GRU Medical College of Georgia
Department of Neurology

COMPREHENSIVE STUDENT GOALS AND OBJECTIVES

Core Curriculum Guidelines

Introduction

Up to 10% of patients seen by family practitioners present with neurologic symptoms and pose neurologic questions to their physicians. Only 16% of the 45 million Americans who visit a physician for a chief complaint referable to the nervous system are ever evaluated by neurologists. Clearly, primary care physicians are routinely called upon to evaluate and manage patients with neurologic disease. Practicing physicians require a firm understanding of the general principles of clinical neurology. The most suitable setting in which to lay the foundation for that understanding is in a neurology clerkship in the clinical phase of medical school. This document outlines the desirable components of a clinical neurology clerkship.

1. Goals and Objectives of the Clinical Neurology Clerkship
    A. Goal: To teach the principles and skills underlying the recognition and management of the neurologic diseases a general medical practitioner is most likely to encounter in practice.
    B. Objectives:
        1. To teach or reinforce the following PROCEDURAL SKILLS:
            - The ability to obtain a complete and reliable history
            - The ability to perform a focused and reliable neurologic examination [see Appendix 1]
            - The ability to examine patients with altered level of consciousness or abnormal mental status [see Appendix 3]
            - The ability to deliver a clear, concise, and thorough oral presentation of a patient's history and examination
            - [*Ideally*] the ability to perform a lumbar puncture
        2. To teach or reinforce the following ANALYTICAL SKILLS:
            - The ability to recognize symptoms that may signify neurologic disease including disturbances of consciousness, cognition, language, vision,

hearing, equilibrium, motor function, somatic sensation, and autonomic function)
    - The ability to distinguish normal from abnormal findings on a neurologic examination
    - The ability to localize the likely site or sites in the nervous system where a lesion could produce patient's symptoms and signs
    - The ability to formulate a differential diagnosis based on lesion localization, time course, and relevant historical and demographic features
    - An awareness of the use and interpretation of common tests used in diagnostic neurologic disease
    - An awareness of the principles underlying a systematic approach to the management of common neurologic diseases (including the recognition and management of situations that are potential emergencies)
    - An awareness of situations in which it is appropriate to request neurologic consultation
    - The ability to review and interpret the medical literature (including electronic databases) pertinent to specific issues of patient care

2. Content of subjects to be taught
    A. The Neurologic Examination (as an integral component of the general medical examination)
        - how to perform a focused but thorough neurologic examination [see Appendix 1]
        - how to perform a screening neurologic examination [see Appendix 2]
        - how to perform a neurologic examination on patients with an altered level of consciousness [see Appendix 3]
        - how to recognize and interpret abnormal findings on the neurologic examination
    B. Localization–general principles differentiating lesions at the following levels:
        - Cerebral hemisphere
        - Posterior fossa
        - Spinal cord
        - Nerve root/Plexus
        - Peripheral nerve (mononeuropathy, polyneuropathy, and mononeuropathy multiplex)
        - Neuromuscular junction
        - Muscle

C. Symptom Complexes–a systematic approach to the evaluation and differential diagnosis of patients who present with:
    - Foot weakness
    - Diffuse weakness
    - Clusiness
    - Involuntary movements
    - Gait disturbance
    - Urinary or fecal incontinence
    - Dizziness
    - Vision loss
    - Diplopia
    - Dysarthria
    - Dysphasia
    - Acute mental status changes
    - Dementia
    - Aphasia
    - Headache
    - Focal pain
        1. facial pain
        2. neck pain
        3. low back pain
        4. neuropathic pain
    - Numbness or paresthesias
    - Transient or episodic focal symptoms
    - Transient or episodic alteration of consciousness
    - Sleep disorders
    - Developmental disorders

3. Approach to Specific Diseases–general principles for recognizing, evaluating and managing the following neurologic conditions (either because they are important prototypes, or because they are potentially life-threatening):
    A. Potential emergencies
        - Increased intracranial pressure
        - Toxic-metabolic encephalopathy
        - Subarachnoid hemorrhage
        - Meningitis/Encephalitis
        - Status epilepticus
        - Acute stroke (ischemic or hemorrhagic)
        - Spinal cord or cauda equina compression

- Head Trauma
- Acute respiratory distress due to neuromuscular disease (e.g., myasthenic crisis or acute inflammatory demyelinating polyradiculoneuropathy)
- Temporal arteritis

B. Strokes
C. Seizures
D. Alzheimer's disease
E. Parkinson's disease
F. Essential tremor
G. Multiple sclerosis
H. Migraine
I. Bell's palsy
J. Carpal tunnel syndrome
K. Diabetic polyneuropathy
L. Brain Death