

Name of Rotation: Neurovascular Ward

Supervisor: Wade Smith, MD, PhD; Nerissa Ko, MD, MAS

Rotation Description:

The Neurovascular Ward service cares for cerebrovascular patients on the 8-South step down service and the ward (chiefly 8-Long). The resident will have responsibility for inpatients on the service, and follow patients from admission through treatment and discharge. A wide variety of cerebrovascular problems will be encountered and the resident will interact with the multidisciplinary team including neuroradiologists and neurointerventionalists. Practical and didactic teaching sessions will supplement the patient care experience. The resident will also take part in the bimonthly journal club discussions of stroke topics.

Core Competencies:

Patient Care-Resident is able to provide compassionate, appropriate and effective patient care for the treatment of health problems and promotion of health. Resident understands how to appropriately prioritize patient problems and develop an appropriate diagnostic plan, prescribes medications appropriately, shows an appropriate balance between attention to the details of patient care and the overall context of treating the patient's illness. Resident obtains consultations appropriately, and is able to perform technical procedures adequately, when appropriate.

Medical Knowledge-Resident demonstrates knowledge of established and evolving biomedical, clinical, epidemiological, and social/behavioral sciences as well as the application of this knowledge to patient care. Resident is able to assess diagnostic information critically and constructively, and recognizes the psychosocial aspects of illness. Resident is able to critically evaluate the medical literature and apply new knowledge to the delivery of safe and effective patient care.

Practice-Based Learning and Improvement- Resident is able to critically evaluate the care of their patients, appraise and assimilate scientific evidence, and continuously improve patient care delivered on the basis of ongoing self-evaluation and learning. The resident uses knowledge to educate patient families, medical students, allied health personnel, peers, and other health professionals as appropriate. Resident is capable of self-identifying strengths, deficiencies, and the limits of their knowledge and expertise. The Resident is receptive to constructive criticism (formative evaluation feedback) regarding the care of patients and physician performance. Resident is able to set learning and improvement goals, and identify and perform activities appropriate to meeting those goals.

Interpersonal and Communication Skills-The Resident demonstrates interpersonal and communication skills that result in effective information exchange and collaboration with patients, families and other health professionals.

These skills include the ability to communicate across a broad range of socio-economic and cultural backgrounds and ability to communicate with physicians, health professionals, and health related agencies effectively. Resident is able to maintain comprehensive, timely and readable medical records. Resident can work effectively as a member or leader of a healthcare team and serve appropriately as a consultant to other physicians and health professionals. Resident is able to clearly lead daily work rounds, when appropriate.

Professionalism- Committed to carrying out professional responsibilities and adhering to ethical principles. Resident demonstrates respect for patient privacy and autonomy and is accountable to patient, society and the medical profession for actions. Resident demonstrates compassion, integrity and respect for others as well as responsiveness to patient needs that supersede self-interest. The Resident demonstrates sensitivity and responsiveness to a broad patient population including diversity in gender, age, culture, race, religion, disability, and sexual orientation. Resident demonstrates the ability to manage personal stress effectively. Answer pages or messages in a timely fashion. Resident understands how to maintain appropriate professional boundaries, and demonstrates integrity, honesty and compassion. Resident completes assigned tasks in a timely fashion.

Systems-Based Practice-Resident understands and is capable to interact effectively with different systems of care. Demonstrates the ability to provide high-quality care in a cost-effective manner. Resident incorporates consideration of cost-awareness and risk-benefit analysis in patient care decisions. Resident advocates for high quality care for all patients.

Rotation Goals: (list 3 – 6 goals)

- Perform a detailed neurological history and physical examination of a stroke patient. (**Competencies Addressed:** Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, Systems-Based Practice)
- Understand the indications and basic interpretation of diagnostic brain imaging for stroke. (**Competencies Addressed:** Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Systems-Based Practice)
- Understand the clinical evaluation and treatment of acute stroke. (**Competencies Addressed:** Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, Systems-Based Practice)
- Understand the pathophysiology, diagnosis and management of common neurovascular disorders including: ischemic stroke, hemorrhagic stroke, subarachnoid hemorrhage, and other cerebrovascular malformations. (**Competencies Addressed:** Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, Systems-Based Practice)
- Understand secondary stroke prevention measures. (**Competencies Addressed:** Patient Care, Medical Knowledge, Practice-Based Learning and Improvement)
- Opportunity to observe neurointerventional cases, and visit the OR. (**Competencies Addressed:** Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, Systems-Based Practice)

Rotation Objectives: (list 3 – 10 training objectives)

- Gain an introduction to the neuroanatomy and pathophysiology of acute cerebrovascular disease (**Competencies Addressed:** Patient Care, Medical Knowledge)
- Develop clinical skills in recognizing acute stroke syndromes (**Competencies Addressed:** Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, Systems-Based Practice)

- Learn basic strategies for management of stroke patients (Competencies Addressed: Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, Systems-Based Practice)

Bibliography/Study List: (list 3 – 10 references). Electronic learning resources can be listed also. These references should reflect general educational materials within your field that is appropriate for a resident in training. High impact individual papers may comprise up to 3 references on the list.)

1. Adams H, Adams R, Del Zoppo G, Goldstein LB. Guidelines for the early management of patients with ischemic stroke: 2005 guidelines update a scientific statement from the Stroke Council of the American Heart Association/American Stroke Association. *Stroke* 2005;36(4):916-923.
2. Albers GW, Amarenco P, Easton JD, Sacco RL, Teal P. Antithrombotic and thrombolytic therapy for ischemic stroke: the Seventh ACCP Conference on Antithrombotic and Thrombolytic Therapy. *Chest* 2004;126(3 Suppl):483S-512S.
3. Coull BM, Williams LS, Goldstein LB, Meschia JF, Heitzman D, Chaturvedi S, et al. Anticoagulants and antiplatelet agents in acute ischemic stroke: report of the Joint Stroke Guideline Development Committee of the American Academy of Neurology and the American Stroke Association (a division of the American Heart Association). *Neurology* 2002;59(1):13-22.
4. Tissue plasminogen activator for acute ischemic stroke. The National Institute of Neurological Disorders and Stroke rt-PA Stroke Study Group [see comments]. *New England Journal of Medicine*, 1995. 333(24): p. 1581-7.
5. Kistler, J.P., A.H. Ropper, and R.C. Heros, Therapy of ischemic cerebral vascular disease due to atherothrombosis. (2). *New England Journal of Medicine*, 1984. 311(2): p. 100-5.
6. Kistler, J.P., A.H. Ropper, and R.C. Heros, Therapy of ischemic cerebral vascular disease due to atherothrombosis (1). *New England Journal of Medicine*, 1984. 311(1): p. 27-34.