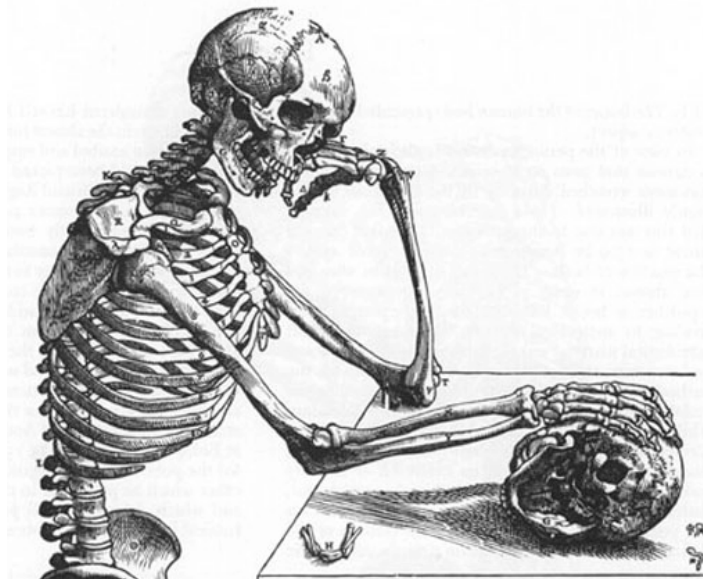
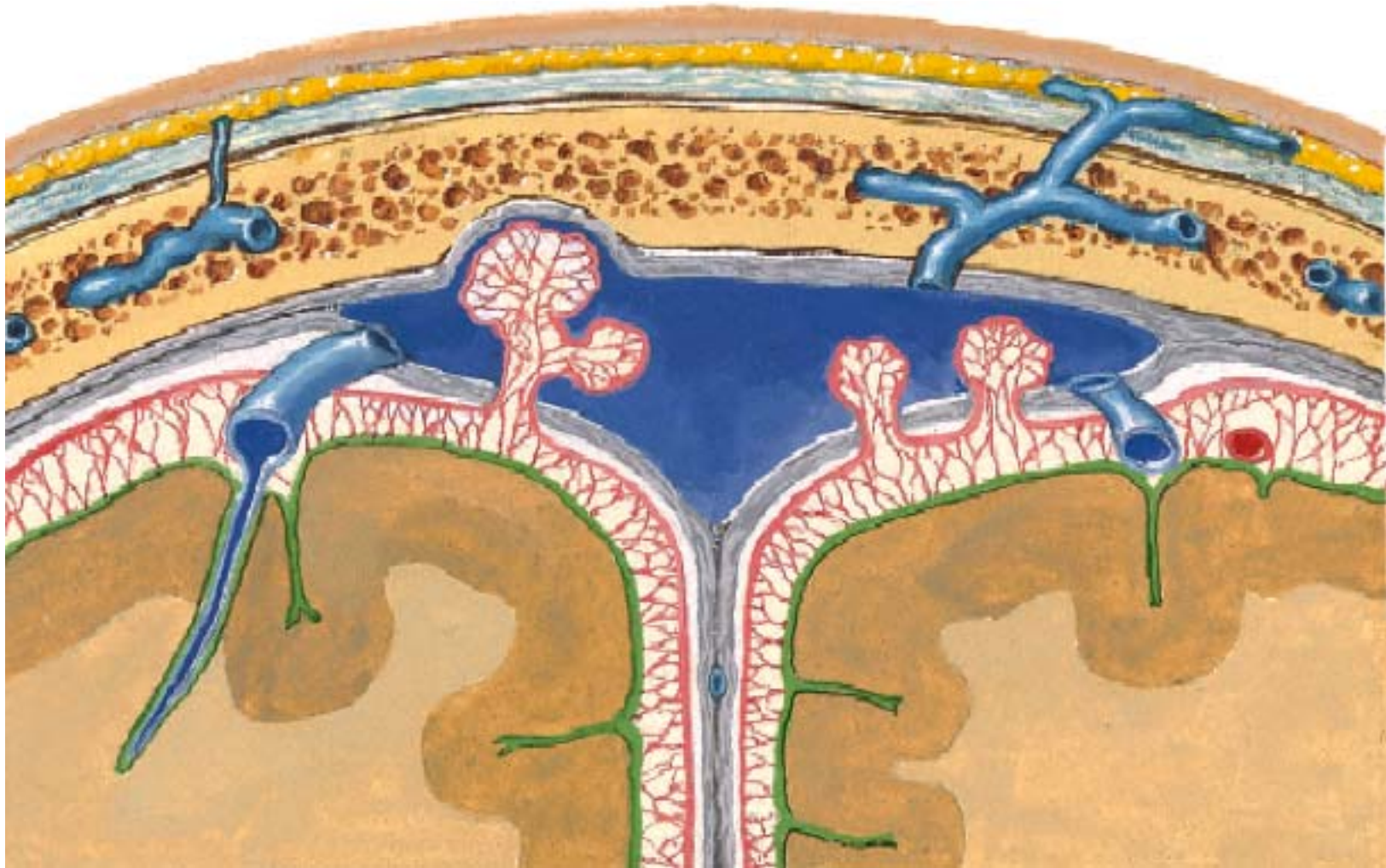


# Unit #3: Dry Lab A

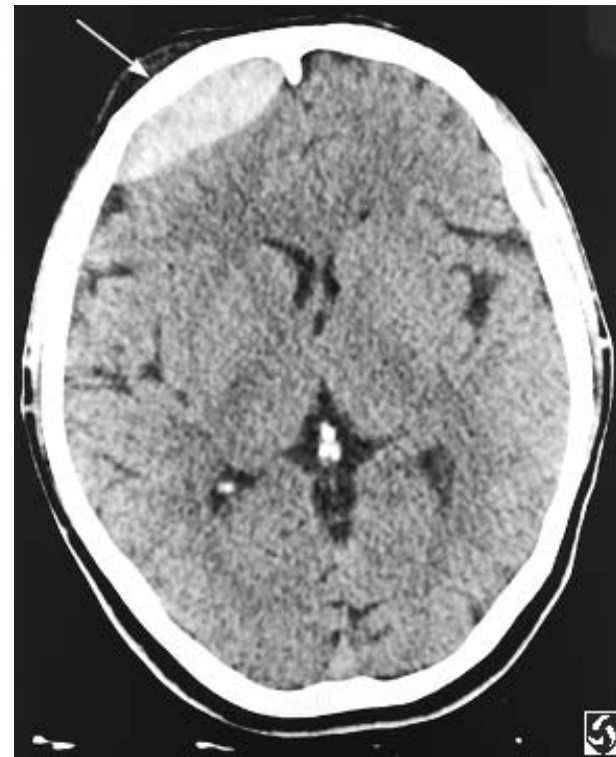
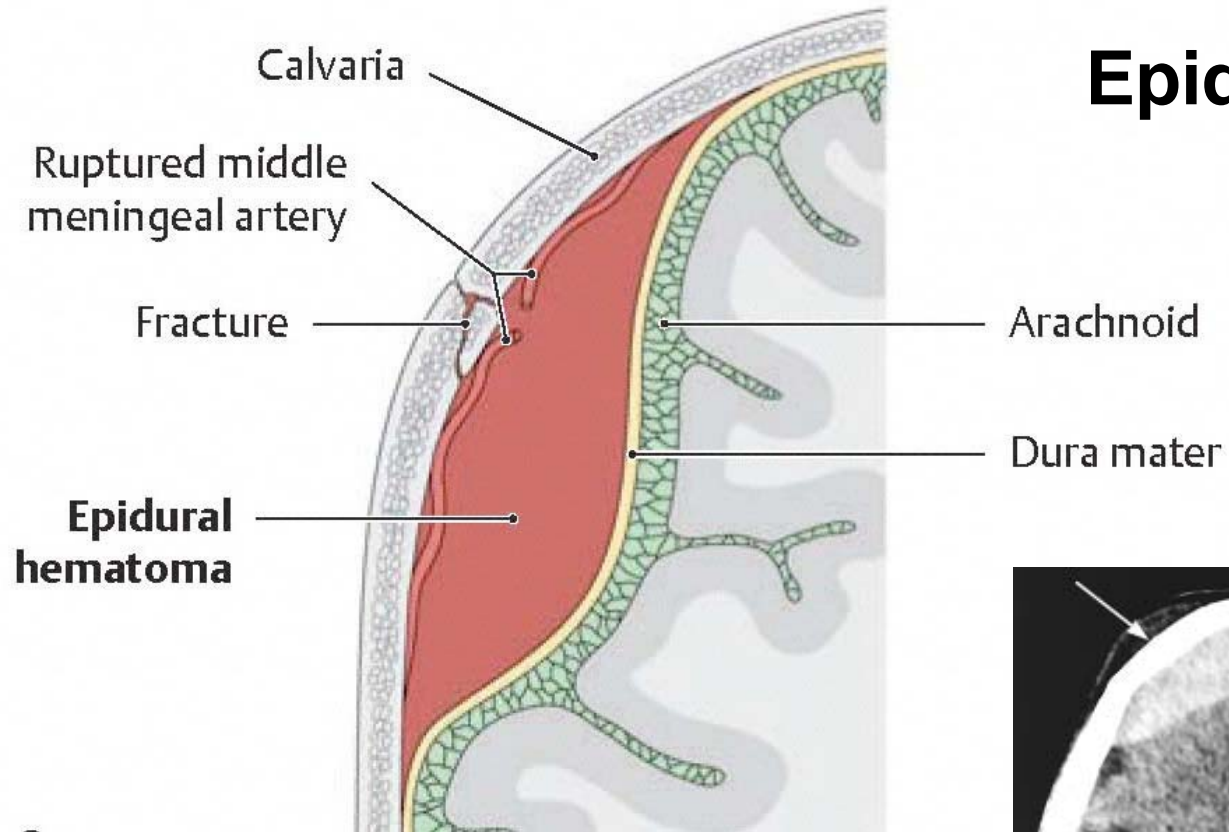


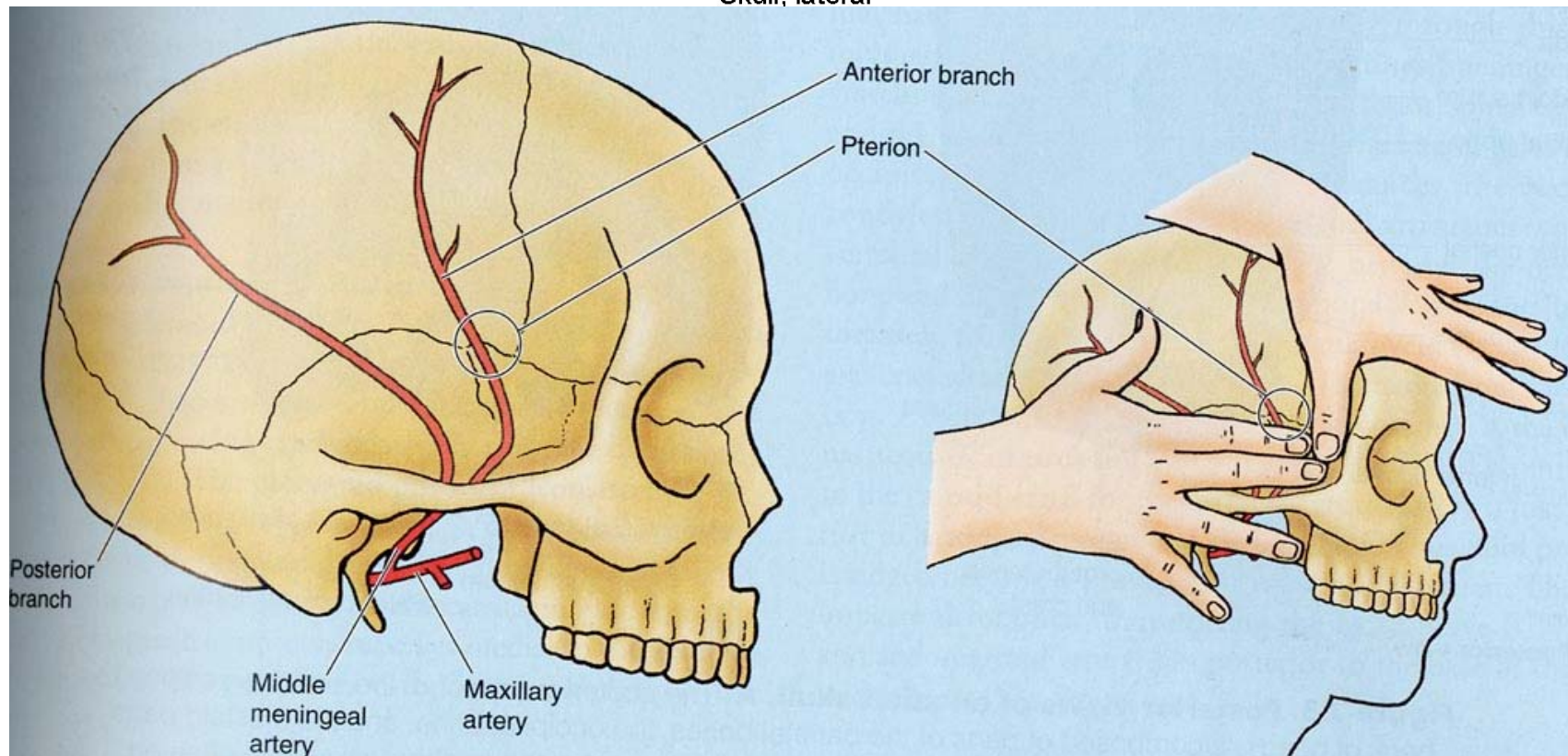
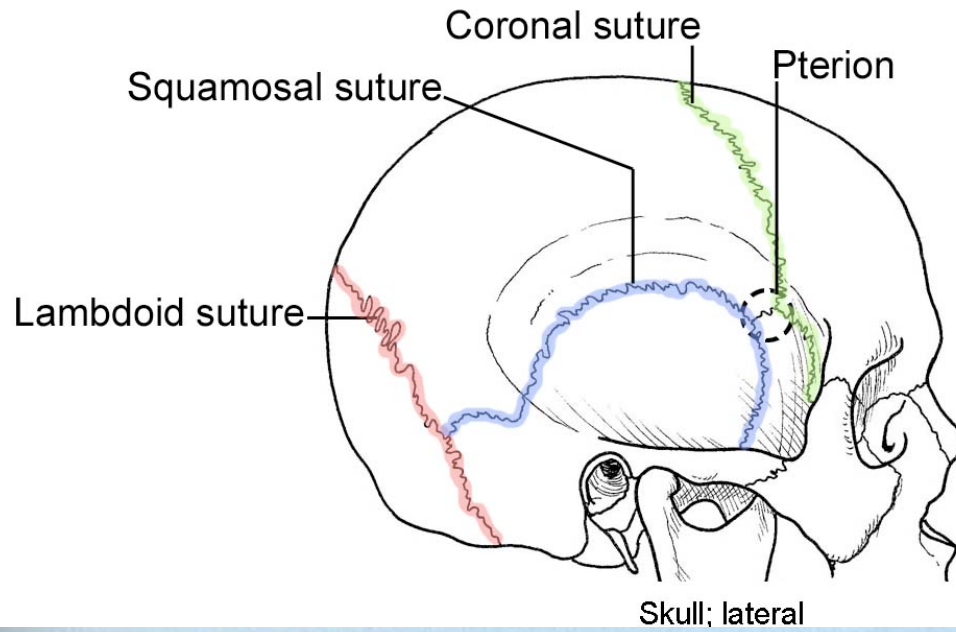
David A. Morton, Ph.D.

# Intracranial Hemorrhage

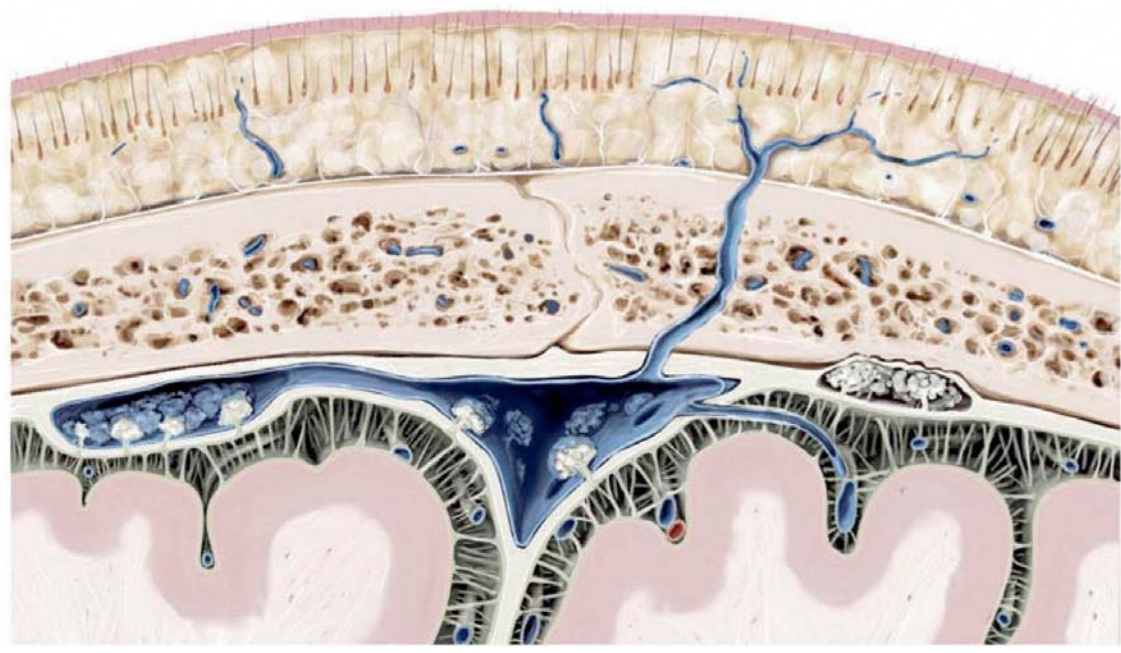
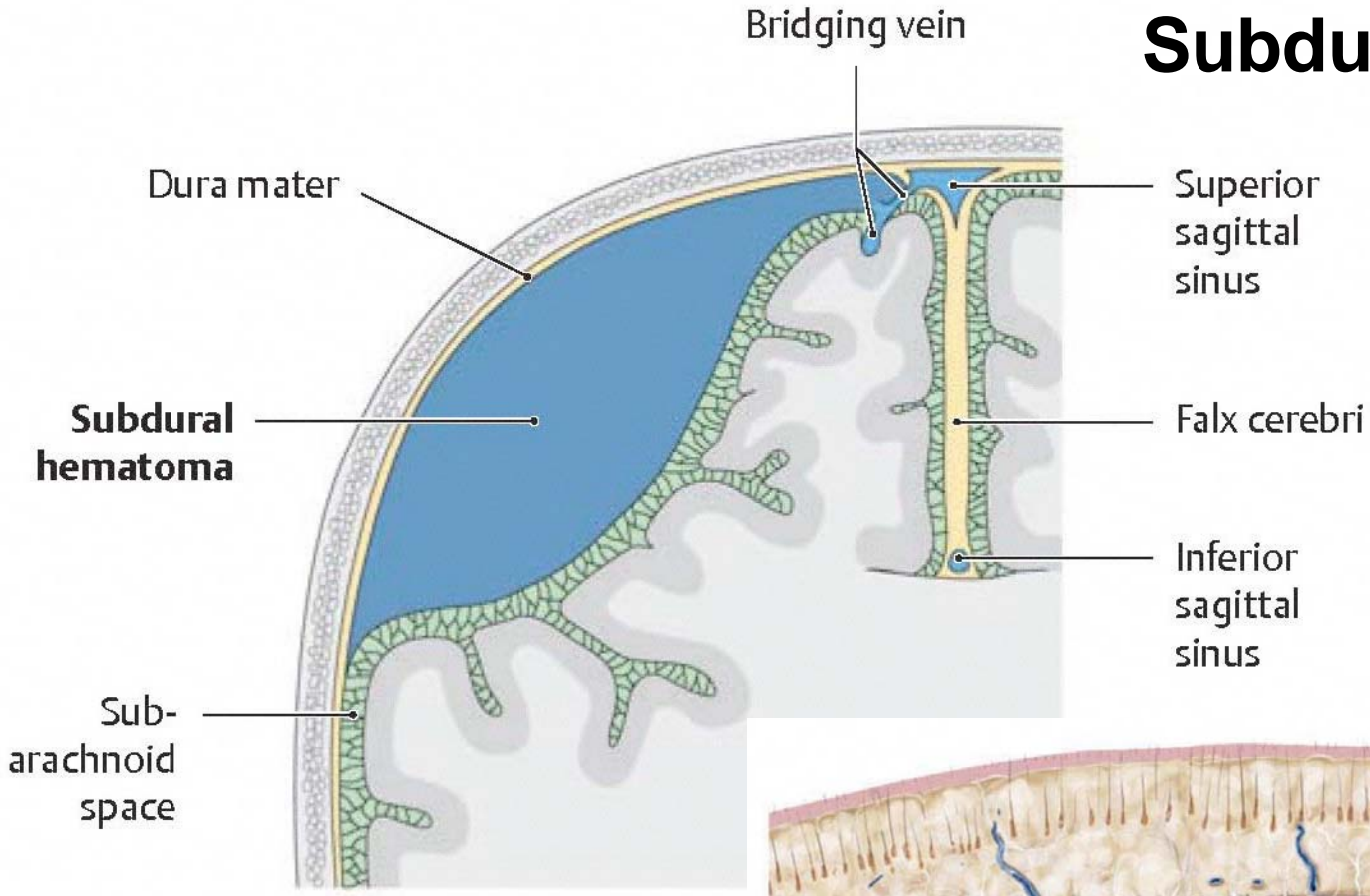


# Epidural Hematoma

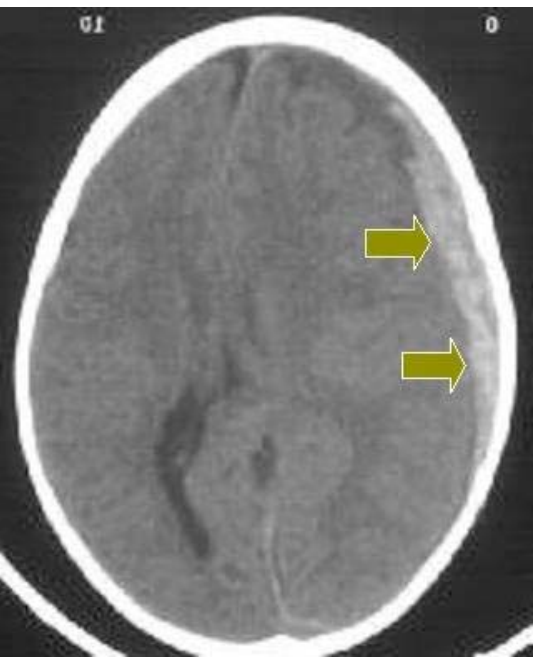
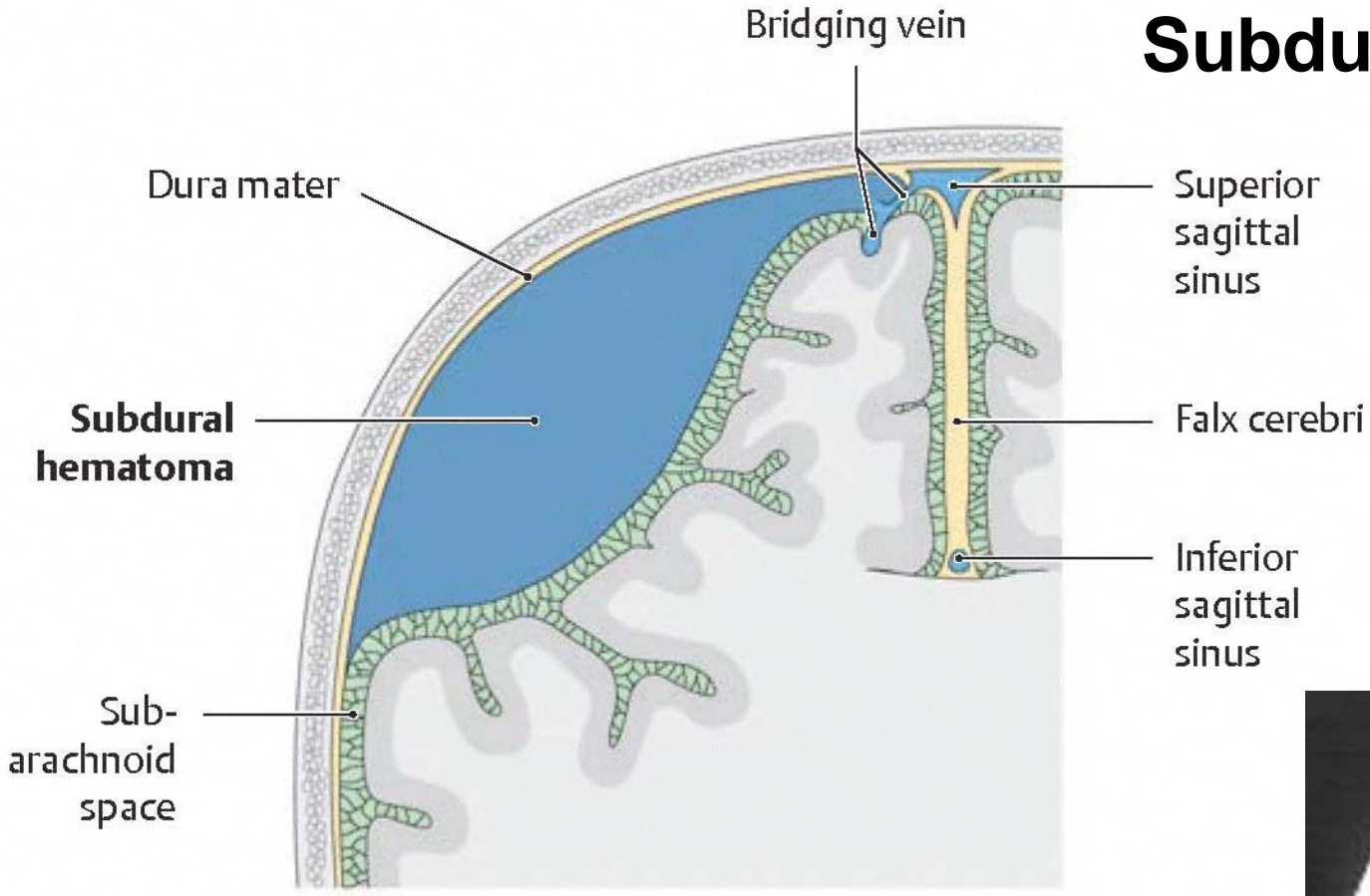




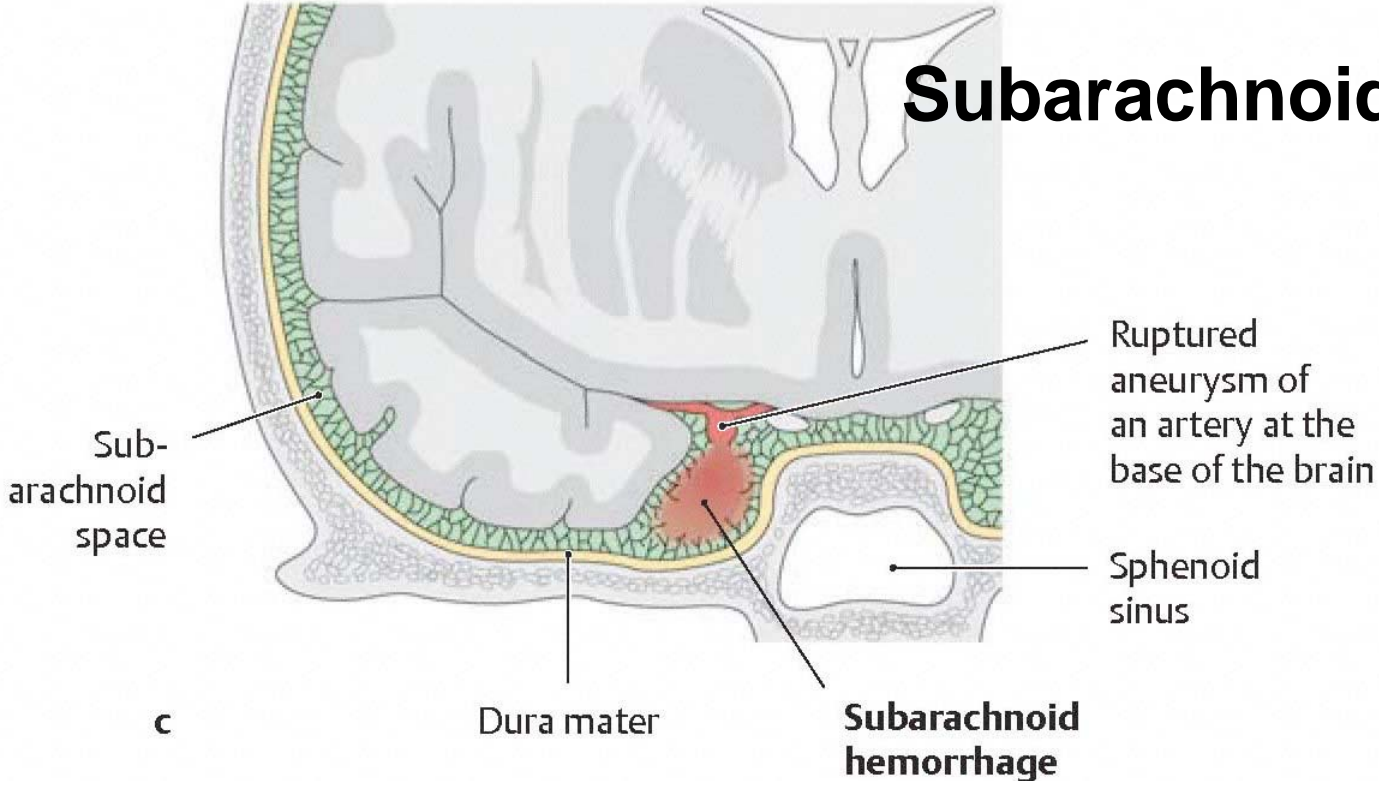
# Subdural Hematoma



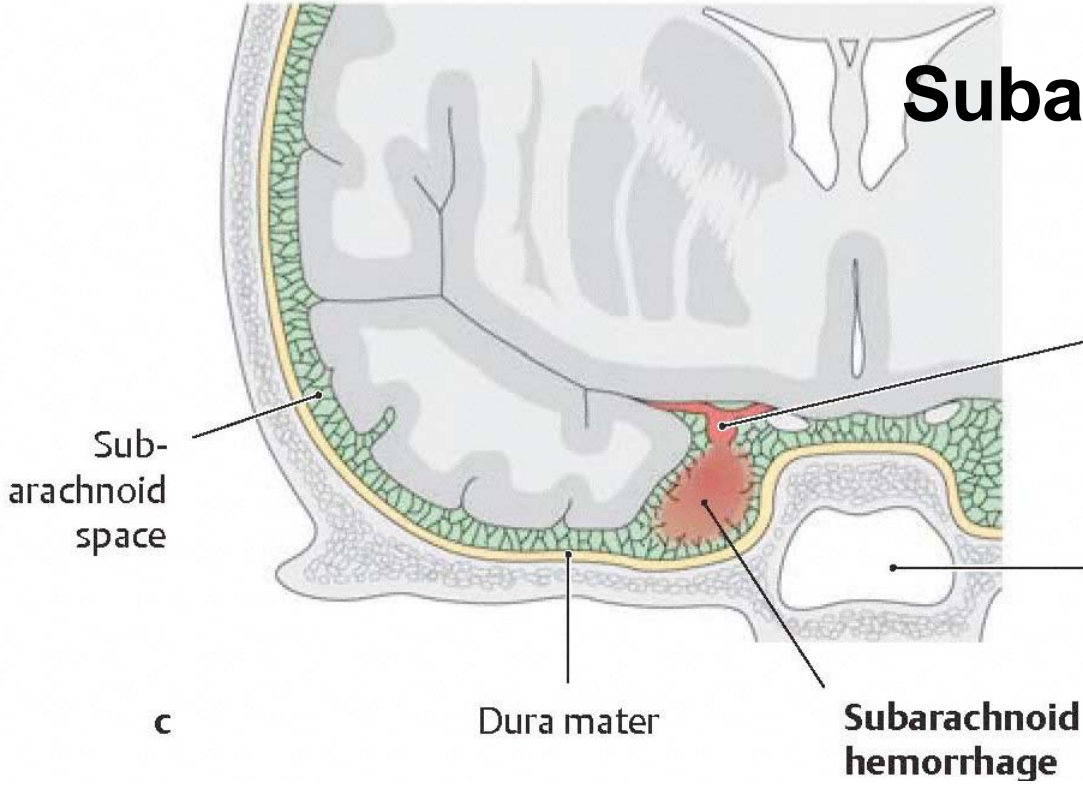
# Subdural Hematoma



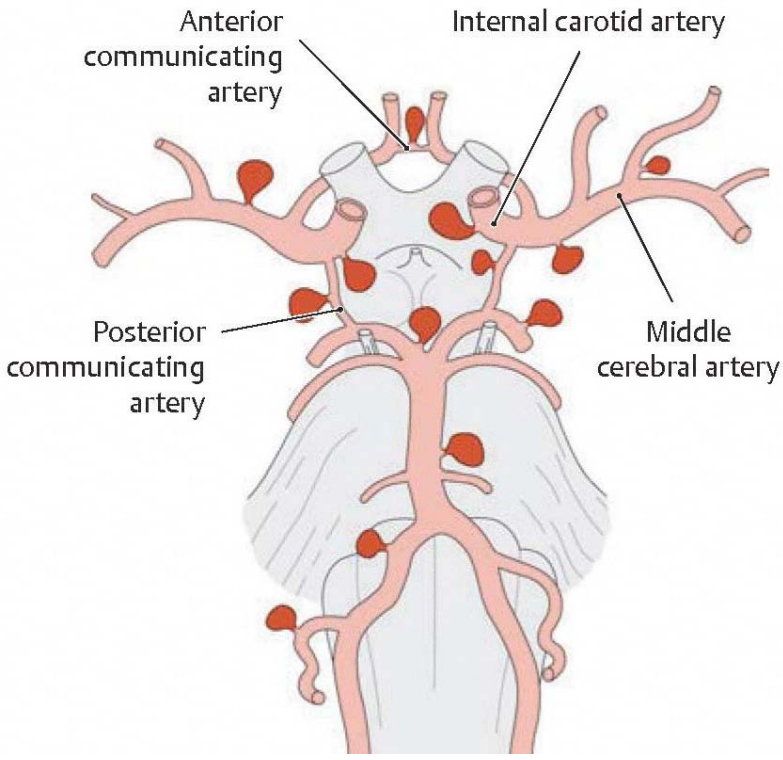
# Subarachnoid Hemorrhage



# Subarachnoid Hemorrhage



c





An elderly woman complains of a slow onset of headache, dizziness, and nausea. Upon physical examination, it is noted that 5 days previous she fell and hit her head on the pavement. She still has a nice goose egg. A head CT show diffuse bleeding outside the brain. What type of hematoma/hemorrhage would you suspect in this patient?

- A. Epidural hematoma due to a ruptured berry aneurysm (small sac-like ballooning of the vessel wall) of the anterior communicating artery
- B. Epidural hematoma due to a torn middle meningeal artery
- C. Subarachnoid hematoma due to a ruptured berry aneurism (small sac-like ballooning of the vessel wall) of the anterior communicating artery
- D. Subarachnoid hematoma due to a torn emissary vein coursing from the scalp to a dural sinus
- E. Subdural hematoma due to a torn bridging vein coursing from the cerebrum to a dural sinus
- F. Subdural hematoma due to a torn middle meningeal artery

One aspect of the cardio-physical exam is measuring the jugular venous pressure (JVP). The JVP appears as a pulse seen in the neck, but it is actually occurring in the venous system, not the arterial. This is due to right atrial contraction, where some blood is pushed back out of the chamber and up the superior vena cava all the way to the jugular vein in a pulsating fashion. The IJV lacks valves.

There is usually two pulses seen for the JVP and only one for the carotid pulse. Describe what is responsible for this observation.



One aspect of the cardio-physical exam is measuring the jugular venous pressure (JVP). The JVP appears as a pulse seen in the neck, but it is actually occurring in the venous system, not the arterial. This is due to right atrial contraction, where some blood is pushed back out of the chamber and up the superior vena cava all the way to the jugular vein in a pulsating fashion. The JVP is only pathologic if the pulse is seen too high up the neck, indicating an overload or back up of blood entering the heart.



The JVP is only pathologic if the pulse is seen too high up the neck, indicating an overload or back up of blood entering the heart. The JVP can be caused by a number of conditions. Which of the following *would NOT* cause an abnormally high JVP?

- A. Abnormal tricuspid valve (prolapsed or stenotic)
- B. Fluid overload (renal failure causing an increased blood volume)
- C. Right atrial fibrillation (uncoordinated contraction or quivering)
- D. Right-sided heart failure (due to pulmonary hypertension)

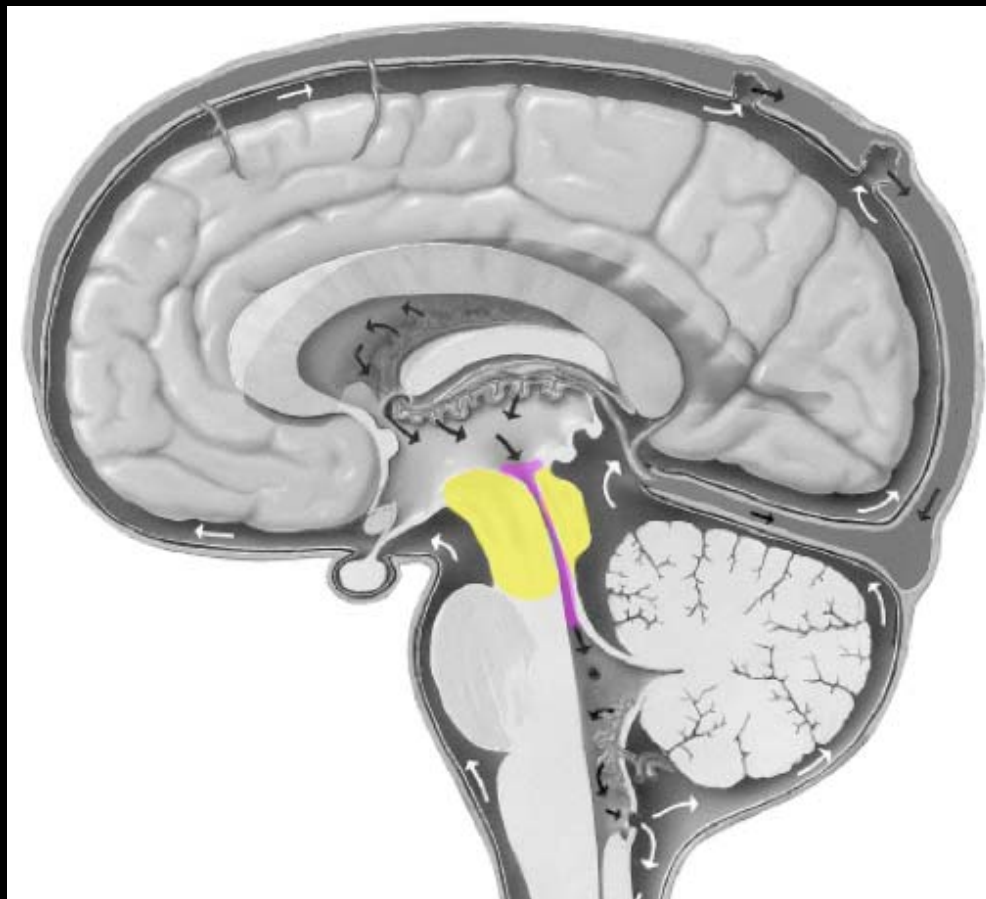
A 2-year-old boy is brought to see a neurologist for a 3-month history of vomiting, irritability, and excessive sleepiness. On examination, he is noted to have papilledema, prompting the neurologist to order a head CT, which reveals greatly dilated lateral and third ventricles, but a normal-appearing fourth ventricle and cerebral aqueduct.

What is the location of this infant's occlusions?

- A. Cerebra aqueduct
- B. Lateral aperature
- C. Median aperature
- D. Foreman of Monro (interventricular foramen)
- E. Fourth ventricle

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**What is the location of this infant's occlusions?**

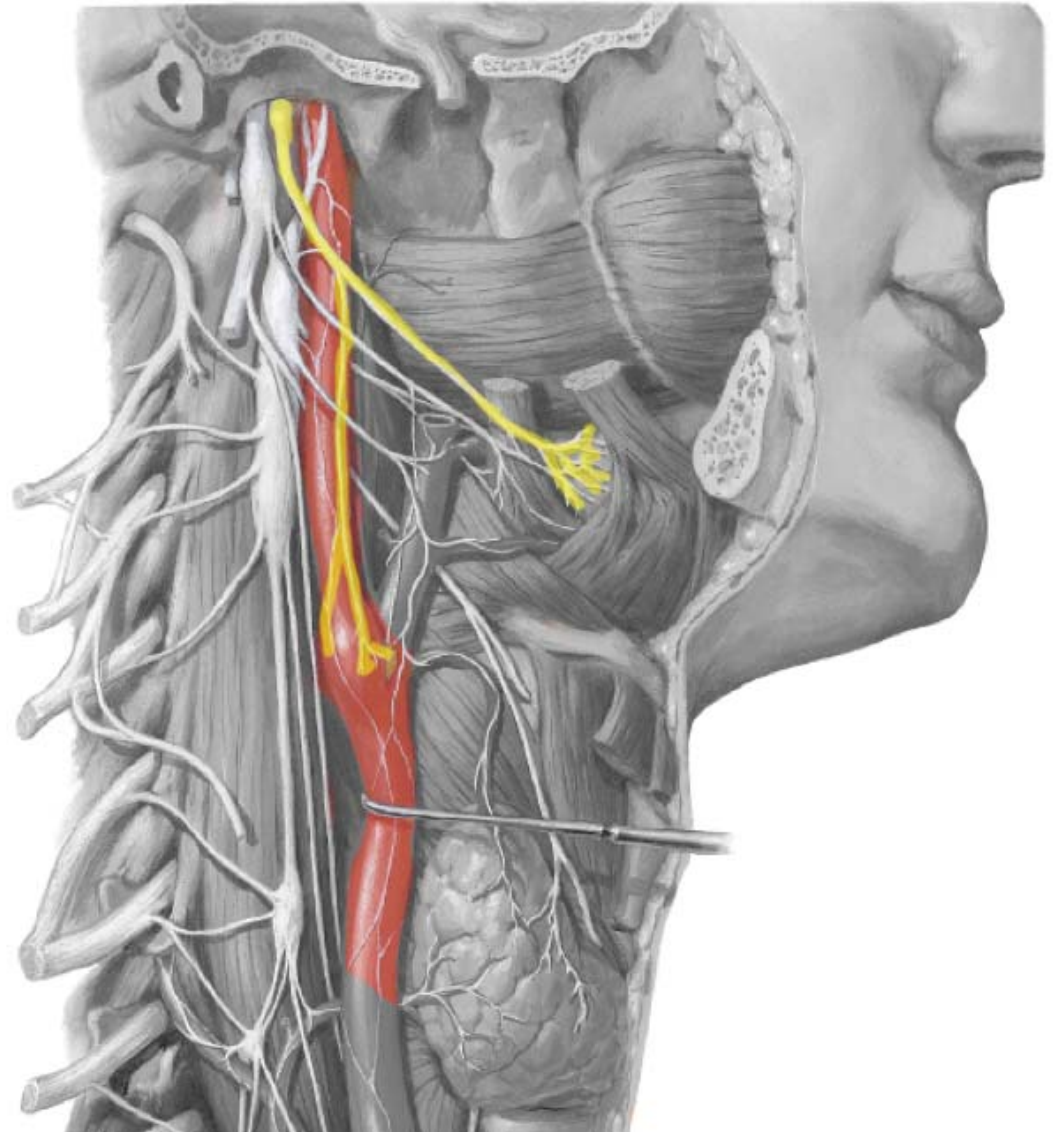


You conduct a post-operative check-up on a patient that has underwent the removal of an atherosclerotic plaque in the right common carotid artery. During the check-up you observe large fluctuations in blood pressure. Damage to which cranial nerve may be associated with this blood pressure instability?

- A. CN V-3**
- B. CN VI**
- C. CN VII**
- D. CN VIII**
- E. CN IX**
- F. CN XII**

## Glossopharyngeal n. (CN IX)

- VS: carotid sinus and body



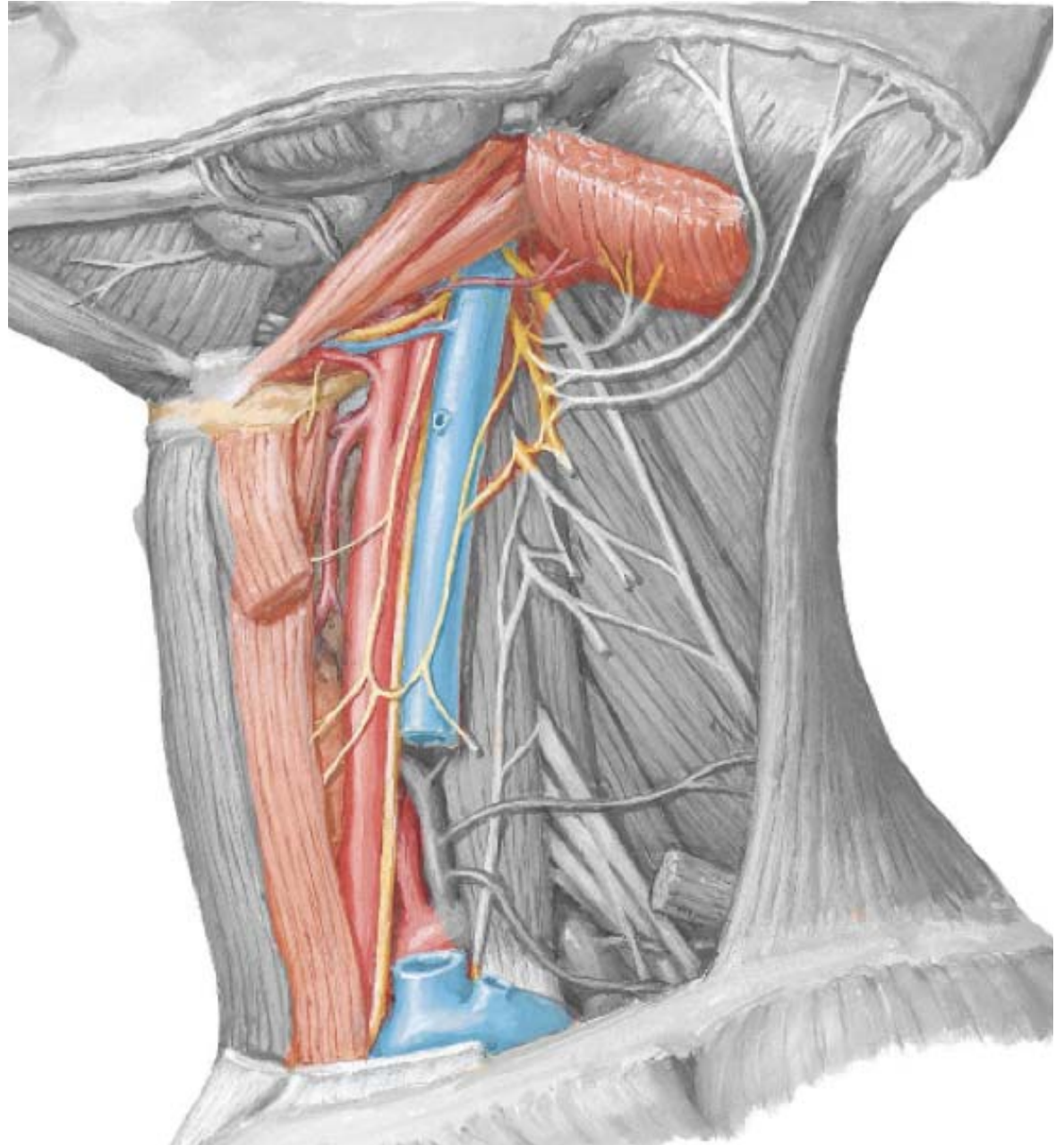


A surgeon is performing a carotid endarterectomy in a 64-year-old man who has a carotid artery occlusion. While approaching the internal carotid artery, a nerve embedded within the fascia of the carotid sheath is severed.

- Describe what effect may occur as a result of this nerve lesion.
  - Sensory (dermatomal, cutaneous field)?
  - Motor (suprahyoid, infrahyoid, etc...)?

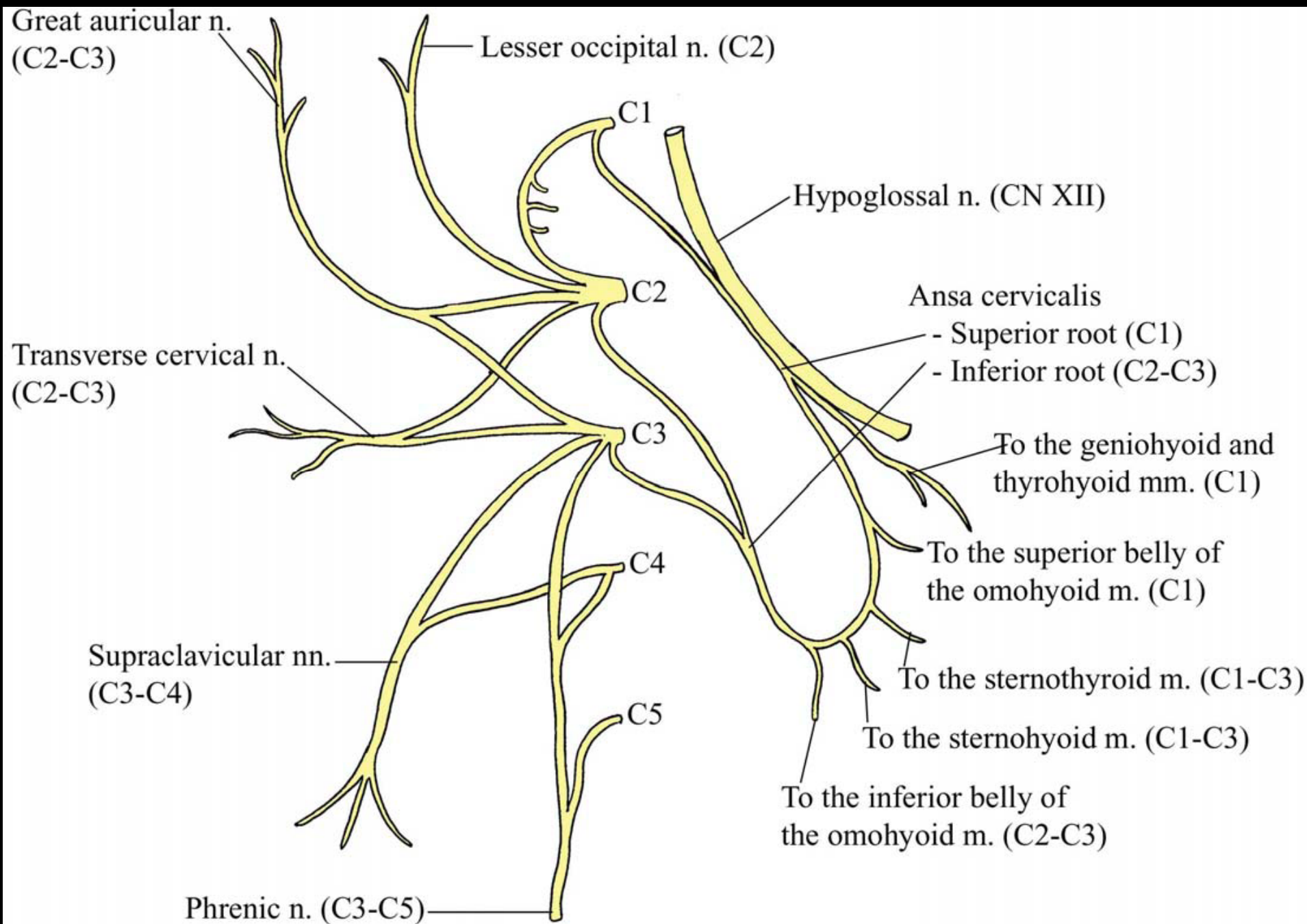
# Carotid sheath

- Ansa cervicalis



In the case of peritonitis in the parietal peritoneum on the inferior surface of the diaphragm, pain may be referred through each of the following nerves EXCEPT:

- a) Great auricular
- b) Lesser occipital
- c) Supraclavicular
- d) Transverse cervical



THANK-YOU