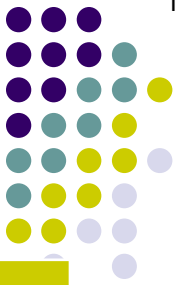
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	?	
<i>Benedikt</i>		
<i>Claude</i>		
<i>Nothnagel</i>		

Each has an associated nonocular finding. What is that finding for...
Weber syndrome?

A

Motility Disorders: Fascicular Syndromes



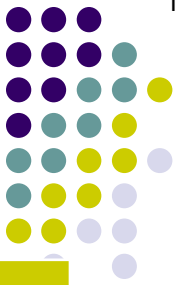
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
Weber	Contralateral hemiplegia	
<i>Benedikt</i>		
<i>Claude</i>		
<i>Nothnagel</i>		

*Each has an associated nonocular finding. What is that finding for...
Weber syndrome?*

Q

Motility Disorders: *Fascicular Syndromes*



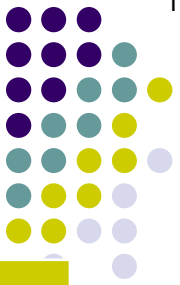
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	
<i>Benedikt</i>	?	
<i>Claude</i>		
<i>Nothnagel</i>		

*Each has an associated nonocular finding. What is that finding for...
Benedikt syndrome?*

A

Motility Disorders: Fascicular Syndromes



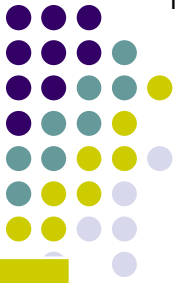
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
<i>Claude</i>		
<i>Nothnagel</i>		

*Each has an associated nonocular finding. What is that finding for...
Benedikt syndrome?*

Q

Motility Disorders: *Fascicular Syndromes*



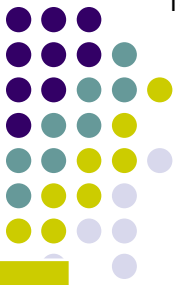
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
Claude	?	
<i>Nothnagel</i>		

*Each has an associated nonocular finding. What is that finding for...
Claude syndrome?*

A

Motility Disorders: *Fascicular Syndromes*



CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
<i>Claude</i>	Contralateral ataxia	
<i>Nothnagel</i>		

*Each has an associated nonocular finding. What is that finding for...
Claude syndrome?*

Q

Motility Disorders: *Fascicular Syndromes*

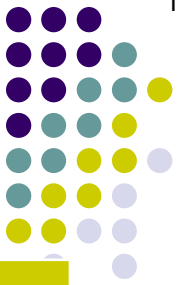
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
<i>Claude</i>	Contralateral ataxia	
<i>Nothnagel</i>	?	

*Each has an associated nonocular finding. What is that finding for...
Nothnagel syndrome?*

A

Motility Disorders: *Fascicular Syndromes*

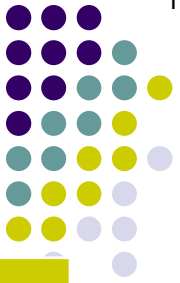


CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
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<i>Nothnagel</i>	Ipsilateral ataxia	

*Each has an associated nonocular finding. What is that finding for...
Nothnagel syndrome?*

Motility Disorders: Fascicular Syndromes

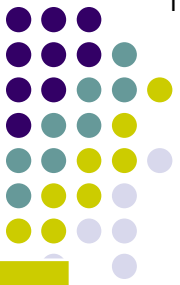


CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
<i>Claude</i>	Contralateral a taxia	
<i>Nothnagel</i>	Ipsilateral a taxia	

I remember that **Claude** and **Nothn**a**gel** involve **ataxia** by noting that, of the four CN3 syndromes, they are the only to have a letter **A** in their name
A is for ataxia!

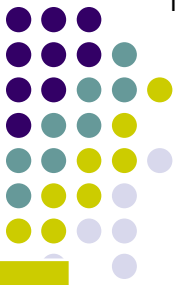
Motility Disorders: *Fascicular Syndromes*



CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	Nonocular CNS findings are <i>contralateral</i>
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
<i>Claude</i>	Contralateral ataxia	
<i>Nothnagel</i>	Ipsilateral ataxia	Note that Nothnagel's is the only fascicular syndrome for which the nonocular findings are ipsilateral

Motility Disorders: *Fascicular Syndromes*

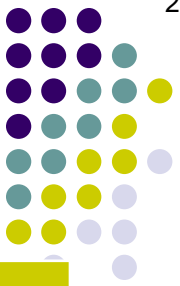


CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	Nonocular CNS findings are <i>contralateral</i>
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Not Nothnagel syndrome is...

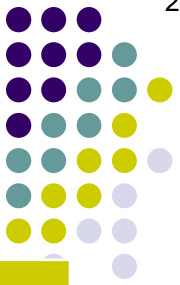
Motility Disorders: *Fascicular Syndromes*



CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	
<i>Weber</i>	Contralateral hemiplegia	Nonocular CNS findings are <i>contralateral</i>
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
<i>Claude</i>	Contralateral ataxia	
<i>Nothnagel</i>	Ipsilateral ataxia	Note that Nothnagel's is the only fascicular syndrome for which the nonocular findings are ipsilateral

Not Nothnagel syndrome
is...
contralateral!



Q

Motility Disorders: *Fascicular Syndromes*

CN3 Fascicular Syndromes

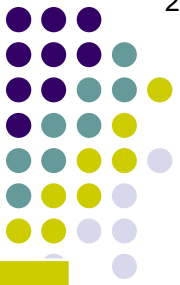
Syndrome	Ipsilateral 3 rd plus...	Lesion location
<i>Weber</i>	Contralateral hemiplegia	?
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	
<i>Claude</i>	Contralateral ataxia	
<i>Nothnagel</i>	Ipsilateral ataxia	

What is the location of the lesion in...

Weber syndrome?

A

Motility Disorders: *Fascicular Syndromes*



CN3 Fascicular Syndromes

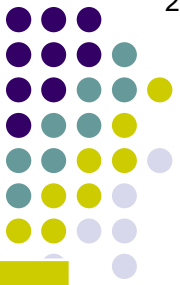
Syndrome	Ipsilateral 3 rd plus...	Lesion location
Weber	Contralateral hemiplegia	Cerebral peduncle
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What is the location of the lesion in...

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Q

Motility Disorders: *Fascicular Syndromes*



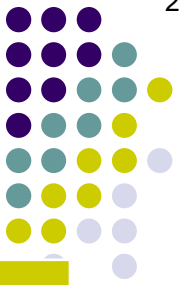
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	Lesion location
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*What is the location of the lesion in...
Benedikt syndrome?*

A

Motility Disorders: *Fascicular Syndromes*



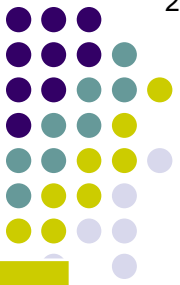
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	Lesion location
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What is the location of the lesion in...

Benedikt syndrome?

Motility Disorders: Fascicular Syndromes

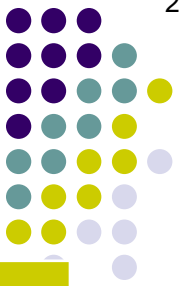


CN3 Fascicular Syndromes

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<i>Claude</i>	Contralateral ataxia	
<i>Nothnagel</i>	Ipsilateral ataxia	

What is the location of the lesion in...
Benedikt syndrome?

I remember this by thinking of Benedict Arnold, the infamous Revolutionary War traitor—ie, he was a 'Red'



Q

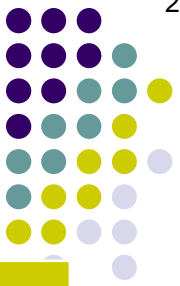
Motility Disorders: *Fascicular Syndromes*

CN3 Fascicular Syndromes

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What is the location of the lesion in...

Claude syndrome?



A

Motility Disorders: *Fascicular Syndromes*

CN3 Fascicular Syndromes

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<i>Claude</i>	Contralateral ataxia	Cerebellar peduncle
<i>Nothnagel</i>	Ipsilateral ataxia	

What is the location of the lesion in...

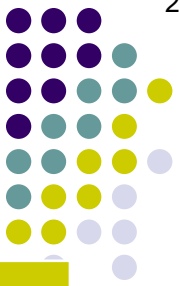
Claude syndrome?

Motility Disorders: *Fascicular Syndromes*

CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	Lesion location
<i>Weber</i>	Contralateral hemiplegia	Cerebral peduncle
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	Note: Similar, but not the same!
<i>Claude</i>	Contralateral ataxia	Cerebellar peduncle
<i>Nothnagel</i>	Ipsilateral ataxia	

What is the location of the lesion in...
Claude syndrome?



Q

Motility Disorders: *Fascicular Syndromes*

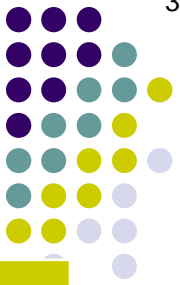
CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	Lesion location
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<i>Claude</i>	Contralateral ataxia	Cerebellar peduncle
<i>Nothnagel</i>	Ipsilateral ataxia	?

*What is the location of the lesion in...
Nothnagel syndrome?*

A

Motility Disorders: *Fascicular Syndromes*



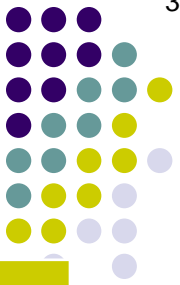
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<i>Claude</i>	Contralateral ataxia	Cerebellar peduncle
<i>Nothnagel</i>	Ipsilateral ataxia	Cerebellar peduncle

What is the location of the lesion in...

Nothnagel syndrome?

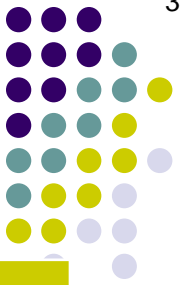
Motility Disorders: *Fascicular Syndromes*



CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	Lesion location
<i>Weber</i>	Contralateral hemiplegia	Cerebral peduncle
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	Red nucleus & substantia nigra
<i>Claude</i>	Contralateral ataxia	Cerebellar peduncle
<i>Nothnagel</i>	Note: Not just similar--the same! Ipsilateral ataxia	Cerebellar peduncle

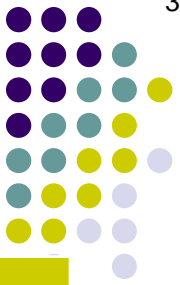
Motility Disorders: *Fascicular Syndromes*



CN3 Fascicular Syndromes

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<i>Claude</i>	Contralateral ataxia	Cerebellar peduncle
<i>Nothnagel</i>	Ipsilateral ataxia	Cerebellar peduncle

I remember this because it just makes sense to me that ataxia will be due to a cerebellar lesion



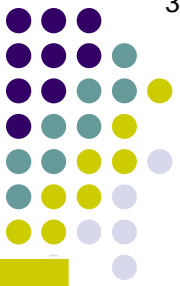
Q

Motility Disorders: *Fascicular Syndromes*

CN6 Fascicular Syndromes

Syndrome		
?		
?		

*The BCSC Neuro book discusses two CN6 fascicular syndromes.
What are their names?*

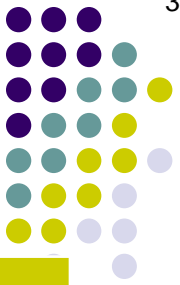
**A**

Motility Disorders: *Fascicular Syndromes*

CN6 Fascicular Syndromes

Syndrome		
<i>Millard-Gubler</i>		
<i>Foville</i>		

The BCSC Neuro book discusses two CN6 fascicular syndromes. What are their names?



Q

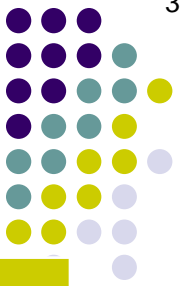
Motility Disorders: *Fascicular Syndromes*

CN6 Fascicular Syndromes

Syndrome	<i>Ipsi- vs contralateral</i> 6 th	
<i>Millard-Gubler</i>		
<i>Foville</i>		

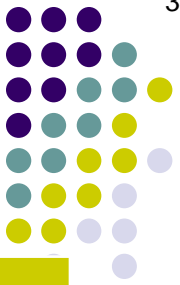
Each is composed in part by a sixth nerve palsy. Is the palsy ipsilateral, or contralateral to the side of the lesion?

A

Motility Disorders: Fascicular Syndromes**CN6 Fascicular Syndromes**

Syndrome	Ipsilateral 6 th	
<i>Millard-Gubler</i>		
<i>Foville</i>		

Each is composed in part by a sixth nerve palsy. Is the palsy ipsilateral, or contralateral to the side of the lesion?



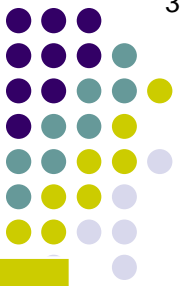
Q

Motility Disorders: *Fascicular Syndromes*

CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	
<i>Millard-Gubler</i>	?	
<i>Foville</i>		

*Each has an associated nonocular finding(s). What is that finding for...
Millard-Gubler syndrome?*



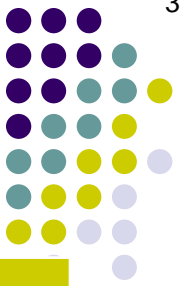
A

Motility Disorders: *Fascicular Syndromes*

CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	
<i>Foville</i>		

*Each has an associated nonocular finding(s). What is that finding for...
Millard-Gubler syndrome?*



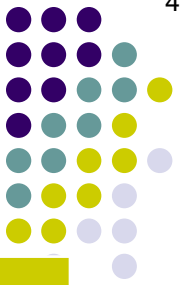
Q

Motility Disorders: *Fascicular Syndromes*

CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	
<i>Foville</i>	?	

*Each has an associated nonocular finding(s). What is that finding for...
Foville syndrome?*



A

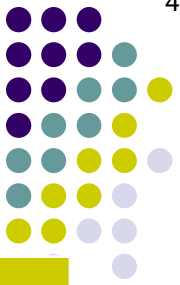
Motility Disorders: *Fascicular Syndromes*

CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	
<i>Foville</i>	Ipsilateral CN7 and contralateral hemiplegia and facial hypoesthesia and loss of taste to anterior tongue	

*Each has an associated nonocular finding(s). What is that finding for...
Foville syndrome?*

Motility Disorders: *Fascicular Syndromes*

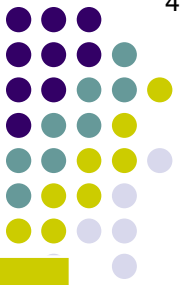


CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	
<i>Millard-Gubler</i>	<u>Ipsilateral CN7 and contralateral hemiplegia</u>	<i>Note that both include an ipsilateral 7th along with contralateral hemiplegia...</i>
<i>Foville</i>	<u>Ipsilateral CN7 and contralateral hemiplegia</u> <i>and</i> facial hypoesthesia <i>and</i> loss of taste to anterior tongue	

*Each has an associated nonocular finding(s). What is that finding for...
Foville syndrome?*

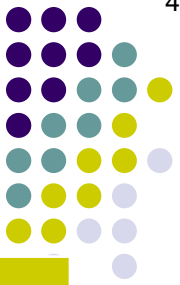
Motility Disorders: *Fascicular Syndromes*



CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	
<i>Foville</i>	Ipsilateral CN7 and contralateral hemiplegia and facial hypoesthesia and loss of taste to anterior tongue	...but Foville includes a number of other findings

Each has an associated nonocular finding(s). What is that finding for...
Foville syndrome?



Q

Motility Disorders: *Fascicular Syndromes*

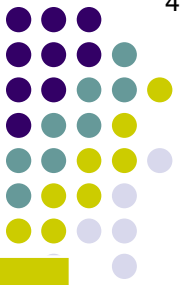
CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	?
<i>Foville</i>	Ipsilateral CN7 and contralateral hemiplegia and facial hypoesthesia and loss of taste to anterior tongue	

*What is the location of the lesion in...
Millard-Gubler syndrome?*

A

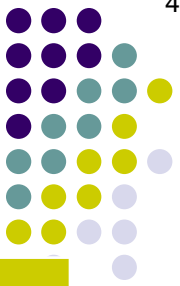
Motility Disorders: *Fascicular Syndromes*



CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	Ventral pons
<i>Foville</i>	Ipsilateral CN7 and contralateral hemiplegia and facial hypoesthesia and loss of taste to anterior tongue	

*What is the location of the lesion in...
Millard-Gubler syndrome?*



Q

Motility Disorders: *Fascicular Syndromes*

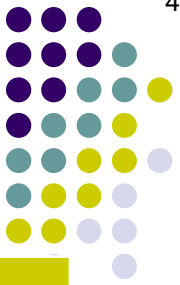
CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	Ventral pons
<i>Foville</i>	Ipsilateral CN7 and contralateral hemiplegia and facial hypoesthesia and loss of taste to anterior tongue	?

*What is the location of the lesion in...
Foville syndrome?*

A

Motility Disorders: *Fascicular Syndromes*

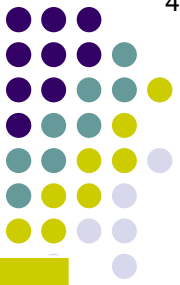


CN6 Fascicular Syndromes

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	Ventral pons
<i>Foville</i>	Ipsilateral CN7 and contralateral hemiplegia and facial hypoesthesia and loss of taste to anterior tongue	Tractus solitarius

*What is the location of the lesion in...
Foville syndrome?*

Motility Disorders: Fascicular Syndromes



CN6 Fascicular Syndromes

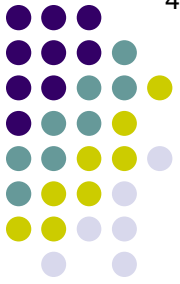
Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Millard-Gubler</i>	Ipsilateral CN7 and contralateral hemiplegia	Ventral pons
<i>Foville</i>	Ipsilateral CN7 and contralateral hemiplegia and facial hypoesthesia and loss of taste to anterior tongue	Tractus solitarius

CN3 Fascicular Syndromes

Syndrome	Ipsilateral 3 rd plus...	Lesion location
<i>Weber</i>	Contralateral hemiplegia	Cerebral peduncle
<i>Benedikt</i>	Contralateral involuntary movements (often a hand flap)	Red nucleus & substantia nigra
<i>Claude</i>	Contralateral ataxia	Cerebellar peduncle
<i>Nothnagel</i>	Ipsilateral ataxia	Cerebellar peduncle

(No question--summary/review slide)

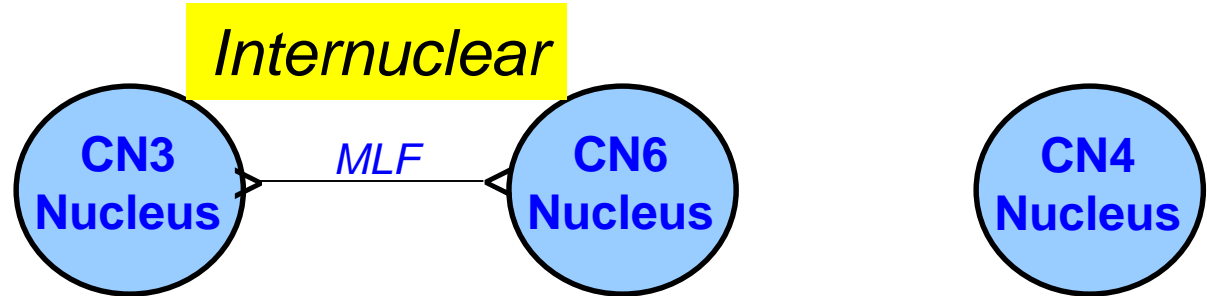
Motility Disorders: *Fascicular Syndromes*



Supranuclear

Gradenigo

Nuclear



Infranuclear

~~Fascicular~~

Subarachnoid

Cavernous sinus

Orbital

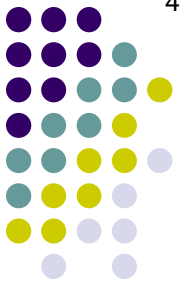
Neuromuscular junction

Extraocular muscle

Finally, we will discuss *Gradenigo syndrome*.

Gradenigo's is not, repeat **not**, a fascicular syndrome (because the nerve fascicle is not involved).

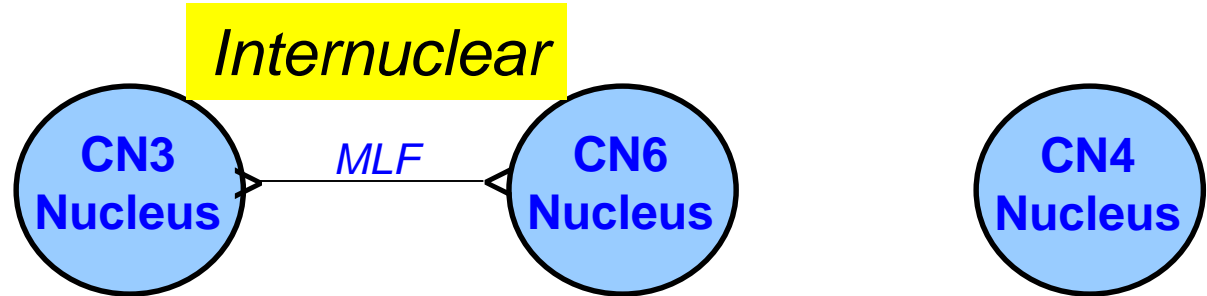
Motility Disorders: *Fascicular Syndromes*



Supranuclear

Gradenigo

Nuclear



~~Fascicular~~

Subarachnoid

Cavernous sinus

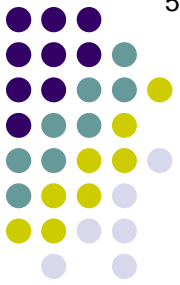
Orbital

Neuromuscular junction

Extraocular muscle

Infranuclear

Finally, we will discuss *Gradenigo syndrome*. Gradenigo's is not, repeat **not**, a fascicular syndrome (because the nerve fascicle is not involved). Rather, it involves the **subarachnoid** course of the nerve. (We're discussing Gradenigo's in this slide-set only because it doesn't fit well in any other.)

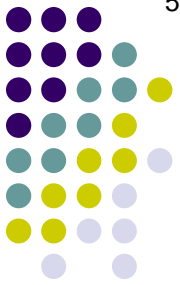


Q

Motility Disorders: *Fascicular Syndromes**Gradenigo***Gradenigo Syndrome**

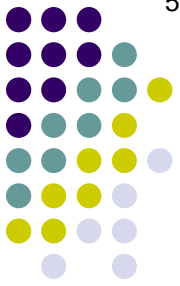
Syndrome	?	
<i>Gradenigo</i>		

Which oculo-motor nerve is involved in Gradenigo syndrome?

**A****Motility Disorders: *Fascicular Syndromes****Gradenigo***Gradenigo Syndrome**

Syndrome	6 th	
<i>Gradenigo</i>		

Which oculo-motor nerve is involved in Gradenigo syndrome?



Q

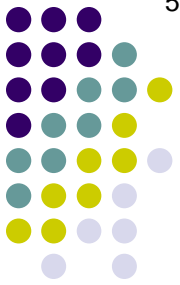
Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

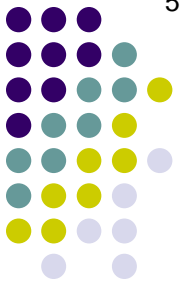
Syndrome	<i>Ipsi- vs contralateral</i> 6 th	
<i>Gradenigo</i>		

Gradenigo syndrome involves a sixth nerve palsy. Is the palsy ipsilateral, or contralateral to the side of the lesion?

**A****Motility Disorders: Fascicular Syndromes***Gradenigo***Gradenigo Syndrome**

Syndrome	Ipsilateral 6 th	
<i>Gradenigo</i>		

Gradenigo syndrome involves a sixth nerve palsy. Is the palsy ipsilateral, or contralateral to the side of the lesion?

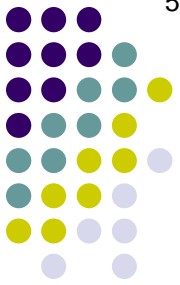


Q

Motility Disorders: *Fascicular Syndromes**Gradenigo***Gradenigo Syndrome**

Syndrome	Ipsilateral 6 th plus...	
<i>Gradenigo</i>	?	

Gradenigo syndrome has an associated nonocular finding. What is it?



A

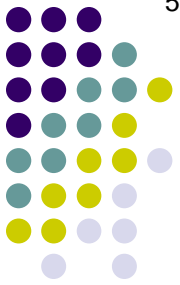
Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	
<i>Gradenigo</i>	Ipsilateral facial pain	

Gradenigo syndrome has an associated nonocular finding. What is it?

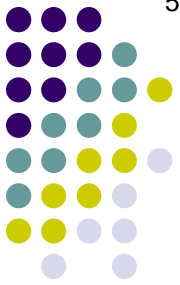


Q

Motility Disorders: *Fascicular Syndromes**Gradenigo***Gradenigo Syndrome**

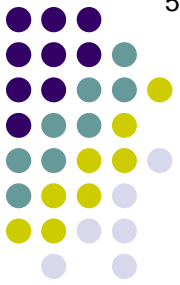
Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	?

Where is the lesion located?

**A****Motility Disorders: *Fascicular Syndromes****Gradenigo***Gradenigo Syndrome**

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	Petrous bone

Where is the lesion located?



Q

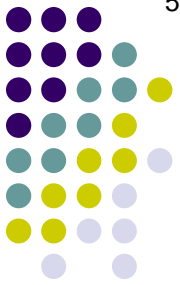
Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	Petrous bone

What is the fundamental pathogenesis in Gradenigo's?



A

Motility Disorders: *Fascicular Syndromes*

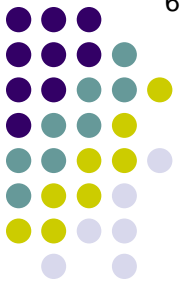
Gradenigo

Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	Petrous bone

What is the fundamental pathogenesis in Gradenigo's?

Chronic inflammation in the mastoid air cells of the petrous portion of the temporal bone knocks out CN6 and the first two divisions of CN5



Q

Motility Disorders: *Fascicular Syndromes*

Gradenigo

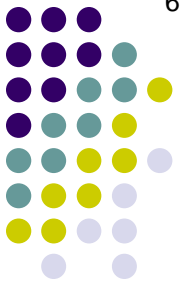
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By what noneponymous name is Gradenigo's syndrome also known?



A

Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

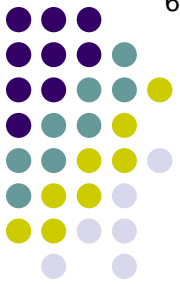
Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	Petrous bone

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By what noneponymous name is Gradenigo's syndrome also known?

Petrous apex syndrome



Q

Motility Disorders: *Fascicular Syndromes*

Gradenigo

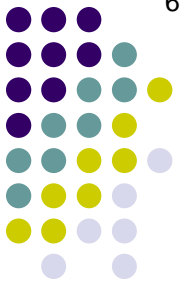
Gradenigo Syndrome

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What is the fundamental pathogenesis in Gradenigo's?

Chronic inflammation in the mastoid air cells of the petrous portion of the temporal bone knocks out CN6 and the first two divisions of CN5

Which population is especially at risk?



A

Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

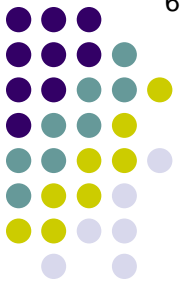
Syndrome	Ipsilateral 6 th plus...	Lesion location
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What is the fundamental pathogenesis in Gradenigo's?

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Which population is especially at risk?

Children



Q

Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	Lesion location
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Which population is especially at risk?

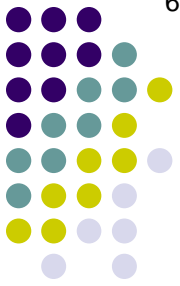
Children

Which group of children is especially at risk?

Q/A

Motility Disorders: *Fascicular Syndromes*

Gradenigo



Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	Petrous bone

What is the fundamental pathogenesis in Gradenigo's?

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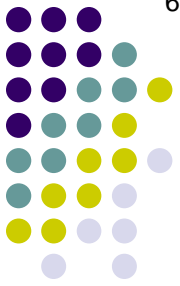
Which population is especially at risk?

Children

Which group of children is especially at risk?

Those who suffer chronic and recurrent bouts of

two words



A

Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	Petrous bone

What is the fundamental pathogenesis in Gradenigo's?

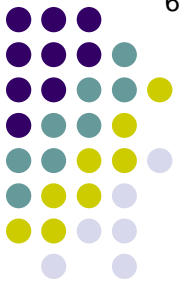
Chronic inflammation in the mastoid air cells of the petrous portion of the temporal bone knocks out CN6 and the first two divisions of CN5

Which population is especially at risk?

Children

Which group of children is especially at risk?

Those who suffer chronic and recurrent bouts of otitis media



Q

Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	Lesion location
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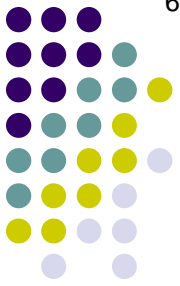
Which population is especially at risk?

Children

Which group of children is especially at risk?

Those who suffer chronic and recurrent bouts of otitis media

In addition to pain, what other ipsilateral 'face finding' is often found in Gradenigo's syndrome?



A

Motility Disorders: *Fascicular Syndromes*

Gradenigo

Gradenigo Syndrome

Syndrome	Ipsilateral 6 th plus...	Lesion location
<i>Gradenigo</i>	Ipsilateral facial pain	Petrous bone

What is the fundamental pathogenesis in Gradenigo's?

Chronic inflammation in the mastoid air cells of the petrous portion of the temporal bone knocks out CN6 and the first two divisions of CN5

Which population is especially at risk?

Children

Which group of children is especially at risk?

Those who suffer chronic and recurrent bouts of otitis media

In addition to pain, what other ipsilateral 'face finding' is often found in Gradenigo's syndrome?

Hemifacial palsy