

## 2022 Calendar Year

### **Thrombolytic IV**

IV Tenecteplase (TNKase) is a clot busting medication that is given to eligible patients during a stroke. As with any medication a risk for a complication is always possible. One such complication is bleeding in the brain or otherwise known as intracranial hemorrhage.

The symptomatic hemorrhage rate after being administered IV Tenecteplase should be less than 6%. The rate of symptomatic hemorrhage at Geisinger:

Geisinger Medical Center 1/38 patients or 2.6%

Geisinger Wyoming Valley Medical Center 0/51 patients or 0%

(Campbell, et al., 2020)

### **Mechanical Thrombectomy**

Some stroke patients can develop what is commonly known as a large vessel occlusion (LVO). This is when a clot forms in one of the brain's large vessels causing a lack of blood flow. Some stroke patients with an LVO may be eligible for a procedure known as a mechanical thrombectomy. This is a procedure where a specialist can feed a catheter up through the groin or wrist into the brain and remove the clot. This procedure as with all procedures can have risks. These risks include but are not limited to: causing a new or worsening stroke, bleeding in the brain (intracranial hemorrhage) and even damage to the vessels in the brain.

Acceptable post mechanical thrombectomy bleeding in research studies is around 7%\*. The rate of bleeding post thrombectomy procedure at Geisinger Health System:

Geisinger Medical Center 6/86 patients or 7%

Geisinger Wyoming Valley Medical Center 3/77 patients or 3.9%

### **Carotid Endarterectomy Surgery**

Some patients have disease in their carotid arteries that requires a procedure called a carotid endarterectomy. Geisinger Health system utilizes both vascular and neurosurgeons who perform this procedure. The 30-day complication of having a stroke and death rate following symptomatic carotid endarterectomy (CEA) and carotid arterial stenting (CAS) is less than 6%\*. The complication rate at Geisinger:

Geisinger Medical Center 1.4%

Geisinger Wyoming Valley Medical Center 1.3%

(Shean, et al., 2018)

### **Works Cited**

Albers, G. W., Marks, M. P., Kemp, S., Christensen, S., Tsai, J. P., Ortega-Gutierrez, S., . . . Kasner, S. E. (2018). Thrombectomy for Stroke at 6 to 16 Hours with Selection by Perfusion Imaging. *The New England Journal of Medicine*, 708-718.

Campbell, B. C., Mitchell, P. J., Churilov, L., Yassi, N., Kleinig, T. J., Dowling, R. J., . . . Davis, S. M. (2020). Effect of Intravenous Tenecteplase Dose on Cerebral Reperfusion Before Thrombectomy in Patients With Large Vessel Occlusion Ischemic Stroke: The EXTEND-IA TNK Part 2 Randomized Clinical Trial. *JAMA*, 1257-1256.

Shean, K. E., O'Donnell, T. F., Deery, S. E., Pothof, A. B., Schneider, J. R., Rockman, C. B., . . . Schermerhorn, M. L. (2018). Regional variation in patient outcomes in carotid artery disease treatment in the Vascular Quality Initiative. *Journal of Vascular Surgery*, 749-759.