**NEUROLOGY**

**Overview**

Exposure to neurology occurs in both the inpatient and ambulatory settings. The inpatient experience occurs in the setting of assisting attending neurologists perform consultations and procedures at the request of other physicians. Hospitalized patients include those with hemorrhagic and ischemic stroke, encephalopathies, seizures and neuromuscular diseases.

**Goals**

*(All PGY Levels)*

- To teach residents the degree of neurology necessary to be a competent internist.
- To teach residents the ability to recognize when an internist should consult a neurologist

**Objectives**

*(All PGY Levels)*

**Patient Care**

- To learn to interview and examine patients, in an effective, efficient and sensitive manner.
- To effectively perform a neurologic exam, including examination of patients with neuropathy and cranial nerve pathology.
- To identify certain signs and their possible disease associations.
- To educate patients about their neurologic disease.
- To obtain all necessary medical information by chart review, discussion with the requesting service and through contact with the patient's primary care physician as necessary and appropriate.
- To competently perform lumbar puncture.
- To understand the indications for cerebral imaging.
- To determine the severity and stability of both new and old medical conditions.
- To learn the priorities of medical management that will help to forestall progression of neurologic disease.
- To recommend/manage the treatment of the patient's neurologic diseases as necessary or as requested by the physician/team requesting the consult.
- To recognize the need for subspecialty consultation by a neurologist.

**Medical Knowledge**

- To expand the clinical knowledge of the basic and clinical sciences underlying neurologic diseases.
- To learn to access and critically evaluate current medical information and scientific evidence relevant to patients' medical illnesses.
• To understand the radiographic findings of common neurologic disorders and when to use imaging techniques including MRI/MRA and CT.
• To interpret the results of cerebral fluid analysis.
• To obtain basic familiarity with the use and interpretation of cerebral arteriograms, EEGs, evoked potentials, nerve conduction tests and electromyography.
• To broaden knowledge in the pathophysiology of common neurologic syndromes.
• To broaden knowledge in the care of patients with neurologic illnesses.

Practice-Based Learning and Improvement

• To develop a logical and organized approach to the most common neurologic syndromes.
• To identify deficiencies in one's knowledge, skills and attitudes in the care of the patient with neurologic diseases.
• To develop strategies for correcting deficiencies in one's knowledge, skills and attitudes in the care of the patient with neurologic disease.
• To evaluate the requesting physician's satisfaction with the services provided by the neurology consultation service.

Interpersonal Skills and Communication

• To communicate, in a sensitive and effective manner, with patients with neurologic disease.
• To communicate in an effective manner with the service requesting the consultation to confirm the reason for the consultation, and to ensure that the question asked is clear.
• To communicate with the patient's primary care physician early and as often as necessary.
• To complete a concise consultation note with clear, detailed recommendations.
• To ensure that all questions asked by the consulting/requesting team have been satisfactorily answered.
• To communicate with the nursing staff and other members of the patients’ health care team to ensure that the plan of care is understood and implemented.

Professionalism

• To be professional in all interactions with patients, families, colleagues and all members of the health care team.
• To ensure patient understanding of their disease and consent to their treatment plans.
• To effectively educate student and resident colleagues.
• To demonstrate respect for alternative, but appropriate treatment plans other than those recommended by the neurologist.
• To be sensitive and respectful when expressing concerns about alternative and inappropriate treatment plans that are being considered by other members of the health care team.
Systems-Based Practice

- To assist the requesting service in the coordination of their patient's care.
- To assist with scheduling of any tests, treatments or physician appointments to ensure the patient's proper medical care is accomplished.
- To use evidence-based, cost conscious strategies in the medical care of patients.

Knowledge to be assessed

The resident should have knowledge and understanding of the following medical illnesses/states (though not exclusively):

<table>
<thead>
<tr>
<th>Benign positional vertigo</th>
<th>Epidural abscess</th>
<th>Parkinson's disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central nervous system infection</td>
<td>Epilepsy</td>
<td>Peripheral neuropathy</td>
</tr>
<tr>
<td>Brain abscess</td>
<td>Headache</td>
<td>Sleep disorders</td>
</tr>
<tr>
<td>Encephalitis</td>
<td>Labyrinthitis</td>
<td>Spinal stenosis</td>
</tr>
<tr>
<td>Meningitis</td>
<td>Lumbar, cervical disk syndromes</td>
<td>Subarachnoid hemorrhage</td>
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<tr>
<td>Cerebrovascular disease</td>
<td>Multiple sclerosis</td>
<td>Subdural hematoma</td>
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<tr>
<td>Stroke</td>
<td>Neuromuscular disease</td>
<td>Toxic encephalopathies, e.g.</td>
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<tr>
<td>Transient ischemic attack</td>
<td>Amyotrophic lateral sclerosis</td>
<td>alcohol withdrawal</td>
</tr>
<tr>
<td>Dementias</td>
<td>Guillain-Barré syndrome</td>
<td></td>
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<tr>
<td>Alzheimer's</td>
<td>Muscular dystrophy</td>
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<tr>
<td>Multi-infarct</td>
<td>Myasthenia gravis</td>
<td></td>
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<tr>
<td>Lewy body</td>
<td>Myopathy</td>
<td></td>
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<tr>
<td>Normal pressure</td>
<td>Normal pressure</td>
<td></td>
</tr>
<tr>
<td>Hydrocephalus</td>
<td>Hydrocephalus</td>
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</tbody>
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Methods of achieving objectives

- Direct patient care recommendations under the supervising Attending
- Didactic (teaching) sessions with the Attending physician.
- Self study using any one of the recommended basic (reference) textbooks of clinical neurology:
  
  “Principles of Neurology Companion Handbook”
  Raymond D. Adams and Maurice Victor
  McGraw Hill, 6th ED. 1997

  “Contemporary Diagnosis & management of the patient with Epilepsy”
  I/O E. Leppich, M.D.
  Handbooks in Healthcare, 1997

- Select handouts and journal articles on pertinent topics.
- Core conference series
- Electronic databases and computerized resources (UF databases, Up To Date)
**Assessment tools**

- Attending will monitor all aspects of Resident's performance in Neurology Clinic.
- Attending will monitor all aspects of Resident's performance while caring for patients on the neurology consultation service.
- Attending will critique Resident's assessment and plan.
- Attending will monitor Resident's self-directed learning.
- Attending will determine whether Resident has met the objectives detailed above.
- Neurology MKSAP questions

**Evaluation process**

- Goals and Objectives will be reviewed with the resident at the beginning of each rotation.
- Resident will sign attestation statement verifying receipt of goals and objectives.
- Verbal feedback throughout and at the completion of the rotation from the Attending.
- Evaluation form completed by the Attending at the conclusion of the rotation, and reviewed with the Resident.

This document was reviewed by the faculty of the Department of Medicine OUCMT 9/06 who approve and support the contents.