

IDPT7041

Neurologic Care

Course Goals

1. Develop the knowledge and skills necessary to care for Neurology patients in the inpatient and outpatient setting.
 2. Develop the skills to work effectively within a multi-disciplinary health care team or network for patients with Neurologic disease.
 3. Develop Patient- Centered Clinical Skills and Reasoning in Neurologic Care.
 4. Communicate effectively both verbally and in writing with colleagues including physicians, nurses, medical assistants, and other interprofessional team members in the Neurology Inpatient and Outpatient setting.
 5. Form clinical questions, retrieve, and interpret high-quality evidence to advance patient care.
 6. Develop knowledge of the procedural skills and diagnostic studies involved in the treatment of common Neurologic conditions and emergencies.
 7. Predict the key localization of common conditions based on the history and neurological examination - "localize the lesion."
 8. Value the importance of neurology and related fields.
 9. Employ key foundational neuroscience concepts to predict clinically relevant concepts to core clinical conditions in neurology.
 10. Support probable diagnoses for common neurologic conditions - "reason and diagnose."
 11. Compose comprehensive evaluation and therapeutic plans for core neurologic conditions - "evaluate and treat."
 12. Develop strategies to effectively counsel patients and their families on common neurologic diagnoses.
 13. Develop an effective technique to discover novel diagnostic techniques, treatments or controversies in neurology through systematic inquiry and appraisal.
 14. Value the importance of neurology and related fields.
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Clinical Learning Objectives

Clinical

Interpersonal and Communication Skills

1. Recognize differences in clinical care in the context of patient's preferences and overall health.
2. Identify when to use an interpreter during appropriate patient care scenarios.
3. Document and provide an oral report of an accurate history from patient using a systems based approach.
4. Document and provide an oral report of prioritized differential diagnoses for common clinical conditions in Neurologic care.
5. Seek and obtain additional information from secondary sources (ex. family, medical record, pharmacy, allied health professionals) when the patient presents and throughout the duration of their care episode.
6. Accurately communicate data orally or in writing to other physicians or health care providers.

Interprofessional Collaboration

1. Understands unique roles of other providers within the hospitalized system including but not limited to: physical and occupational therapists, social workers, case managers, and nurses.
2. Work effectively as a member of the health care team.

Medical Knowledge for Practice

1. Students will understand the medical, legal, and ethical implication of brain death, the vegetative state, and the minimally conscious state.

Patient Care

1. Students will understand the indications for and limitations of computed tomography (CT), magnetic resonance

imaging (MRI), electroencephalography (EEG), lumbar puncture (LP), and nerve conduction studies and electromyography (NCS/EMG).

2. Recognize Neurologic emergency signs and symptoms, assessment and treatment (Status Epilepticus, Acute Stroke).
3. Gather data that defines both the disease and the illness experience (patient/caregivers' perspective, expectations and the illness' effect on their functioning, preferences for care) and develop diagnostic/management plans that account for these variables.
4. Demonstrates knowledge to interpret basic clinical tests and images commonly encountered in Neurologic care.
5. Perform an accurate and comprehensive Neurologic examination.
6. Students will have performed or witnessed a lumbar puncture (LP).
7. Apply an understanding of Neuroanatomy to the localization of disease for common presenting Neurologic signs in patients.

Personal and Professional Development

1. With assistance, reflect on feedback to develop plans for improvement.
2. With assistance, identify strengths and limits to one's knowledge and performance and set learning and improvement goals.

Practice-Based Learning and Improvement

1. Effectively search evidence based medicine resources to obtain original primary literature.
2. With assistance, determine if evidence can be generalizable to individual patients.
3. Identify clinical questions as they arise in patient care activities.

Professionalism

1. Communicate effectively with patients and families, across a broad range of cultural, literacy and socioeconomic backgrounds.
2. Demonstrate sensitivity to patients including but not limited to differences in race, gender, sexual orientation and literacy.
3. Document truthfully.
4. Demonstrate compassion, integrity, and respect for others and responsiveness to patient needs.

Didactic Learning Objectives

Cerebrovascular Session

1. Predict localization of strokes to major brain regions and vascular territories.
2. Formulate a reasonable differential diagnosis for strokes.
3. Judge reasonable differential diagnoses based on clinical evidence.
4. Recognize the symptoms of transient ischemic attacks.
5. Choose appropriate diagnostic tests for acute stroke evaluation.
6. Choose appropriate therapies for acute treatment, and prevention of stroke.
7. Recognize common comorbidities of stroke.
8. Explain the natural histories and expected courses of stroke to patients.
9. Predict psychosocial issues of the patients and their caregivers.
10. Explain stroke phenomenon for patients through understanding of neurophysiology, anatomy, epidemiology, and pharmacology.

Movement Disorders Session

1. Appreciate the dopaminergic pathways relevance to the parkinsonian clinical presentations.
2. Formulate a reasonable differential diagnosis for parkinsonism.
3. Formulate a reasonable differential diagnosis for tremor.

4. Discover the latest available evidence for the diagnosis of common conditions.
5. Choose appropriate pharmaceutical therapies using knowledge of neuropharmacology including pharmacokinetics, dynamics & key side effect profiles.
6. Recognize common comorbidities of neurologic disease.
7. Appreciate the role of palliative care in neurologic disease.
8. Explain the natural histories and expected courses of common conditions in neurology to patients.
9. Predict psychosocial issues of the patients and their caregivers.
10. Model disease phenomenon for patients through understanding of neurophysiology, anatomy, epidemiology, and pharmacology.

NIHSS Certification

1. Complete and Submit a NIH Stroke Scale Certification (NIHSS) certification.

The Neurologic Exam

1. Recall major components of the comprehensive screening neurologic exam.
2. Apply knowledge of clinical neuroanatomy to choose appropriate examination techniques to compose a diagnostic exam.
3. Synthesize key exam findings to important neuroanatomic landmarks.
4. Describe the differences between upper and lower motor neuron weakness.
5. Relate the importance of the essential neurologic exam to your potential field of interest.