

**Perlman Emergency Fellowship**  
**NorthShore Health System**  
Syllabus: Neurology

Length: Didactic hours: 10  
Lab hours: 2 (includes sim lab, journal club, radiology time, etc)  
Clinical hours: TBD

Faculty: Joey Davidson, MD  
Kelly Iszak, MS, PA-C  
Christine Compini, MS, PA-C  
Nancy Doherty, APN  
Deborah Lynch, APN

Course Description: This emergency medicine fellowship module will review the pathophysiology, presentation, diagnosis and treatment of headaches, neurologic infections, peripheral neuropathies and stroke

Course Outcomes:

1. Discuss the etiology and pathophysiology for the different types of headache.
2. Describe the clinical presentation and management of the different types of HAs
3. Discuss the etiology, clinical presentation, and management of temporal arteritis.
4. Discuss the "red flags" elicited during the history or physical exam that are suggestive of serious pathology.
5. Compare and contrast the clinical presentation of headache associated with a brain tumor (or other expanding meningitis, and a subarachnoid hemorrhage.
6. Describe the clinical presentation and management of post-traumatic headaches.

Discuss the diagnostic studies used in the evaluation of headache, to include expected findings.

1. Discuss the common etiologies for meningitis.
2. Compare and contrast the clinical presentation of bacterial and viral and aseptic meningitis.
3. Compare and contrast the CSF findings in aseptic and bacterial meningitis.
4. Compare and contrast the management of aseptic and bacterial meningitis.
- 5 Apply the appropriate antibiotic therapy to be used based on the underlying etiology.

(Discuss the etiology, clinical presentation, and management for encephalitis, to include arbovirus, West Nile, Herpes, rabies.)

6. Discuss the diagnostic studies used in the evaluation of CNS infections

Seizures?

1. Distinguish between a brief neurological screening exam, a focused neurological exam, and a comprehensive neurological exam.
2. Describe HX and PE findings of peripheral neuropathies
3. Formulate treatment plan for peripheral neuropathies in ED
1. List the risk factors associated with the development of cerebrovascular disease.

2. Define embolic, thrombotic, and lacunar ischemic infarct strokes.
3. Define transient ischemic attack (TIA).
4. Define cerebrovascular accident (CVA).
5. Discuss the diagnostic studies used in the evaluation of ischemic stroke, to include the expected findings.
6. Discuss the medical management of an ischemic stroke, to include the use of thrombolytic therapy.
7. Discuss the indications for surgical management of cerebrovascular disease, to include carotid endarterectomy.
8. Compare and contrast the etiology of spontaneous intracerebral hemorrhage with subarachnoid hemorrhage.
9. Compare the clinical presentation of intracerebral hemorrhage with subarachnoid hemorrhage.
10. Discuss the diagnostic studies used in the evaluation of a hemorrhagic stroke
11. Discuss the management of hemorrhagic stroke, to include medical and surgical options.

Teaching methods: Didactic lectures/discussions, case studies, assigned readings, and other materials as assigned. Participation in simulation and other lab experiences. Precepted clinical hours.

Evaluation:

1. Weekly meeting with Fellowship Director to include discussion of exemplar case from clinical experiences
2. Simulation case study with evaluation
3. Evaluation of clinical preceptor
4. Evaluation of clinical procedures log

Course materials :

Tintinalli, J. E., Stapczynski, J.S., Cline, D.M., Ma, O.J., Cydulka, R.K., Meckler, G. D. (2011) Tintinalli's Emergency Medicine A Comprehensive Study Guide (7<sup>th</sup> edition)  
 Adams (need info)  
 Additional materials as assigned

Attachments:

1. Topical outline
2. Schedule
3. Details related to assignments, if any
4. Locations of clinical experiences and information about the site
5. Procedure list

Date: 05/2014