Tenecteplase (TNK) for Acute Ischemic Stroke

What is TNKase (Tenecteplase)?

TNK is a clot busting medication (thrombolytic) that is used to treat a blood vessel that has been blocked, such as in the event of an acute ischemic stroke. During an acute ischemic stroke, a blood vessel in the brain becomes blocked and the blood flow, oxygen, and nutrients your brain needs are decreased. The result is an area of dead tissue, which we call stroke.

TNKase is given through an IV that will be inserted into your arm. You will receive one dose of this medication. There is evidence that this medication works just as well or better and is routinely given quicker than other medications used to treat acute ischemic stroke. Evidence suggests that patients have better outcomes the earlier they receive clot busting medication. Research also shows that treatment should begin as soon as possible after the onset of stroke-like symptoms in order to reduce the risk of death or disability from a suspected stroke.

Who can receive TNKase?

To receive TNK you must be able to come to the hospital and be seen by a provider within 4.5 hours from the time your symptoms start. If a clot busting medication is given outside of this 4.5 hour window, you may have an increased risk of bleeding. There are a few things that may prohibit you from receiving TNK such as active internal bleeding, a serious head injury, brain or spinal surgery in the past two months, or use of anticoagulants within the last 72 hours. Your provider will review all the criteria with you before receiving TNK.

What are the risks and benefits of TNKase?

TNKase has been shown to work well for acute ischemic stroke patients by dissolving a blood clot in your brain and restoring blood flow. By restoring blood flow to the brain, the effects of stroke are minimized.

Some of the risks include bleeding or an allergic reaction called angioedema. Bleeding can be in the brain, gastrointestinal (GI) tract, reproductive system, or anywhere needles have been injected.

What can you expect after you receive TNKase?

You will have frequent monitoring in an ICU setting where your blood pressure and neurological status will be assessed by trained nurses. You will have a CT scan of your brain 24 hours after you receive TNK to make sure there is no evidence of bleeding. You will also undergo a complete stroke work-up including an MRI of your brain, ultrasound of your heart called an echocardiogram, blood work, and heart monitoring among other tests.