



A large new international study hoping to extend the benefits of mechanical thrombectomy has been launched. Thrombectomy is a treatment for certain types of acute ischaemic stroke that can use mechanical devices to drastically reduce the effects of an ongoing stroke. Very small devices are used to break and remove the clot from the blood vessel in the brain. This procedure is carried out by highly skilled neuro-radiologists and requires special hospital facilities.

Recent thrombectomy trials have included highly selected groups of stroke patients. They showed that if used in stroke patients with only small brain lesions, thrombectomy significantly reduces the level of post-stroke disability by restoring blood flow and therefore limiting brain damage.

The new study, part of the EU funded TENSION project, will examine the effects of mechanical clot retrieval in a large group of patients in whom the benefit of thrombectomy is uncertain. TENSION will study if it is safe and effective to do thrombectomy in patients with so-called 'extended lesions', that is, larger areas of damaged brain when compared to the previous studies. Patients will also be able to enrol in the trial up to 12 hours after their symptoms first showed. This will extend the treatment to a larger group of patients: including, for instance, more of those who have a stroke during the night-time and are more likely to be delayed in getting to hospital.

TENSION is careful to include the patient perspective on the evaluation of the outcome of the trial and its treatment effects. Importantly, the trial will also provide evidence for the socio-economic benefits of increasing the use of mechanical thrombectomy.

The trial will enrol up to 714 patients in eight European countries and the project will run for 5 years from February 2018. TENSION is co-ordinated by Prof. Dr. Götz Thomalla of the Universitätsklinikum Hamburg-Eppendorf in Hamburg and Prof. Dr. Martin Bendszus of the Universitätsklinikum Heidelberg and has received funding from the EU Horizon 2020 programme. Prof. Thomalla said "TENSION addresses a major health problem and will provide evidence for an effective therapeutic intervention for patients with severe stroke. This means we will get better individual patient outcomes and avoid stroke-related disability in a large number of patients. At the societal level, the new treatment will help in reducing stroke-related costs."

For more information, please contact research@safestroke.eu.