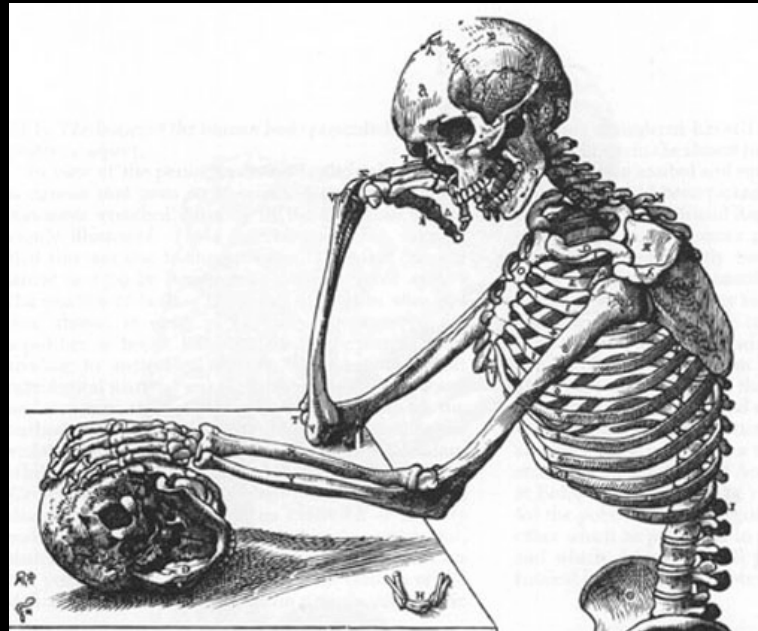


Unit #3: Dry Lab B

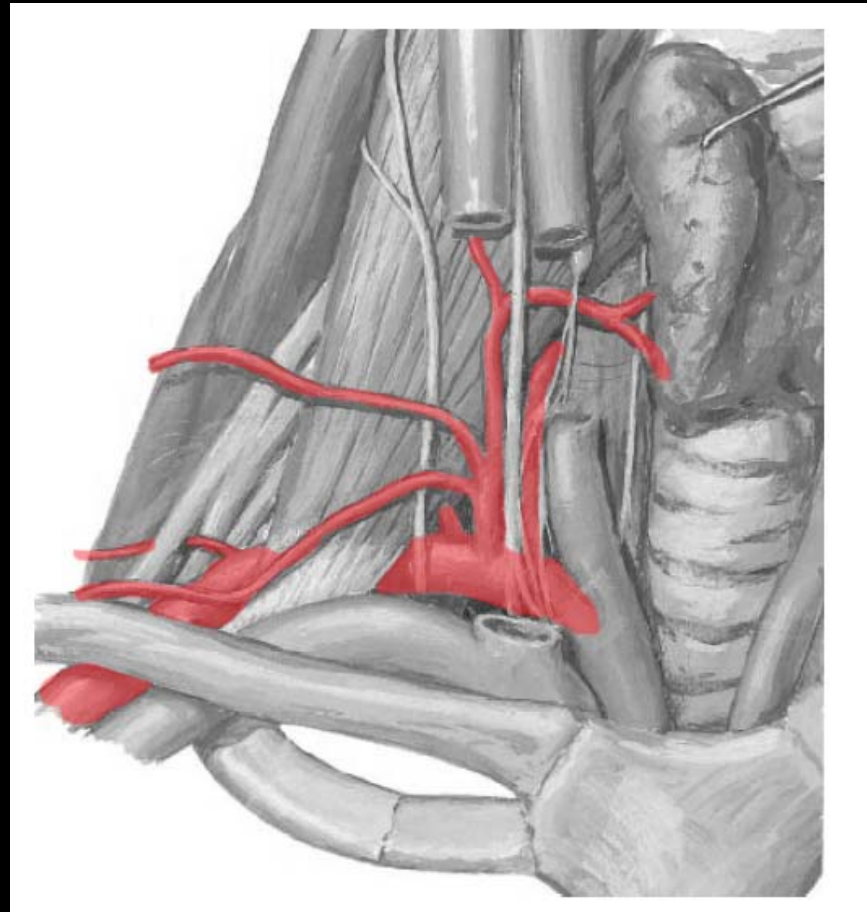
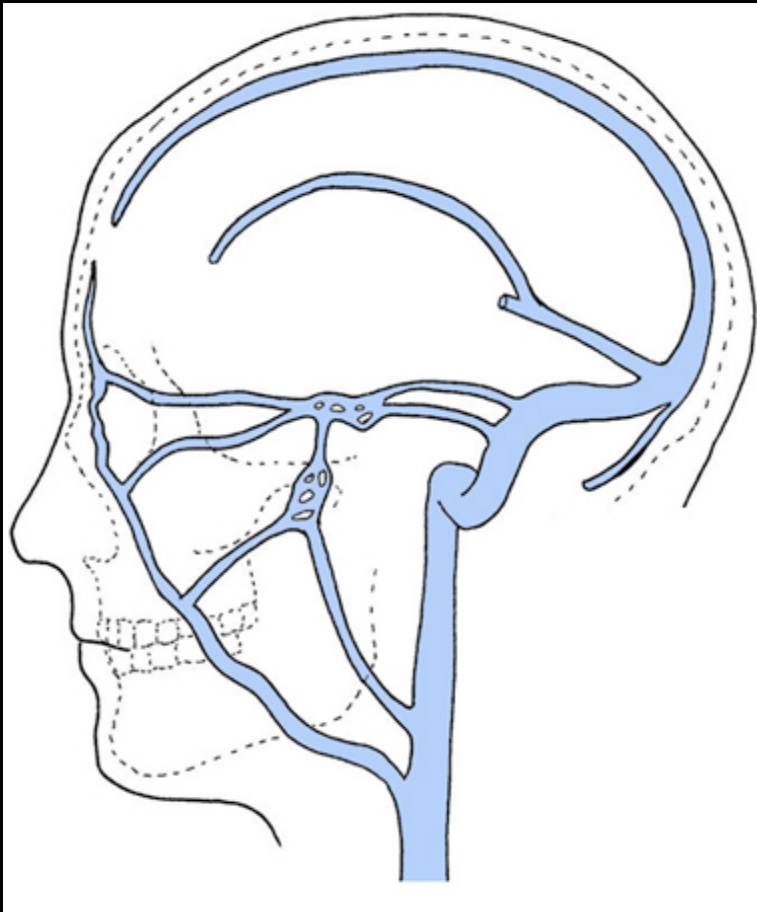


The adenohypophysis (anterior pituitary gland) produces thyroid stimulating hormone (TSH) which targets the thyroid gland. Trace one molecule of TSH from the pituitary gland and ending in the thyroid gland.

Pituitary gland – cavernous sinus ...

The adenohypophysis (anterior pituitary gland) produces thyroid stimulating hormone (TSH) which targets the thyroid gland. Trace one molecule of TSH from the pituitary gland and ending in the thyroid gland.

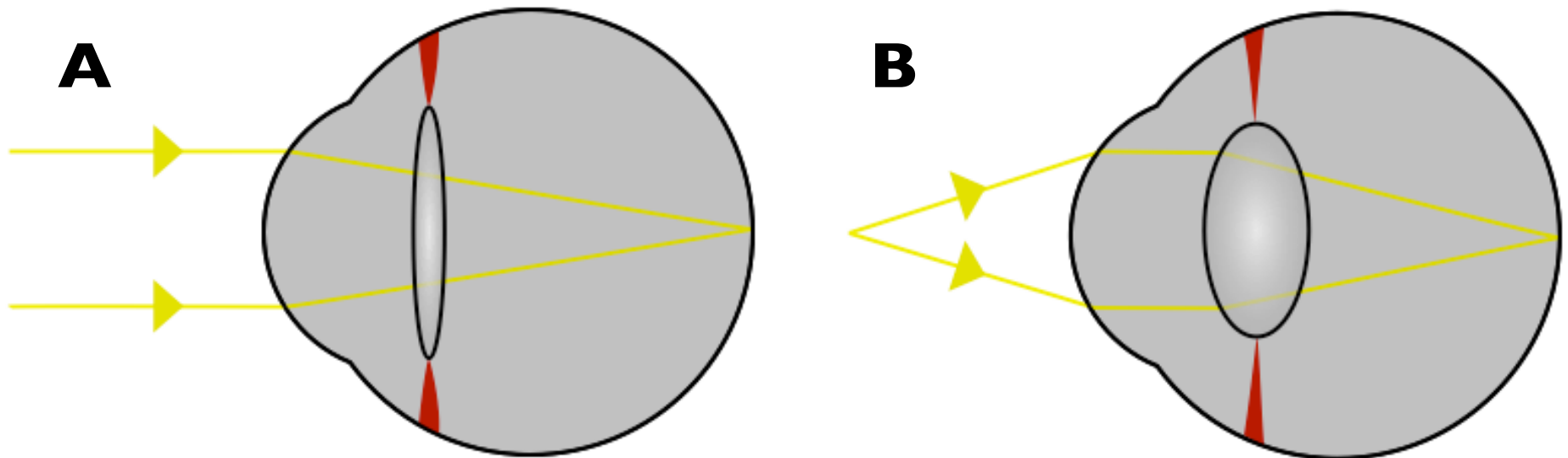
Pituitary gland – cavernous sinus ...



The corneal reflex checks to see if a patient winks when a wisp of cotton touches each cornea. The reflex tests sensory input from CN _____ and motor output from CN _____.

- A. CN II
- B. CN III
- C. CN IV
- D. CN V
- E. CN VI
- F. CN VII





Accommodation of the lens occurs when a person changes focus between objects near and far. Accommodation of the lens between A and B in the figure above results from ciliary muscle:

- A. contraction from CN III innervation
- B. contraction from lack of CN III innervation
- C. relaxation from CN III innervation
- D. relaxation from lack of CN III innervation

3) Eyeball

Horner's Syndrome

- Lack of sympathetic innervation to the head
- Symptoms?

3) Eyeball

Horner's Syndrome

- Lack of sympathetic innervation to the head
- Symptoms?
 - Ptosis
 - Anhidrosis
 - Miosis

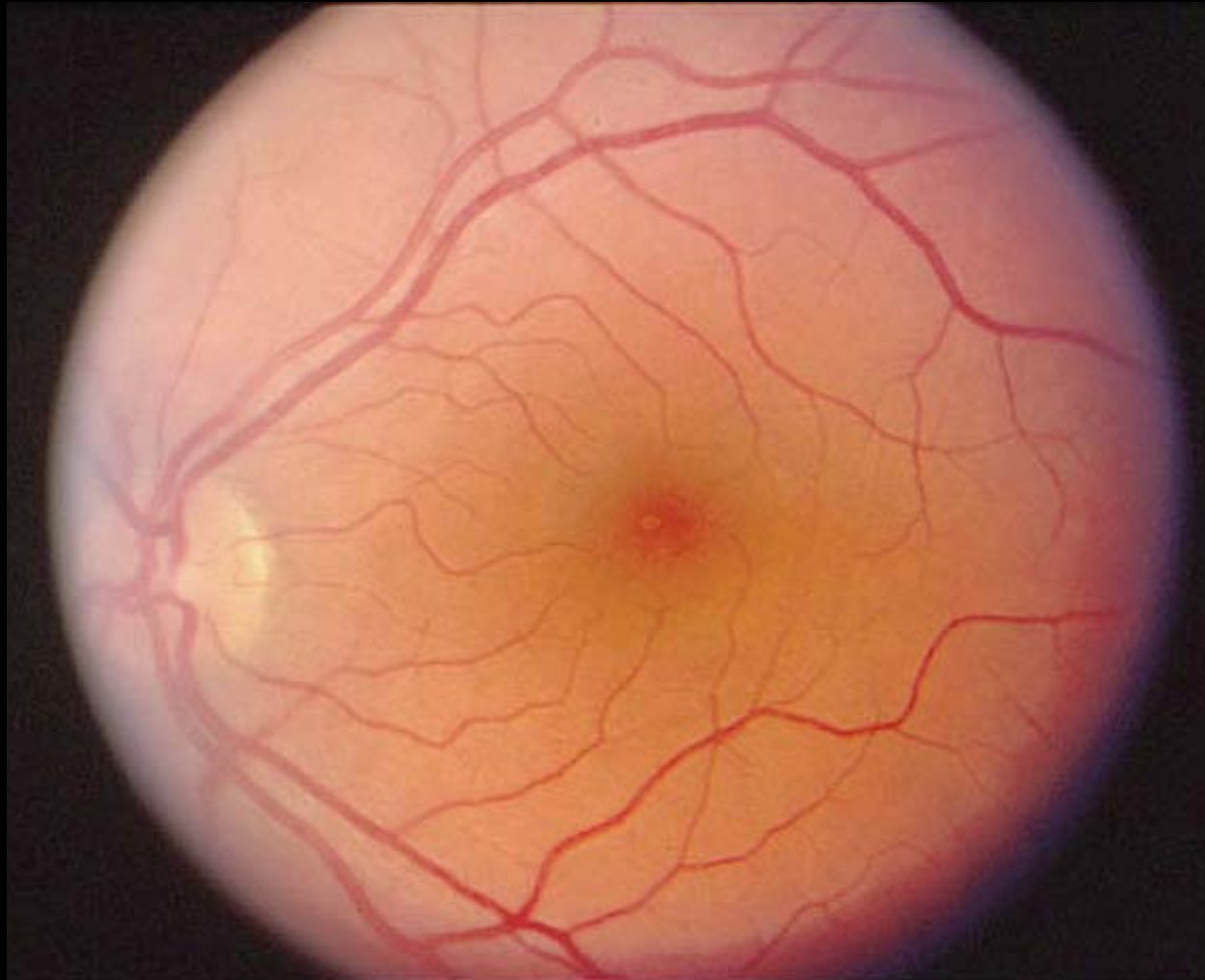
3) Eyeball

Horner's Syndrome

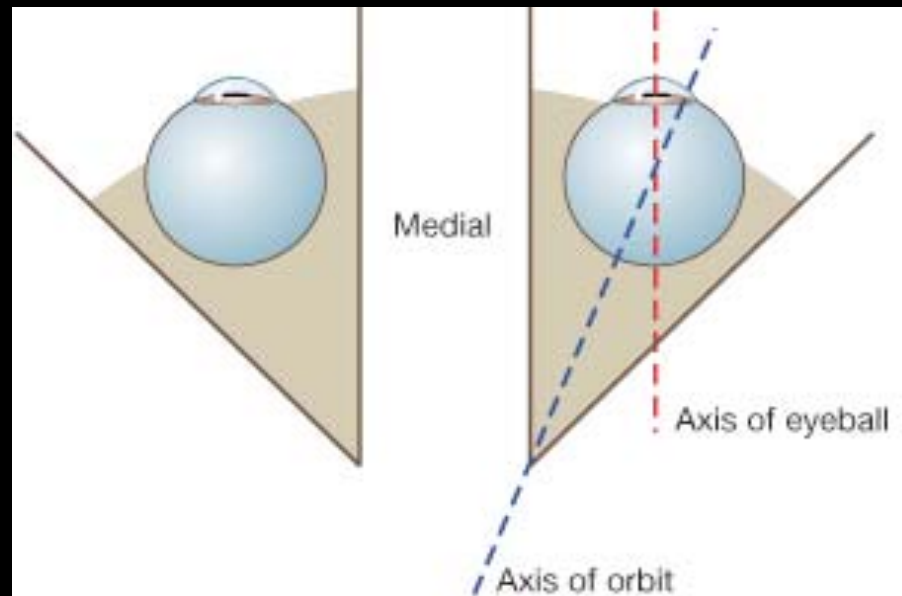
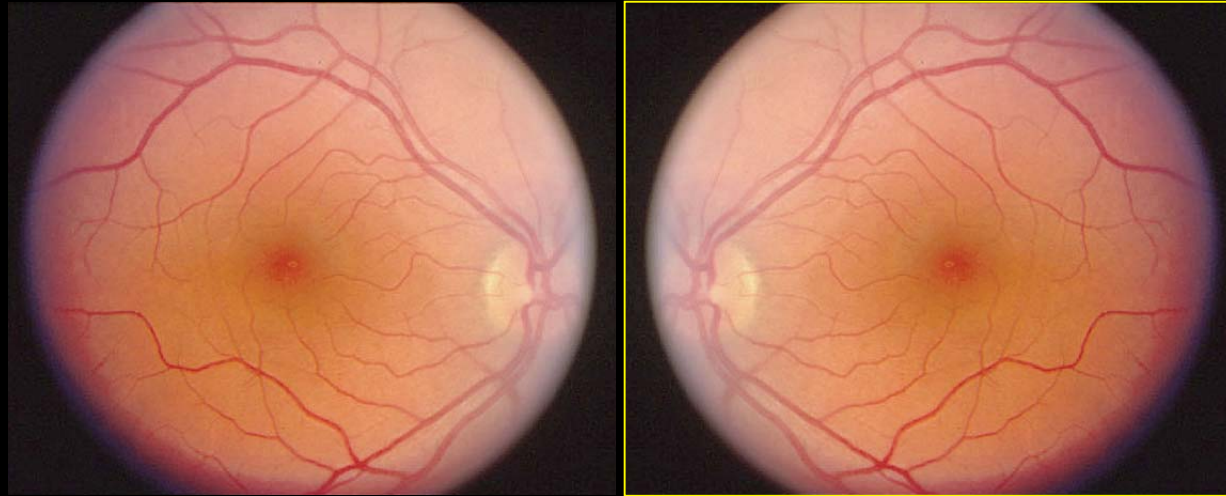
- Lack of sympathetic innervation to the head
- Symptoms?
 - Ptosis
 - Anhydrosis
 - Miosis
- (PAM is Horny)



Is this a left or right eye?



Left



Identify the CN lesion in the following patient?

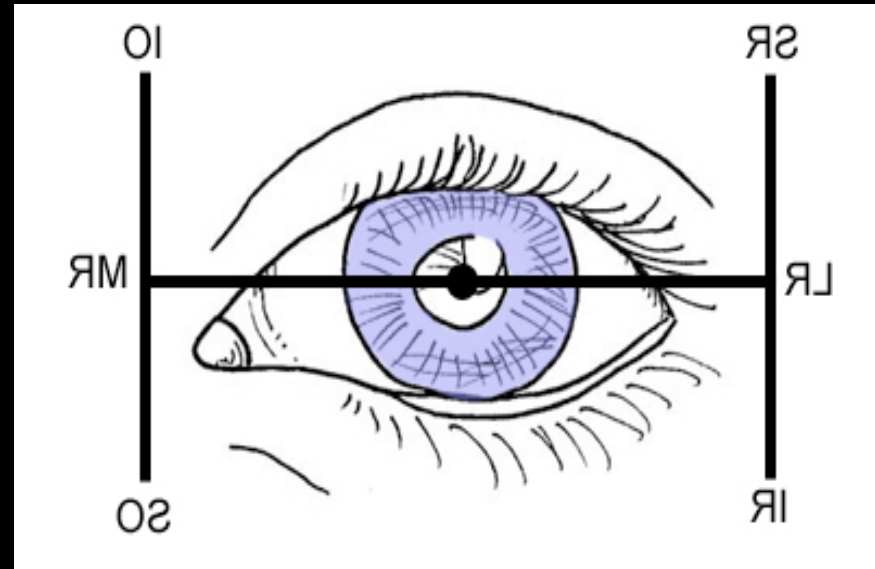


- A. Left CN III
- B. Left CN IV
- C. Left CN VI
- D. Right CN III
- E. Right CN IV
- F. Right CN VI

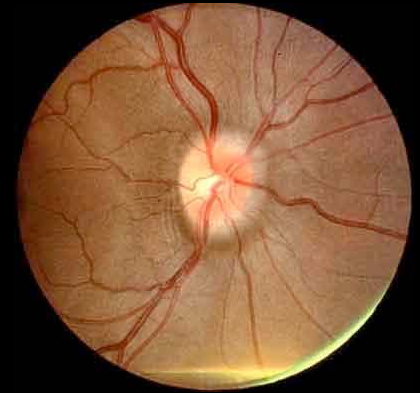
Identify the CN lesion in the following patient?



- A. Left CN III
- B. Left CN IV
- C. Left CN VI
- D. Right CN III
- E. Right CN IV
- F. Right CN VI



Upon ophthalmic examination of a patient, you notice a very prominent swelling at the optic disk (papilledema) as shown in the figure. This should immediately alert you to what potential problem?



- A. Increased intracranial pressure due to brain tumor or CSF obstruction
- B. Increased pressure inside the globe due to a tumor or inflammation of the eye
- C. Obstruction of the outflow drain of the vitreous or the aqueous humors of the eye
- D. Tumor of the retina or choroid layer of the eye at the macula lutea or fovea centralis

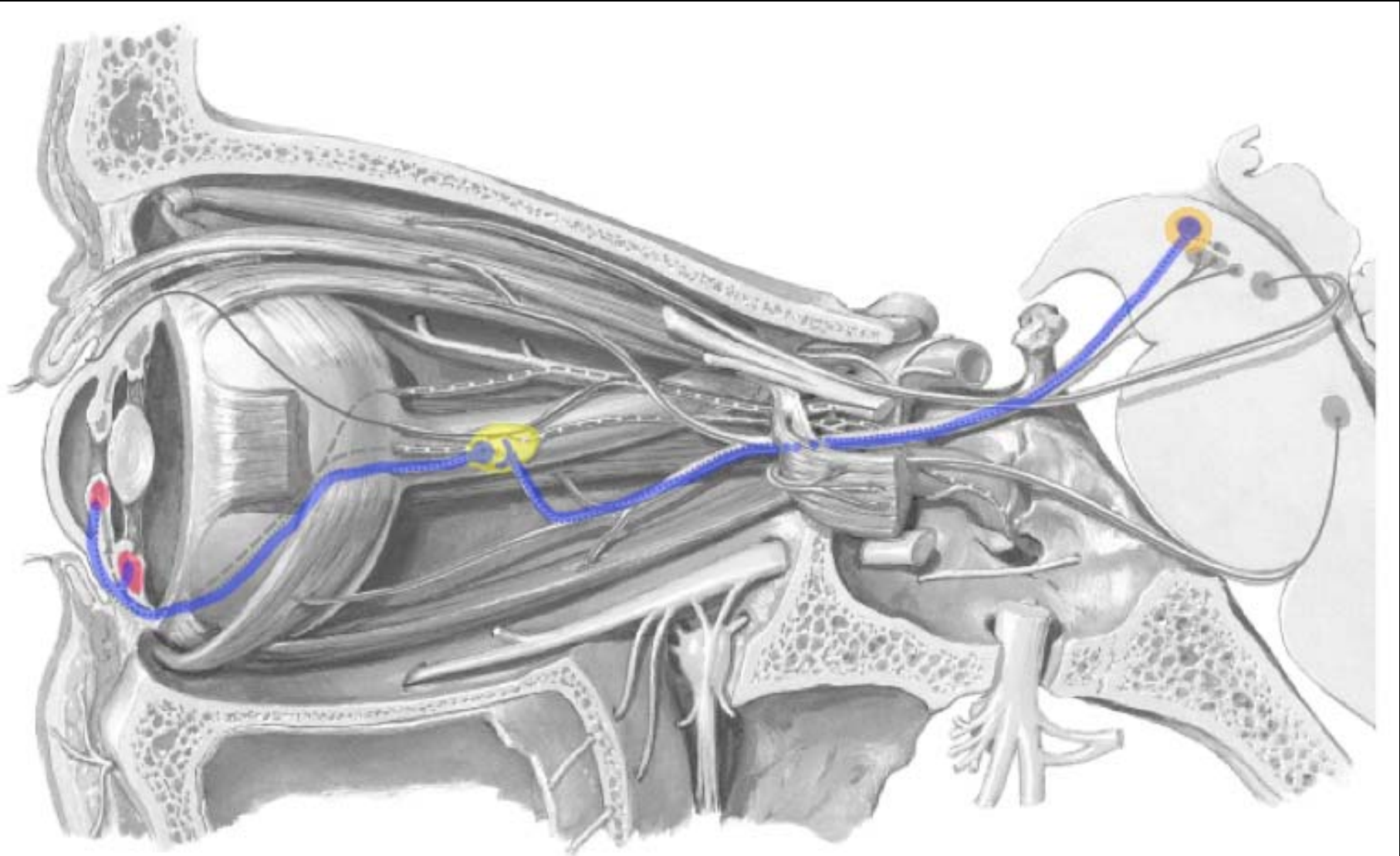
Both Jack and Mary present in your office and you observe the following:

- Jack's left eye: ptosis and a dilated pupil
- Mary's right eye: ptosis and a constricted pupil

Explain how both patients have ptosis but Jack has a dilated pupil and Mary a constricted pupil (*ptosis*=droopy eye lid)

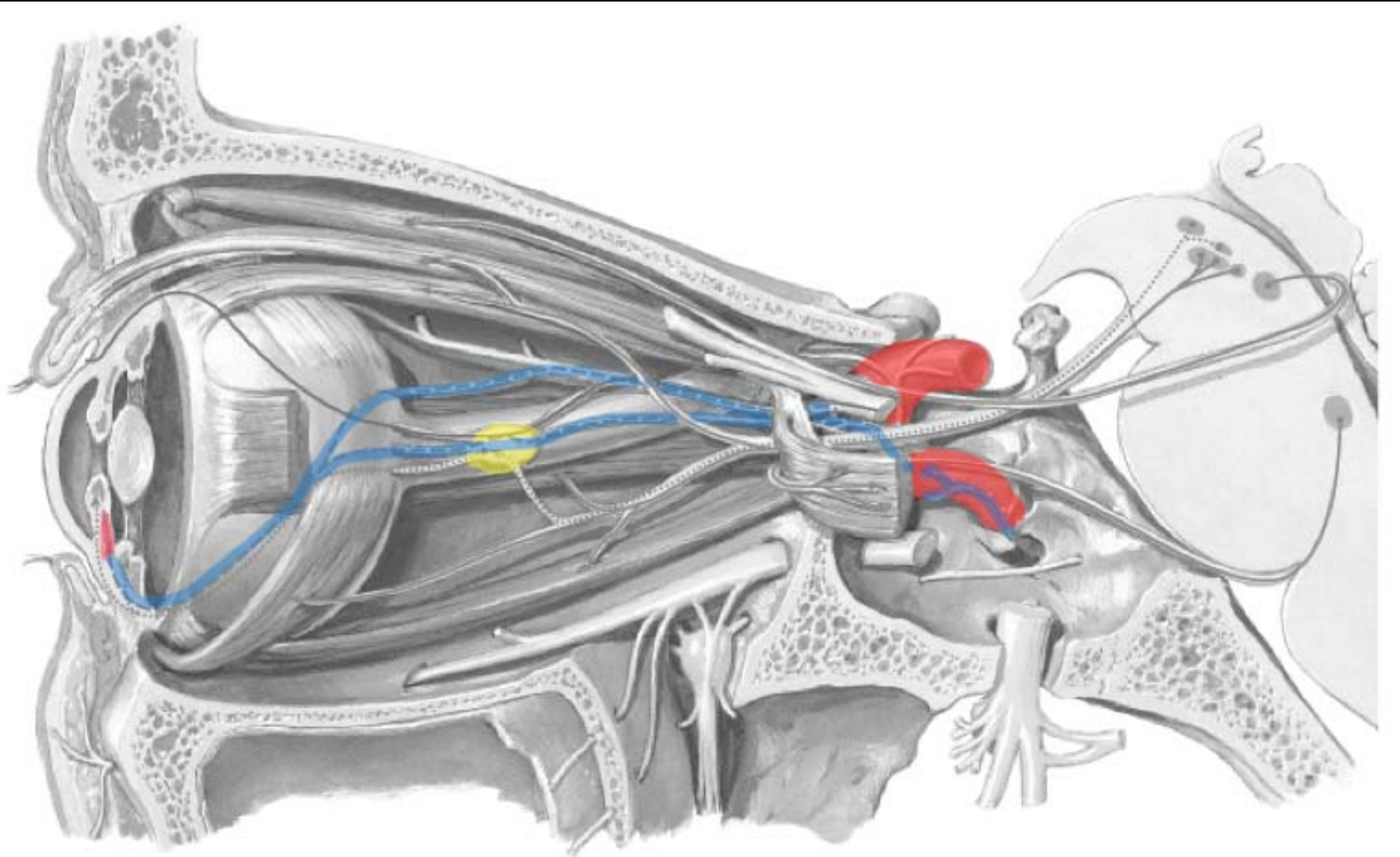
3) Eyeball

a) CN III Parasymp - ciliary mm. and sphincter pup.



3) Eyeball

a) CN III Symp - pup. dilator and sup tarsal m.



Identify the correct image that illustrates the position of your patient's right eye after clinically testing her superior oblique muscle.

A.



Nose

B.



Nose

C.



Nose

D.



Nose

E.



Nose

F.



Nose

Identify the correct image that illustrates the position of your patient's right eye after clinically testing her superior oblique muscle.

A.



Nose

B.



Nose

C.



Nose

D.



Nose

E.

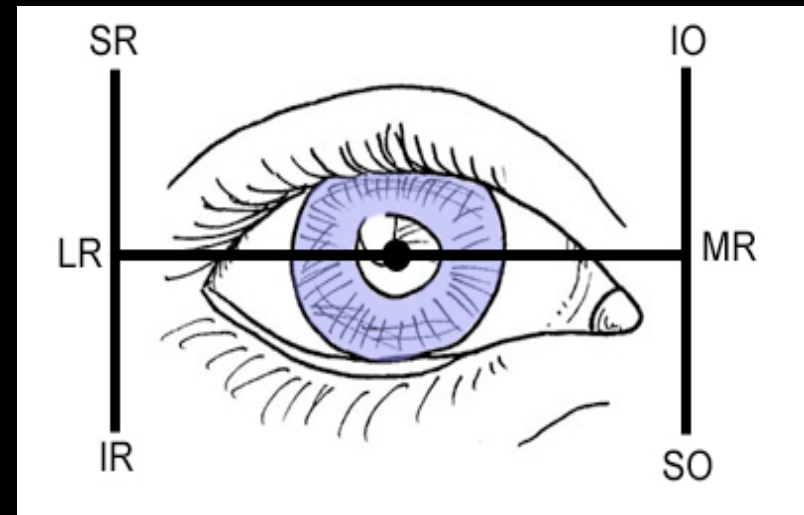


Nose

F.



Nose



Infection in the dural venous sinuses can lead to the formation of blood clots (Medicine. 1986 Mar; 65(2):82-106).

An infection led to a blood clot in the cavernous sinus (cavernous sinus thrombosis). As the blood clot grew inside the cavernous sinus, it began to compress the structures within the sinus.

Symptoms that lead to the diagnosis of this condition include paralysis of all the extraocular muscles on the affected side along with what other symptoms?

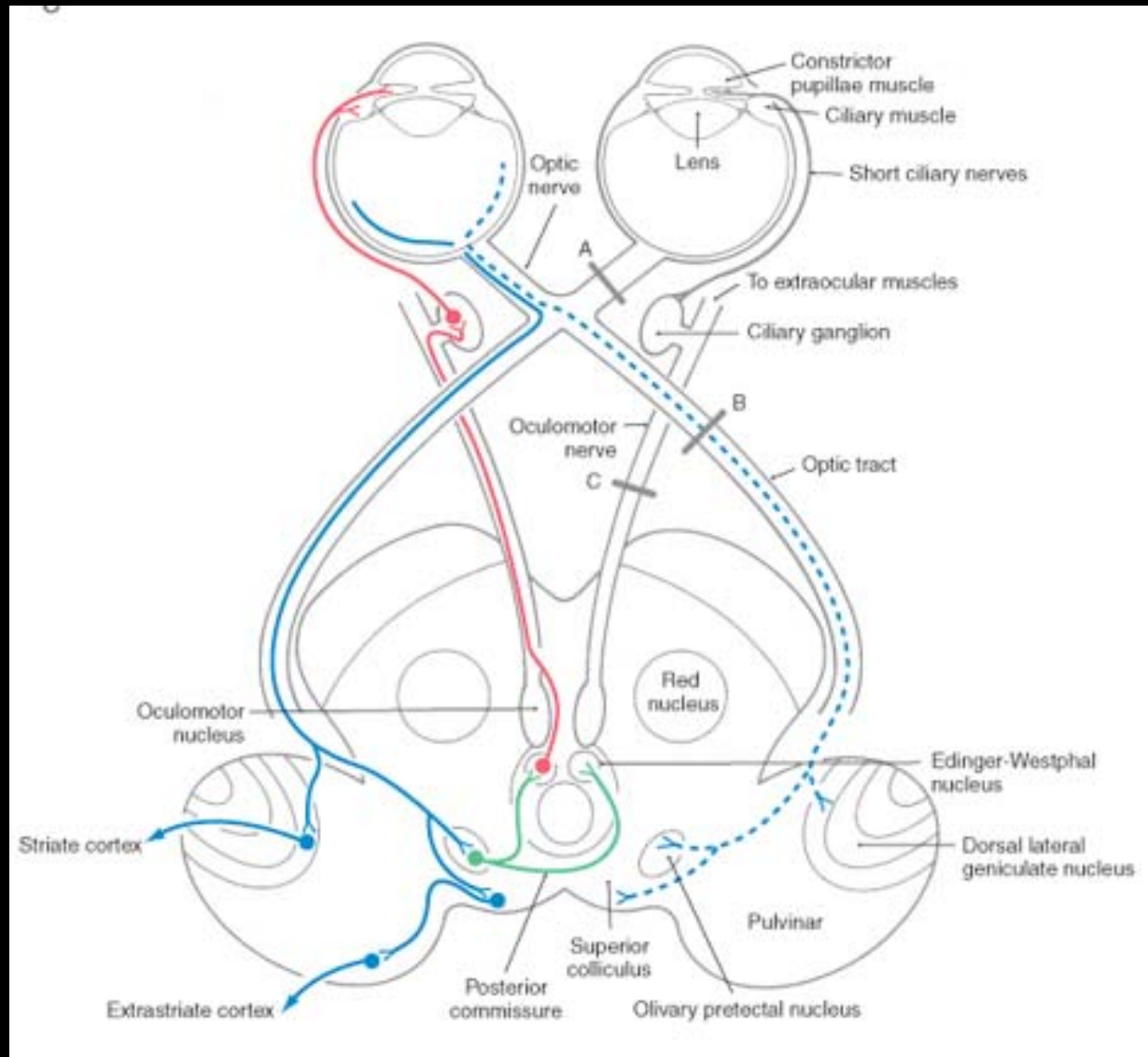
- A. Loss of the ability to lacrimate (produce tears) in one eye
- B. Loss of the ability to taste on the anterior two thirds of the tongue
- C. Tingling and/or numbness of the upper half of his face and his jaw
- D. Tingling and/or numbness of his forehead and upper half of face

A lesion to which cranial nerve will result in the following symptoms observed in this patient's right eye?

- A. CN I
- B. CN II
- C. CN III
- D. CN IV
- E. CN V
- F. CN VI



Pupillary light reflex



A unconscious patients pupillary reflex will reveal the following:



Pupil	L	R
Constrict	X	X
No change		
Dilate		



Pupil	L	R
Constrict		
No change	X	X
Dilate		

Explain the findings.

A patient's pupillary reflex will reveal the following:

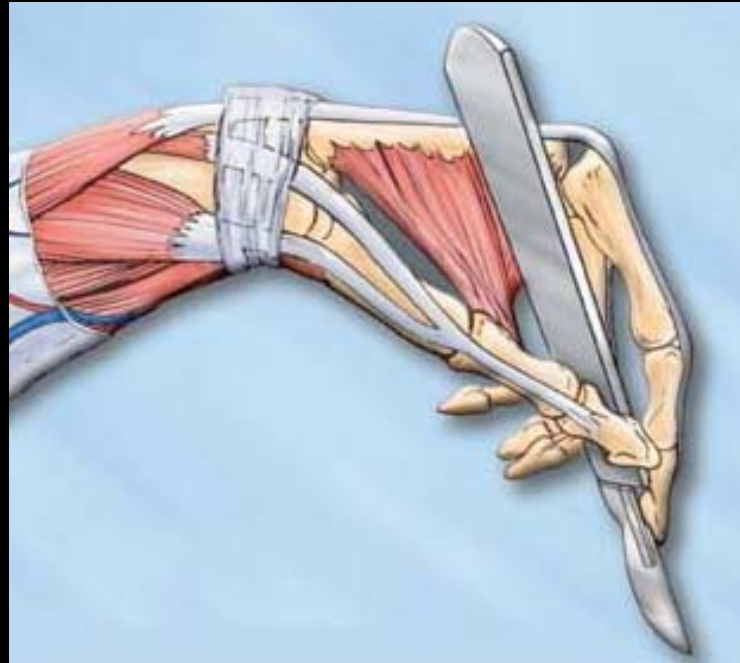


Pupil	L	R
Constrict	X	
No change		X
Dilate		



Pupil	L	R
Constrict	X	
No change		X
Dilate		

What additional symptoms would you expect to see in this patient?



THANK-YOU