

NEUROLOGY CURRICULUM 2008 – 2009

Overview/ Learning Venues

- Residents are assigned to a dedicated two or four-week Neurology rotation during their training, typically in the R-3 year. Patient-care experiences may be through the Neurology consultation service, Neurology inpatient service, or Neurology outpatient clinics. Medicine residents also attend the weekly Neurology Grand Rounds a 8 am each Friday and selected resident conferences of the Department of Neurology.
- Neurological problems are commonly encountered in patients admitted to the General Medicine ward rotations at both LSUHSC-S and the VA Hospital. The Neurology Consultation Service at the University Hospital frequently assists in the management of these patients. Thus, residents frequently have the opportunity to discuss cases with the Neurology faculty.
- Cognitive disorders of the elderly are encountered frequently during nursing home rounds that are part of the Geriatrics rotation.
- Lectures on cognitive disorders, dementia, and delirium are presented as part of the Geriatrics rotation and the Geriatrics core curriculum lectures.
- Residents are expected to read sections of standard Medicine and Neurology textbooks, and UpToDate that are applicable to the patients they encounter during any of the above experiences.

Evaluation Methods

- Global faculty evaluation at the end of the dedicated Neurology rotation (*all competencies*)
- Clinical evaluation exercises: Interviewing skills, examination skills; counseling skills; medical knowledge and diagnostic interpretation; documented through *MyEvaluations (medical knowledge, patient care; interpersonal and communication skills)*. Specific exercises may focus on, but are not limited to:
 - Observation of a complete neurological examination
 - Interpretation of cerebrospinal fluid analysis results
 - Interpretation of CT scan of the head
- Neurology content area of the annual In-Training Examination (*medical knowledge, patient care*): In most cases, the ITE functions as a self-evaluation tool or a “pre-test” in preparation for the Neurology rotation.

Educational Goals

Patient Care

- Demonstrate ability to obtain a detailed, focused medical history in a patient with neurological disease
- Demonstrate ability to perform a detailed neurological examination, with appropriate modifications for obtunded, comatose, uncooperative, and cognitively-impaired patients
- Develop an evidence-based approach to the diagnostic evaluation of:
 - Stupor and coma
 - Seizures
 - Tremor and other movement disorders
 - Vertigo
 - Dementia
 - Delirium
 - Peripheral neuropathy/ changes in sensation
 - Paralysis/ weakness
 - Headache
 - Abnormal speech
- Understand the pharmacologic management, included the pharmacokinetics and pharmacodynamics of commonly used drugs, for the following problems:
 - Stroke and cerebrovascular disease
 - Epilepsy
 - Dementia
 - Tremor and Parkinson's disease
 - Headaches
 - Multiple sclerosis

Medical knowledge

- Learn to localize neurologic lesions through an understanding of neuroanatomy
- Develop a differential diagnosis of the following neurological problems or symptoms:
 - Stupor and coma
 - Seizures
 - Tremor and other movement disorders
 - Vertigo
 - Dementia
 - Delirium
 - Peripheral neuropathy/ changes in sensation
 - Paralysis/ weakness
 - Headache
 - Abnormal speech
- Understand the pathophysiology and clinical presentation of the following diseases:
 - Stroke/ TIA/ RIND

- Alzheimer's disease, vascular dementia, Lewy body dementia, fronto-temporal dementia, dementia secondary to metabolic disorders, and other causes of dementia
- Alcohol and drug-related neurological disorders
- Seizure disorder
- Parkinson's Disease and other movement disorders
- Multiple sclerosis and other demyelinating diseases
- Tumors of the central nervous system
- Vascular headaches
- Guillian-Barre syndrome
- Amyotrophic lateral sclerosis and motor neuron diseases
- Muscular dystrophy
- Myasthenia gravis and other dystonias
- Neurologic manifestations of HIV infection
- Understand the indications and basic interpretation of the following tests:
 - Lumbar puncture and CSF analysis
 - Doppler examination of the carotid system
 - Neuro-imaging studies, including CT of the head and spinal cord, MRI, and MRA
 - Electromyography and nerve conduction studies
 - Electroencephalogram
 - Metabolic and immunologic tests applicable to neurologic diseases

Interpersonal and Communication Skills

- Develop skill in interviewing patients with problems in the scope of the Neurology, with attention to education and culturally-sensitive language.
- Develop skill in giving a focused presentation of clinical findings to the attending faculty.
- Learn to record the results of a neurological examination in the medical record.
- Develop skill at communicating findings and recommendations of consultations to primary physicians, both verbally and in writing
- Learn to communicate appropriate information to patients who are seen in consultation, and in obtaining informed consent for procedures performed by the subspecialty.

Professionalism

- Demonstrate a commitment to excellence and continuous professional development.
- Demonstrate punctuality and preparation for consultation rounds.
- Demonstrate courteous and professional behavior during encounters with patients and families.
- Demonstrate appropriate professional relationships with colleagues, faculty, and other members of consultation team.
- Demonstrate respect for patients' primary physicians in discussions with patients and within the consult team.

- Demonstrate a habit of evaluating consultations patients and conveying information in a timely manner

Practice-based Learning and Improvement

- Demonstrate a pattern of self-evaluation of performance, identifying gaps in medical knowledge during the evaluation and management of patients, and incorporating feedback into performance.
- Demonstrate a pattern of replicating the effective clinical decision making of senior faculty
- Demonstrate a pattern of independent reading and study related to the diseases encountered in the clinics and through hospital consultations.
- Demonstrate a pattern of using library and Internet resources to appraise the literature related to problems encountered during the rotation, and of applying evidence to patient care.
- Learn to critically appraise articles related to Neurology.

Systems-based Practice

- Develop an understanding of the hospital resources available to the evaluation and management of patients with problems encountered by the subspecialty.
- Demonstrate sensitivity to health care costs, and insight into balancing costs and quality care.
- Demonstrate sensitivity in working with case managers, clinical coordinators, technicians, and other paramedical personnel to enhance the effectiveness of patient care.
- Demonstrate a knowledge of and commitment to the rules governing confidentiality of patient information.