**M4 Elective Stroke Rotation**

**Rotation Goals & Objectives:**

This rotation is intended to give the student exposure to taking stroke call, triaging stroke patients, and interpreting stroke related imaging in a rapid fashion. Residents will gain this knowledge by participating in “Tele-Stroke” management with the UC Stroke Team for all hospitals in the Greater Cincinnati/Northern Kentucky region as well as by seeing all stroke patients who present to UCMC Hospital and observing thrombectomies. Students will also have opportunities to rotate in stroke clinic and observe outpatient care of stroke patients.

At the end of this rotation, students should expect to have been involved in numerous acute cases, feel more comfortable assessing acute stroke patients and better understand long term recovery and treatment of stroke patients.

**Rotation Overview & Schedule:**

1. The rotation will be broken into two halves, each spanning two weeks.

1. Two weeks of acute stroke care with the tele stroke team.
2. Two weeks of stroke and vascular neurology clinic.

2. For the acute stroke care portion of the rotation, students will be expected to join the UC Tele-Stroke team from 8-5 on Monday – Friday unless they have other educational duties during this time. During this time, students are expected to “shadow” all tele-stroke calls and participate in imaging interpretation/medical decision making with the on-call Stroke Team member. If a stroke presents to UCMC ED, the student will be expected to evaluate these patients in person and act as a primary decision member (in consultation with the Stroke Team).

This will look somewhat different depending on which Stroke Team member you are with. You will likely be paired up with a resident and should make sure to coordinate with them throughout this. In general, expect one of the two formats:

1. Fellow – All PGY 5 (first year) Stroke Fellows are expected to be on-site when they are working with resident rotators. The student should sit with the fellow and work in tandem with them. Stroke calls will typically be taken on speaker phone. Students will be able to independently view all imaging using the Viz software.
2. Faculty/PGY 6 Stroke Fellows may choose to be in person or remotely. If they are in person then things may operate similar to rotations with fellows as above. If the faculty member chooses to work remotely then they will be expected to connect with the student/resident via a “three-way call” and have student/resident shadow these calls. Students will still be able to review all imaging using the Viz software and the residents and faculty member should discuss medical decision making throughout the day remotely. Even if faculty members are remote, students should be on campus so that they are available to respond to all UCMC ED code strokes in person. If a resident is rotating at the same time, the student and resident are expected to meet in a mutual area so they can be called by the attending with a single phone.

3. During the clinic portion of the rotation, students will spend time in clinic with our Stroke Team faculty. A majority of their patients will have stroke/vascular neurologic pathology such as stroke, aneurysms, cerebral hemorrhage, etc. but please know that many Stroke Physicians may see additional patient types. The schedule will vary by week pending faculty availability and will be sent to you by our administrative staff. If questions regarding the schedule arise, please text or email Dr. LaPorta. The role of the student (i.e. shadowing vs. independently seeing patients) will be up to the faculty member.

4. Students will be expected to attend Tuesday morning 7am Neuro IR conference and 8am Stroke Conference. These are educational meetings involving complex decision making. These meetings currently are virtual but may move back to hybrid/in person as we move further from the pandemic. Additionally, students will be allowed to attend neurology resident noon lectures and Grand Rounds for additional education as they see fit.

5. Students will take call on the Mobile Stroke Unit (MSU) for one day of their rotation. This should take place in the final week. On this day they will work with MSU crew to triage acute stroke patients in the community and will be exposed to the EMS side of stroke care. Details regarding coordination of this are to follow.

6. It is quite unlikely that duty hours will be breached on this rotation, however, if there is concern for this it is the responsibility of the student to communicate this with Dr. LaPorta and their supervising attending and make appropriate adjustments to their schedule.

7. Stroke call can be “Feast or Famine”. There may be days where you work non-stop and there may be very slow days. Please bring independent work or study material to work on during this time. The below list of recommended reading may be a useful starting point.

**Recommended Reading:**

* Guidelines for the Early Management of Patients with Acute Ischemic Stroke (Stroke, 2019)
* 2022 Guideline for the Management of Patients with Spontaneous Intracerebral Hemorrhage (Stroke, 2022)
* 2021 Guideline for the Prevention of Stroke in Patients with Stroke and Transient Ischemic Attack (Stroke, 2021)
* Platelet-oriented inhibition in new TIA and minor ischemic stroke (POINT) (Int J Stroke, 2013)
* Clopidogrel with aspirin in acute minor stroke or transient ischemic attack (CHANCE) (NEJM, 2013)
* Endovascular thrombectomy after large-vessel ischaemic stroke: a meta-analysis of individual patient data from five randomised trials (HERMES Meta-analysis) (Lancet, 2016)
* Thrombectomy 6 to 24 Hours after Stroke with a Mismatch between Deficit and Infarct (DAWN) Trial (NEJM 2018)
* A multicenter randomized controlled trial of endovascular therapy following imaging evaluation for ischemic stroke (DEFUSE 3) (International Journal Stroke 2017)
* MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset (WAKE-UP) (NEJM, 2018)
* SELECT2 & ANGEL-ASPECT (2023); part of a series of “Large Core” trials which have changed our recent approach to anterior circulation large vessel occlusion management
* ARCADIA (2023), RESPECT-ESUS (2019) – Trials evaluating appropriate long term treatment in patients with Embolic Stroke of Undetermined Source