

# **G23B: Unit #3 Review**

**Groups A and B at Cadaver Lab Today**

Group A: ENT Demo and Review

Group B: Larynx Dissection and ENT Demo

1. A patient presents with pain in the following areas:

- Back of the nose and throat
- Back of the tongue
- Ear
- Tonsil area

**Which of the following cranial nerve neuropathies best fits these symptoms?**

- A. Accessory neuralgia**
- B. Glossopharyngeal neuralgia**
- C. Hypoglossal neuralgia**
- D. Vagus neuralgia**
- E. Vestibulocochlear neuralgia**

2. When an ophthalmologist examines a patient's retina, she will often administer eye drops causing pupil dilation (see photograph).

**What must the drugs in the eye drops do to the sympathetic and parasympathetic neurons in the eye in order to cause pupil dilation?**



- A. Inhibit parasympathetic neurons, inhibit sympathetic neurons**
- B. Inhibit parasympathetic neurons, stimulate sympathetic neurons**
- C. Stimulate parasympathetic neurons, inhibit sympathetic neurons**
- D. Stimulate parasympathetic neurons, stimulate sympathetic neurons**

3. A 64 y/o male undergoes a carotid endarterectomy to remove an atherosclerotic plaque at the bifurcation of his left common carotid artery. The neck is dissected down to the carotid artery, the artery is opened, the plaque removed, a vascular patch is applied, and the incision is closed. During a post-op check, a large fluctuant mass is noted in the neck, posterior to the angle of mandible. There is concern for a hematoma at the operative site.

**A cranial nerve exam may reveal what lesion in which cranial nerve?**

- A. CN 5 – Deviation of Jaw to Left**
- B. CN 5 – Deviation of Jaw to Right**
- C. CN 7 – Facial and Forehead Droop on Right**
- D. CN 7 – Facial Droop Only of Left**
- E. CN 12 – Deviation of Tongue to Left**
- F. CN 12 – Deviation of Tongue to Right**

4. A 42-year-old man presents with an abscess of the parotid gland that is subsequently incised and drained. **The physician performing this procedure must be careful to avoid accidentally cutting a nerve which provides what function?**

- A. Innervation of the orbicularis oculi muscle**
- B. Innervation of the submandibular gland**
- C. Innervation of the temporalis muscle**
- D. Sensation over the bridge of the nose**
- E. Sensation over the eyelid**
- F. Sensation over the mandible**

5. A 57-year-old man goes to see a neurologist for a 6-month history of significant weight loss and difficulty swallowing. On examination, he is noted to have an absent gag reflex. In light of the weight loss, the neurologist feels that this man may have a malignant brain tumor.

**A tumor at what cranial foramen could cause these findings?**

- A. Foramen ovale**
- B. Foramen rotundum**
- C. Foramen spinosum**
- D. Internal auditory meatus**
- E. Jugular foramen**

6. A 57-year-old man goes to see a neurologist for a 6-month history of significant weight loss and difficulty swallowing. On examination, he is noted to have an absent gag reflex. In light of the weight loss, the neurologist feels that this man may have a malignant brain tumor.

**What additional finding could you expect to see in this patient?**

- A. Absent corneal reflex**
- B. Absent pupillary reflex**
- C. Difficulty elevating shoulders and turning head against resistance**
- D. During protrusion of his tongue it deviates to one side**
- E. Ringing in the ears**

7. During a physical exam it is noted that a patient's right eye fails to move past center on lateral gaze to the right but normal movement on leftward gaze. Her left eye has normal function. MRI reveals an expanding mass in the sella turcica that is compromising a nervous structure.

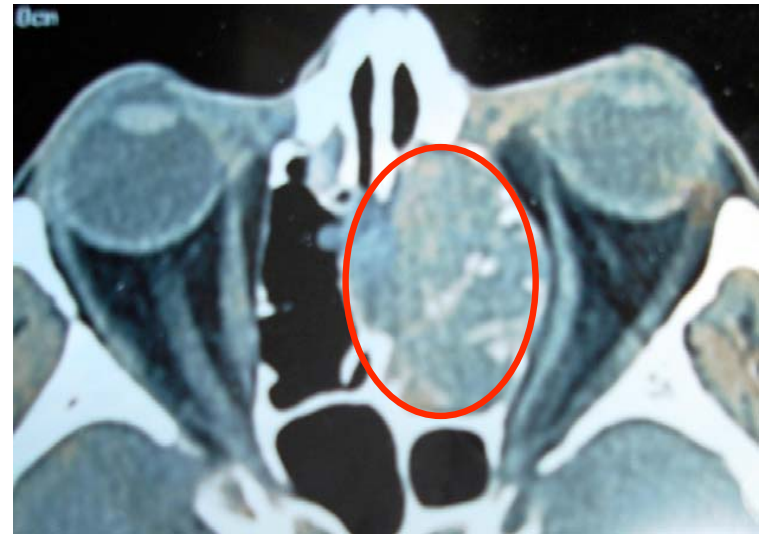
**Which of the following defects is most likely when testing vision on lateral gaze to the right and to the left?**

- A. Double vision on right and left**
- B. Double vision on left but normal vision on right**
- C. Double vision on right but normal vision on left**
- D. Normal vision on right and left**



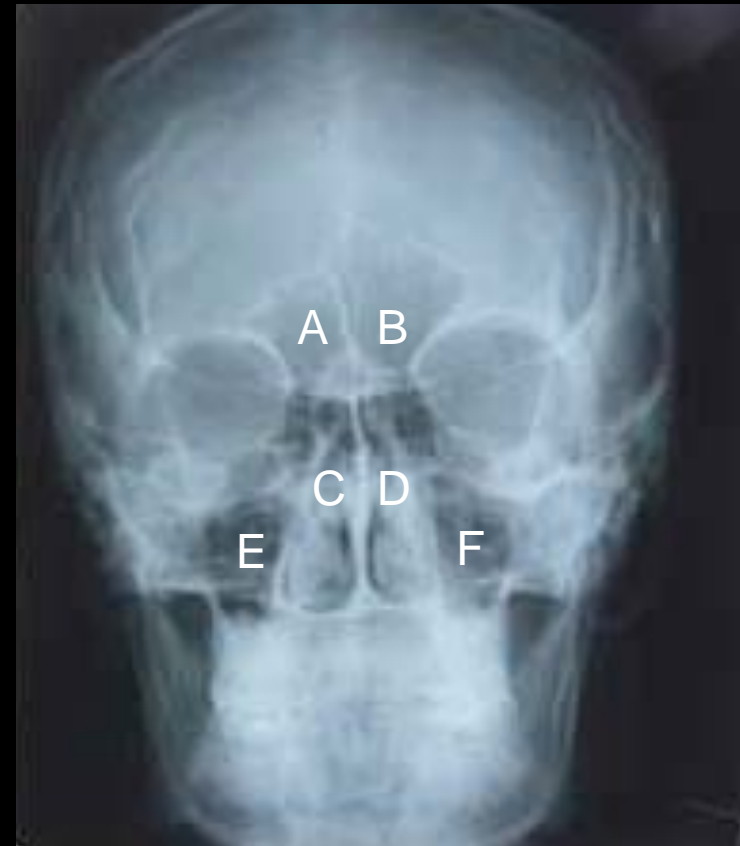
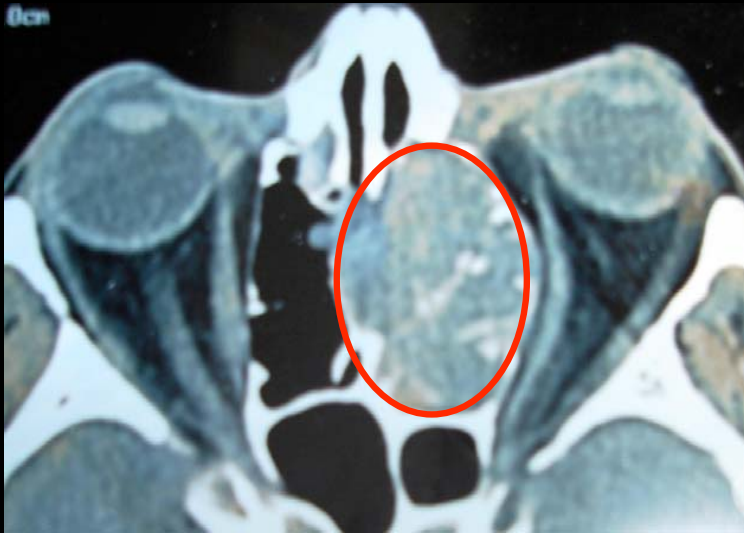
8. The following CT was done on a patient who presented with chronic epistaxis (nose bleeds). The mass filled the middle meatus to the choanae. The tumor (circled in red) is seen pushing against a muscle in the orbit.

**To evaluate if the muscle is still working correctly you will have the patient look:**



- A. Laterally
- B. Laterally and downward
- C. Laterally and upward
- D. Medially
- E. Medially and downward
- F. Medially and upward

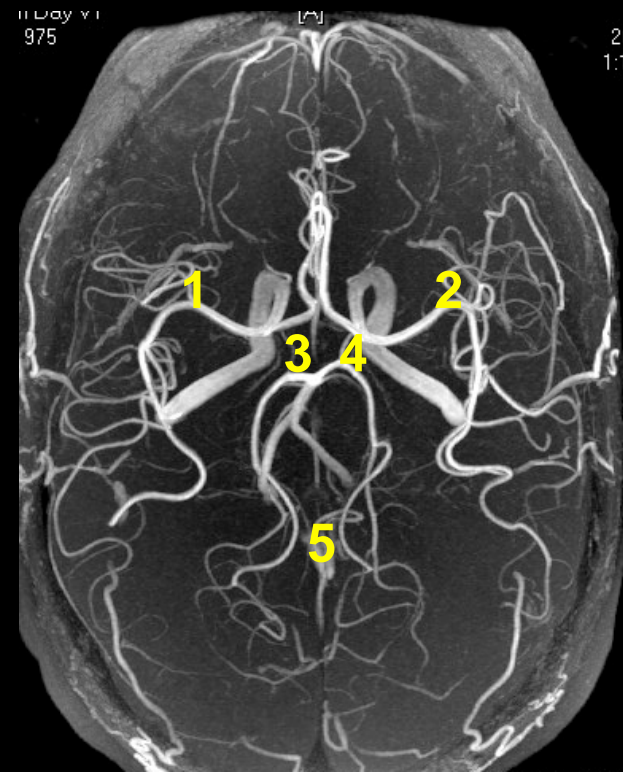
9. Assuming it is hung correctly, which letter on the plain film x-ray is closest to the tumor seen on the CT?



10. The following MRI was done on a patient with a dilated pupil and loss of normal pupillary reflex in the left eye.

**Which number most closely represents the area where the affected nerve leaves the brain?**

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5



11. A patient presents with a skull fracture on the lateral side of his head near the pterion. A head CT scan shows blood pooling just deep to and contained within the region of the parietal bone. After about 3 hours the patient begins to lose consciousness.

**What type of hematoma 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**

# ANSWERS

1. B
2. B
3. E
4. A
5. E
6. C
7. C
8. D
9. D
10. D
11. B