

ESMINT partners in EU funded research project: Clinical study starts in eight European countries

Can blood clots in the brain be removed even in major strokes?

In a so-called thrombectomy, blood clots are removed from the arteries of the brain with the help of a catheter in the event of a stroke in order to restore blood flow to the brain. Up to now, this therapy has only been used regularly in specialized centers if a stroke has not yet caused major brain damage. The TENSION research project in collaboration with scientists from ESMINT is to conduct a clinical study to show whether patients affected by severe strokes can also benefit from the procedure. The study is starting at 40 sites in eight countries in close cooperation with the University Hospital of Heidelberg. It is supported by the European Union with 6.5 million euros.

A large part of strokes in Europe is caused by a blood clot (thrombus) that closes a blood vessel in the brain so that parts of the brain can no longer be supplied with oxygen. Previously, if only a small amount of brain tissue was damaged, doctors could insert a catheter into the arteries of the brain from the groin under X-ray control and remove the clot with special instruments. It is currently unclear whether this treatment will also help patients with major brain attacks.

“With our research project TENSION we want to analyze if patients with already extensive cerebral infarcts can also benefit from a thrombectomy as well,” says Prof. Dr. Laurent Pierot, President of ESMINT and Director of the Department of Neuroradiology in Reims/France. “If our assumptions were confirmed, this would result in an effective treatment approach for stroke patients who have been seriously affected.”

Clinical study: 40 study centres, 714 patients

Up to 714 patients who are admitted with a stroke at one of the 40 sites throughout Europe are to be included in the study.

“In order to ensure a uniform highest quality of procedural quality in all study centers, we have developed a standardized training and accreditation programme,” says Prof. Patrick Brouwer, General Secretary of ESMINT and senior consultant at the Karolinska Hospital in Stockholm.

Patients are randomly divided into two groups: While the first group receives conventional drug therapy, in the second group the clot is additionally removed by thrombectomy. After 90 days, the degree of the patient’s disability due to the stroke is recorded on the basis of a scale customary in stroke treatment.

The clinical study is coordinated from Heidelberg University Hospital and the TENSION research project is managed by the UKE.

The European Society of Minimally Invasive Neurological Therapy (ESMINT) is an interdisciplinary society addressing medical practitioners and scientists working in the field of neuroradiology, interventional neuroradiology, neurointerventional surgery, endovascular neurosurgery and vascular neurology.

ESMINT encourages and supports medical practitioners and scientists of these fields working to develop and improve minimally invasive methods for the interventional treatment of neurological diseases. ESMINT promotes the safe application of such techniques and their practice by suitably trained and competent practitioners throughout Europe. ESMINT encourages the setting of international standards for practice and research and encourages their use and appropriate implementation.

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