Questions for the 442 Course

1. A 61 year old lady was urgently transferred to the emergency department after she was found unresponsive by her husband. Her past medical history was significant for hypertension. Upon arrival to the emergency department she was obtunded. Other findings included left sided paresis and dilated right pupil with absent papillary reflex. CT scan of the brain revealed large intracerebral hemorrhage at the left temporal area with uncal herniation.

Which of the following are the accurate components of the papillary light reflex?

- A. The afferent limb is CN II and the efferent limb is CN V
- B. The afferent limb is CN V and the efferent limb is CN III
- C. The afferent limb is CN III and the efferent limb is CN VII
- D. The afferent limb is CN V and the efferent limb is CN VII
- E. The afferent limb is CN II and the efferent limb is CN III

Answer: E.

2. A 58 year old male was admitted to the hospital for the evaluation of right leg weakness. His symptoms started three days ago. However, he did not seek medical attention until he was urged by his wife. His work up including MRI, that is demonstrated below, showed a stroke in the distribution of:



- A. Middle cerebral artery
- B. Posterior cerebral artery
- C. Anterior cerebral artery
- D. Anterior choroidal artery
- E. Posterior choroidal artery

Answer: C.

- 3. A 75 year old year old female sought medical attention because of right temporal area headache that has been going on for seven months. Review of system was significant for jaw claudication and generalizes weakness. Her physical examination revealed direct tenderness at the right temporal area. The most likely cause of the patient's headache is:
 - A. Migraine
 - B. Paroxysmal hemichrania continua
 - C. Subdual hematoma
 - D. Giant cell arteritis
 - E. Brain Neoplasm

Answer: D.

4. An 85 year old male was transferred to the emergency department after he woke-up with speech difficulty and left sided weakness. His past medical history is significant for hypertension and hyperlipidemia. His blood pressure was 180/90 mmhg. His neurological examination revealed dysarthria, disorientation, left sided neglect and left sided paresis. Acute ischemic stroke was suspected and he was evaluated with MRI and conventional angiogram that are shown below. The most likely cause of his stroke is:





- A. Right Posterior cerebral artery occlusion
- B. Right middle cerebral artery occlusion
- C. Right anterior cerebral occlusion
- D. Right vertebral artery occlusion
- E. Right choroidal artery occlusion

Answer: B.

- 5. A 45 year old male was referred to the neurologist for the evaluation of urinary incontinence and bilateral lower extremities weakness. His symptoms started with midback pain that was followed within few weeks with progressive lower extremity weakness. Five days ago, he started to experience urinary incontinence. His neurological examination showed bilateral lower extremity weakness, increased deep tendon reflexes in the lower extremities and extensor plantar responses. The most likely lesion responsible for the patient's symptoms is:
 - A. Peripheral neuropathy
 - B. Myopathy
 - C. Extra-dural thorasic mass with cord compression

- D. Brainstem tumor
- E. Plexopathy

Answer: C.