GOALS AND OBJECTIVES

Resident Level: PGY-3

Setting: Residents will be trained to evaluate patients with vascular neurology disease on the inpatient neurology service, neurology consult service, and in interaction with the neurosciences critical care unit.

Goals: The goals of the vascular neurology residency rotation is to provide graduated comprehensive inpatient training in the assessment, evaluation and treatment of patients with cerebrovascular disease. Particular emphasis is given to the treatment of acute stroke.

Objectives: By the end of the rotation the resident will:

- Obtain an appropriate history and examination in patients with vascular insults
- Become certified in and proficient in performing the National Institutes of Health Stroke Scale acute stroke neurologic evaluation
- Develop a general differential diagnosis for the cause of the symptoms
- Select an appropriate evaluation and referrals
- Discuss the pathophysiology and treatment of the patient
- Provide criteria for IV tPA use, tPA dosing and specifics of care in the 24 hours after tPA treatment
- Understand the steps of a first responder for acute stroke cases
- Teach any rotating medical students about the essentials of stroke management
- Provide information to family members and patients in terms they understand and that respect the patient’s background (cultural, ethnic, religious, and economic)
- Present cases and literature reviews at conferences and educational programs
- Be able to discuss key articles in the stroke literature

Instructional Methods

The resident:

- Participates in daily ward rounds and twice daily critical care rounds
- Joins the acute stroke team for codes during the day when possible

Clinical conference (in addition to usual neurology resident conferences):

- Vascular neurology conference, Thursday 7 AM, Dr. Stan Barnwell, director. 
  Attendance is mandatory for the resident rotating on the stroke service.

Daily patient management rounds are held in conjunction with the neurosciences ICU team for ICU patients and then with the ward team. Each provides the opportunity to discuss teaching points as they arise. More in depth teaching rounds are held with the ward team weekly. Each set of rounds incorporates both inpatient and consult patients at OHSU.
The core vascular team includes the vascular neurology resident, the neurology resident assigned to the stroke rotation (usually PGY2), and one of two attending vascular neurologists. A medical student (usually MS IV), an intern or additional neurology resident may sometimes join the team when the service is very busy. For the neurosciences ICU rounds, this core team joins members of the ICU team, including another general neurology resident, neurosurgery resident, physician’s assistant and critical care attending. A nurse involved in the care of the patients often joins the bedside rounds.

The neurology resident assigned to the stroke rotation is primarily responsible for writing the detailed admission or initial consult note, daily notes and for writing orders and ensuring the details of patient care are carried out for patients at OHSU. The vascular neurology resident assists the neurology resident in these duties. The vascular neurology resident is the general neurology resident’s first resource for management questions, although the vascular neurology attending is closely involved especially in the beginning of the residency. In addition, the vascular neurology resident performs consults at the VA when requested by general neurology or another service there. The vascular neurology resident is the first responder for acute stroke cases during the day and when on call, and involves the neurology resident promptly when that resident is available and not participating in another required activity.

The vascular neurology attending faculty takes the opportunity to educate the residents on patient related issues as they arise on ICU or ward rounds. Diagnostic tests are viewed daily via the PACS system and abnormal findings discussed. Approximately once a week more in depth teaching sessions occur. These are initially led by the attending faculty but are increasingly presented by the vascular resident or by both residents jointly as they research topics.

The neurology resident on the stroke rotation has opportunities to observe representative interventional treatment procedures for ischemic and hemorrhagic stroke patients, including acute stroke treatment, stents, aneurysm coiling and AVM embolization.