**December 1, 2020 AHD Neurology Objectives**

**Multiple Sclerosis:**

1. Describe the pathophysiology of multiple sclerosis. List several risk factors for the disease.
2. Describe the most common presenting signs and symptoms for which a clinician should consider a diagnosis of multiple sclerosis.
3. Understand how to make the diagnosis of multiple sclerosis using the McDonald criteria.
4. Describe the clinical phenotypes of multiple sclerosis.
5. Understand how to manage the complications of MS such as fatigue, bowel and bladder dysfunction, walking speed, and pseudobulbar affect.
6. Know the first line therapies for MS and the side effects of the second-line therapies, specifically fingolimod, dimethyl fumarate, and natalizumab.

**Migraine:**

1. Understand the pathophysiology of migraine headaches.
2. Describe the criteria for the diagnosis of migraine without aura and migraine with aura and how to use the POUND mneumonic.
3. Describe the first-line therapy for migraine including the indication for triptan therapy and its contraindications. Understand the diagnosis of status migrainosus and the treatment options.
4. Describe who should receive prevention therapy for migraines, the lifestyle modifications, and indications for pharmacologic prophylaxis. What are the pharmacologic agents that have shown efficacy in migraine prevention?

**Dementia:**

1. Describe the diagnostic criteria for mild cognitive impairment and distinguish it from dementia.
2. Describe the sensitivity and specificity of the mini-mental status exam (MMSE) and the Montreal cognitive assessment for mild cognitive impairment and dementia.
3. Describe the appropriate work up (laboratories and imaging tests) for a patient with dementia to look for reversible causes.
4. Compare and contrast in table format the clinical presentation, pathophysiology, and treatment options for the following types of dementia: Alzheimer’s , Lewy body, Frontotemporal, Normal Pressure Hydrocephalus, and Vascular dementia.