DUKE INTERNAL MEDICINE RESIDENCY PROGRAM

NEUROLOGY CONSULTS ROTATION DESCRIPTION

http://neurology.medicine.duke.edu/

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OVERVIEW:

The Duke Neurology Consult (Elective) Rotation consists of an inpatient consultative experience. Through these diverse experiences, medical house staff trainees will learn a comprehensive overview of Neurology. Interns considering a Neurology consults rotation should contact Dr. Sinha. Junior and senior assistant residents rotating on the Neurology Consults Rotation will primarily perform inpatient evaluations at Duke University Hospital. The house officer will work closely with a Neurology junior resident to perform, under the supervision of the teaching attending physician, inpatient consults as requested from other clinical services.

Required didactic conferences during this rotation are:
1- Clinical Neuroscience Grand Rounds
   Wednesdays at 8 am
   Location Duke North 2003
2- Neurology Interesting Case Conference
   Thursdays at 5 pm
   Location Duke South O3103
3- Morning Report
   Tuesdays at 7:30 am
   Location Duke North 4275

GOALS OF THE ROTATION:
1) Develop the ability to perform a medical history, review of systems, and physical examination appropriate to adequately evaluate, diagnose and begin to provide therapy and advice for outpatients with suspected and confirmed Neurologic disorders

2) Learn how to perform inpatient consultations and become a competent and caring physician in the needs of patients with Neurologic disorders who require hospitalization
PATIENTS AND DISEASE PROFILE:

Inpatient Neurology Consult Service (DUH): Adult inpatients on any adult service within Duke University Hospital who are confirmed or suspected of having a Neurologic condition.

Neurologic conditions that are frequently encountered during Neurology Consult Rotation

**Dementia/Delirium**
- Recognize the historical and clinical manifestations of dementia and delirium.
- Differentiate between these two diagnoses.
- Generate an appropriate differential diagnosis for dementia and delirium.
- Understand the laboratory evaluation that is necessary to evaluate the patient.

**Neurologic Complications of Systemic Disease**
- Recognize neurologic complications of systemic disorders including endocrine, hematology, hepatic and renal diseases.
- Recognize paraneoplastic syndromes and their association with malignancy
- Recognize neurologic complications of pregnancy.
- Understand the diagnostic evaluation and treatment of these disorders

**Post-Surgical Neurologic Complications**
- Understand the post-surgical neurologic complications that can occur, especially after cardiac and carotid artery surgery

- Formulate prognostic information and a treatment plan, if needed.

**Headaches**
- Diagnose common types of headaches including classic migraine, common migraine, cluster headache, muscle contraction headache and headache due to increased intracranial pressure.
- Understand the necessary laboratory evaluation of the patient’s headache.
- Understand the indications and side effects of medical therapies for migraine including migraine status.

**Back and Neck Pain**
- Understand the historical and clinical aspects of back and neck pain that may suggest specific etiologies.
- Know the differential diagnosis that is appropriate for those complaints.
- Be able to localize the etiology through physical examination and confirmatory tests such as electromyography or neuroradiologic imaging studies.
- Understand the therapeutic options based on the specific etiologies of the pain.
Dizziness
- Understand the historical and clinical characteristics of disorders that cause dizziness including orthostatic hypotension, benign positional vertigo, Meniere’s disease, vertebrobasilar ischemia and drug toxicity.
- Generate an appropriate differential diagnosis based on the patient’s findings.
- Perform an appropriate laboratory evaluation of the patient’s complaints.
- Learn the treatment options based on the specific etiology.

Seizure/Syncope
- Understand the historical features of the common seizure disorder types such as simple partial, complex partial, absence, and generalized tonic-clonic seizures.
- Be able to differentiate seizure from syncope.
- Understand the clinical and laboratory evaluation of both disorders.
- Understand the indications and side effects of common anticonvulsant medications.

Parkinson’s Disease
- Recognize the historical and clinical features of Parkinson’s disease.
- Generate the appropriate differential diagnosis and laboratory evaluation.
- Understand the uses and side effects of medications used to treat Parkinson’s disease.

Neurologic Complications of Alcohol Use
- Understand both the acute and chronic neurologic toxicity of alcohol abuse.
- Recognize the historical and clinical features of a patient who is affected by the acute or chronic toxicity of alcohol.
- Formulate a treatment plan based on the specific neurologic complications

Functional Neurological Disease
- Understand when the history and physical examination of a patient suggest a non-organic cause of their neurological complaint.
- Understand the differential diagnosis for functional neurological complaints

DUTIES of the House Officer on Neurology Consults (Elective for Interns):
The medicine residents rotate through the inpatient Neurology consult service at DUH. Several Neurology attending physicians rotate on a weekly basis on the private consultation service at Duke University Hospital. During the week, the medical resident receives the consults for the Neurology resident on consult rotation and performs these consultations. The medical resident then presents the case to the Neurology attending who reviews the history and physical examination with that resident. The medical resident will then follow-up on the consultation patient as deemed appropriate by the consultation team. The medical resident rounds with the Neurology attending on a daily basis and as needed. Interns on the Neurology Elective rotation typically see 1-2 new
consults/day and JARs and SARs may see 2-3 new consults /day. Interns and residents are expected to follow-up on consults that they have seen. They may also be asked to follow-up on other patients.

**Procedures**
The house staff may perform procedures such as lumbar puncture in which they are properly trained under supervision, and will be assisted by the senior Neurology resident under the supervision of the teaching attending physician. All procedures will be documented by a written note in the chart. Prior to all procedures, patient identification should be accomplished using the “TIME-Out” process.

**Hand-off protocol**
The resident handoff in browser for the Neurology Consult service is updated by the house officer at the end of the day following attending rounds.

**Educational Conference Attendance**
Medical house staff will attend the following conferences during the Neurology Consult Rotation:

1. **Clinical Neuroscience Grand Rounds**
   - Wednesdays at 8am
   - Location Duke North 2003
2. **Neurology Interesting Case Conference**
   - Thursdays at 5 pm
   - Location Duke South O03103
3. **Morning Report**
   - Tuesdays at 7:30 am
   - Location Duke North 4275

In addition, there are noon conferences on various topics every day. A list of weekly topics is available from the Neurology residents.

**Back-up**
At no time should house staff feel overwhelmed by either the number of patients to care for, amount of work to do or a feeling that there are too many patients that need to be seen. In the event that this does occur, the resident must take responsibility for asking for help and should not feel any pressure to not do so, or that such an action would be viewed as “a sign of weakness”. Available resources include the Neurology resident on consults, the Neurology chief resident, the chief medical resident, and the Neurology attending physician on service or on call.

**EDUCATIONAL METHODS:**
Residents are assigned significant responsibilities for patient evaluation and care in the inpatient setting where teaching and supervision are provided by senior Neurology residents, Neurology fellows and teaching attending physicians. This clinical experience is complemented by didactic conferences which focus on clinic and basic science aspects of Neurology, Neuroradiology, laboratory testing and pathology. Based on the complex needs of some patients with chronic conditions, residents are presented an integrated program for care based on cultural, socioeconomic, ethical and behavioral approaches.
Supervision of the trainees by faculty is accomplished by:
Review by the faculty of the resident’s history and physical examination, plan of therapy and evaluation of laboratory and other diagnostic data
Direct Observation of Resident’s History and Physical Examination
Direct Observation of Procedures and Skills
Case Review and Discussion at Conferences

EVALUATION METHODS:

Each resident will be evaluated for his/her ability to formulate a reasonable plan of diagnostic testing and patient management, as well as by his/her performance of collateral reading and medical knowledge, judgment, intellectual honesty, and maturity. The resident’s performance in the core competencies of patient care, medical knowledge, practice-based learning, interpersonal and communication skills, professionalism and system based practices will be evaluated by the various attending physicians with whom s/he works during this rotation and documented using https://duke.medhub.com/. Each resident will also be evaluated by the attending as to his/her potential for academic medicine, insofar as the attending can assess this through observation and interaction in the context of the rotations in the outpatient clinics and inpatient consult service.

Residents will also receive individualized verbal feedback from Neurology residents and attending physicians with whom they work on this rotation. Residents are encouraged to request feedback verbally from supervising residents and attending physicians during the course of and at the conclusion of the Neurology experience.
CORE ACGME COMPETENCIES- NEUROLOGY CONSULTS ROTATION:

Patient Care
1. Perform and document a complete history including chief complaint, history of present illness, past medical history, review of systems, family history, medication review, and social history.
2. Perform and document a complete physical exam including vital signs, pertinent general exam, and neurological exam including mental status, cranial nerves, motor, sensory, reflexes, and coordination/gait.
3. Develop a formulation of the case for presentation including localization and differential diagnosis.
4. Understand how to do a focused consult evaluation when time is limited.
5. Develop plans for evaluation and treatment of patients in concert with faculty and other team members.
6. Counsel and educate patients and their families.

Medical Knowledge
1. Begin to demonstrate knowledge of common neurologic disorders including their pathophysiology, evaluation, and treatment.
2. Be able to evaluate common neurological chief complaints
3. Be able to evaluate and treat common neurological emergencies
4. Understand common perioperative neurological issues
5. Evaluate patients with neurological complications of systemic disease including patients on the cardiology, oncology, obstetrics/gynecology, psychiatry, and surgical services
6. Begin to understand the uses and interpretations of ancillary tests used in neurology
7. Understand the evaluation and prognostic issues for patients with hypoxic/ischemic coma.
8. Be able to perform and interpret a lumbar puncture

Practice Based Learning and Improvement
1. Demonstrate skills in obtaining information through core texts, libraries, Internet searches, and databases.
2. Participate in the Neurology Conferences during the rotation
3. Review neurology practice guidelines when available such as the AAN Guidelines.

Interpersonal and Communication skills:
1. Work effectively as part of the Neurology clinic ambulatory staff and inpatient consult service team consisting of fellows, other residents, medical students, nursing staff and pharmacists.
2. Develop effective communication skills towards patients, their families, colleagues, and members of the patient care team
3. Develop the ability to obtain and interpret consultations and work with a consulting team in the care of your patient.
4. Serve as an effective consultant when asked, answering a specific question and communicating clearly to the requesting team.

5. Educate those around you including students, other house staff, faculty, members of the care team, and patients and families about neurological disorders

Professionalism:

1. Understand your responsibilities for patient care, documentation, team coverage and sign-out, facilitating continuity of care and emergent evaluation when needed.
2. Realize extra support for the practice may be needed in time of colleague emergency.
3. Demonstrate ethical and compassionate behavior in the care of patients regardless of the patient’s age, culture, gender, religion, socioeconomic status, or sexual orientation.
4. Understand issues of consent, confidentiality and end of life care.
5. Be aware of safety issues in the evaluation and treatment of your patients, working under the creed of “first, do not harm”.
6. Demonstrate exemplary attitude, respect, compassion and integrity at all times
7. Demonstrate a commitment to excellence and ongoing professional development.

System Based Practices:

1. Practice cost-effective utilization of laboratory studies
2. Work effectively with primary health care teams and ancillary care providers to provide appropriate and timely patient care
3. Coordinate outpatient follow-up for consult patients and communicate with clinic physicians.