



Stroke research: almost three times as many patients could be disability-free in future

Virtually no other disease has seen such massive strides in treatment in recent years as stroke. Recent studies have confirmed that it is still possible to mechanically remove large vessel occlusions in the brain many hours after a stroke occurs. At the European Academy of Neurology Congress in Amsterdam, experts expressed optimism that the proportion of patients with lives free of serious disability after a major stroke could be increased by 270 per cent.

Amsterdam, 24 June 2017 – “The past few years have brought about greater advances in the treatment of stroke than the two previous decades,” said Prof Urs Fischer, Secretary General of the European Stroke Organisation (ESO) and stroke expert at the University of Bern’s Department of Neurology, summarising the latest developments. Advances in stroke therapy were one of the key focuses at the 3rd Congress of the European Academy of Neurology in Amsterdam. “The introduction of endovascular therapy means that we can now treat patients with large vessel occlusions, and the latest research findings show that we will be in a position to save far more stroke patients in future and spare them from serious lifetime disability.”

Stroke is the second most common cause of death worldwide

Stroke is already being talked about as *the* epidemic of the twenty first century. Around one fifth of all women and one sixth of men worldwide have a stroke at some point in their life. More than one in ten deaths are attributable to stroke, making this cerebrovascular condition the second-largest cause of death in the world. Stroke is also the second most frequent cause of lifetime and serious disability.

Large vessel occlusions also removable

A major milestone came 15 years ago when intravenous thrombolysis was first introduced. Under this procedure, stroke-causing blood clots in vessels of the brain are dissolved using medicine. The drawback of this method is that in around 10 to 20 per cent of cases the occlusions are so large that the treatment does not work sufficiently. A mechanical alternative has been available for a number of years now: endovascular thrombectomy involves removing a clot from a blood vessel in the brain using a catheter inserted via the groin. Prof Fischer: “The clinical effects of these acute stroke treatments are often striking. Patients who are admitted to hospital with serious neurological deficits show signs of improvement immediately after recanalisation. A number of them are even well enough to be discharged after just a few days.” The effectiveness of this method is now well documented: “Eight studies unanimously show that endovascular treatment of patients with acute occlusions of large vessels in the brain is superior to treatment with medication only,” Prof Fischer said.

New data: thrombectomy also helps more than six hours after stroke

Although the number of treatments of this kind is increasing all the time, this pioneering approach currently only benefits a few per cent of patients. One reason is that experts previously believed that mechanical clot removal was only possible within six hours of a stroke. The recently unveiled results of the DAWN study disproved this assumption: 48.6 per cent of patients survived without serious disability when they received a thrombectomy and thrombolysis as a combined treatment for a stroke event that had taken place more than six hours earlier. In the control group with medical management alone, just 13.1 per cent had no complications. “This means a relative reduction in disability of 73 per cent,” Prof Fischer summarised. “These new insights may enable us to increase the number of patients able to lead an independent, disability-free life by up to 270 per cent.”

Major variances in care provision in Europe

“We can only harness the full potential of this option if we adapt structures and processes for stroke care to reflect the latest findings,” explained EAN President-elect Prof Franz Fazekas from Austria’s University Hospital Graz. This is why EAN teamed up with five other medical societies last year to publish guidelines on the use of thrombectomy, which define all of the organisational and personnel requirements from selecting suitable instruments to post-operative care. “A pan-European study conducted by ESO, ESMINT and SAFE together with the EAN showed that provision of care is still unsatisfactory in some parts of Europe when it comes to thrombolysis and thrombectomy,” said Prof Fazekas. “Several European countries are not sufficiently equipped for this latest treatment breakthrough.”

In many cases, patients are denied access to the latest neurological innovations because hospitals do not have stroke units or sufficiently trained staff. “But where a person lives should not dictate whether they receive optimal treatment following such a common and serious event as a stroke,” Prof Fazekas added. “EAN will do everything it can to eliminate these differences as quickly as possible. To achieve this we will work very closely with all of the organisations involved in stroke research and stroke care, just as we did when drawing up the survey and the thrombectomy guidelines.”

Need for improvement also in countries where treatment is good

Even countries with highly developed stroke infrastructure still have room for improvement. This question is discussed in a new report by the European Brain Council, “The Value of Treatment for Brain Disorders”. This publication focuses on unmet needs and treatment gaps in neurology.

In many cases, too much time passes between the stroke event and the start of treatment. “Reducing the symptom-to-needle time is a central aspect of improving patient prognoses,” noted Prof Fazekas. “Sadly, many patients wait far too long before calling the emergency services, despite all the campaigns designed to increase awareness. It is particularly regrettable since the time that elapses before treatment starts can determine whether the patient is left disabled or goes on to live an independent life.”

As the expert confirms, there is still room for improvement within the individual treatment centres. According to the guidelines in place in the majority of European countries, no more than an hour should pass between the arrival of the patient and the start of treatment. Prof Fazekas: “Even 15 years after the effectiveness of intravenous thrombolysis was proven, the door-to-needle time for many patients still exceeds 60 minutes.”

Sources: Clinical Mismatch in the Triage of Wake Up and Late Presenting Strokes Undergoing Neurointervention With Trevo (DAWN), ClinicalTrials.gov Identifier: NCT02142283; Aguiar de Sousa et al. ESO ESMINT EAN SAFE Survey On Acute Endovascular Stroke Care In Europe, Abstract ESOC 2017

EAN Congress Press Office

B&K - Bettschart&Kofler Kommunikationsberatung, Dr Birgit Kofler

Phone: +43 676 63 68 930

E-mail: kofler@bkkommunikation.com