



3rd European Stroke Organisation Conference

16-18 May, 2017 | Prague, Czech Republic

MEDIA RELEASE

Highlights from the first afternoon of ESOC 2017

- ESO-SAFE partnership is launched with the release of the Burden of Stroke Report, and a report on policy, access and quality of care.
- VISTA Collaborators: The benefits of thrombectomy are confirmed and the importance of rapid treatment emphasised.
- HERMES Collaborators: The benefits of mechanical thrombectomy for acute ischaemic stroke are greater with smaller ischaemic core but it remains effective with increasing volume.
- TO-ACT Study: No significant benefit from endovascular treatment in severe cerebral venous sinus thrombosis.
- TALOS Study: Further research of SSRIs is required to assess benefit after ischaemic stroke.
- TESPI Study: Findings support thrombolysis for acute ischaemic stroke in patients over 80 years of age.

See video interviews with principal investigators and summary slides at:

<http://www.esoc2017.com/conference-information/conference-news>.

Prague, 16 May 2017 – Attendance at the third European Stroke Organisation Conference (ESOC) outstripped demand for space in the opening plenary as more than 4,000 delegates gathered in Prague for three days of the latest clinical study results, teaching courses and practical training. Excitement generated by the scientific programme continued into the afternoon with further data announcements, as well as the launch of the new partnership between the European Stroke Organisation and the Stroke Alliance For Europe (ESO-SAFE). Highlights from the afternoon's scientific programme are outlined below.

Launch of the Action Plan for Stroke in Europe 2018-2030, ESO-SAFE Memorandum of Understanding and Burden of Stroke Report

The Memorandum of Understanding between the European Stroke Organisation and the Stroke Alliance for Europe, cements a partnership between the leading European professional and patient organisations. The first act was to launch the Burden of Stroke Report, providing the most accurate, up to date record of the incidence, prevalence and outcomes from stroke as well as a report on policy, healthcare infrastructure, service provision and quality related to stroke treatment. These initiatives are important steps in the development of the Action Plan for Stroke in Europe 2018 to 2030. This will guide European Union policy on research and management of stroke for the next decade.

Note: A video interview with Prof Bo Norrving, leader of this initiative, will be available from 18:00 CET on Wednesday 17 May at at: <http://www.esoc2017.com/conference-information/conference-news>.

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Modifiers of Endovascular Treatment Effect and Importance of Time Delays

Mechanical thrombectomy has revolutionised the treatment of large vessel ischaemic stroke. In the largest study of its kind, the factors which modify the efficacy of this treatment were assessed by the Virtual International Stroke Trials Archive (VISTA) Collaborators. Principal investigators, Prof Pooja Khatri (University of Cincinnati, USA) and Prof Diederik Dippel (Erasmus University Medical Center, Rotterdam, The Netherlands) presented an analysis of data from 14 studies.

Key findings presented by Professor Khatri:

- The odds ratio for improved disability was 1.94 (95% CI 1.6 to 2.39) with endovascular treatment compared to control.
- There was no significant difference in mortality.
- Age did not modify the effect of treatment but older age was associated with worse outcome in both groups.

Key findings presented by Prof Dippel:

- There was a significant relationship between time from onset to groin puncture and efficacy of thrombectomy.
- There was a significant relationship between time from onset to reperfusion and efficacy of thrombectomy.

“The evidence for endovascular therapy is robust, even if we include the prior negative trials,” said Khatri. “For a one hour delay the absolute reduction in likelihood of a good functional outcome is 9.5%,” added Prof Dippel.

Prognostic and Treatment Impact of Penumbra Imaging

Data from the ground-breaking HERMES Collaboration of the thrombectomy randomised studies has been used to assess the effects of CT-perfusion imaging on predicting the benefit from mechanical thrombectomy for acute ischaemic stroke due to large vessel occlusion. On behalf of the HERMES Collaborators, principal investigator Prof Bruce Campbell (Royal Melbourne Hospital and The University of Melbourne, Australia) presented findings from an assessment of the modified Rankin Scale (mRS) scores at 90 days in 900 patients.

Key findings:

- Ischaemic core size on CT-perfusion and MRI were independently associated with functional outcome but did not modify the effect of treatment
- Despite poorer outcome, endovascular intervention was still beneficial in patients with larger ischaemic cores, up to at least 70mls. Beyond this, benefit was uncertain.

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“The number of patients needed to treat (with mechanical thrombectomy) to achieve good outcome tends to increase with estimated ischaemic core volume,” commented Prof Campbell. “However, overall point estimates remain at levels that may be worthwhile at higher estimated core volumes.”

These data should help to guide patient selection for thrombectomy.

TO-ACT Study: Endovascular Treatment in Severe Cerebral Venous Sinus Thrombosis

Cerebral venous thrombosis is a rare cause of stroke and the optimal management in severe cases is unclear. Principal investigator Prof Jonathan Coutinho (Academisch Medisch Centrum, Amsterdam, The Netherlands) presented the first results from the TO-ACT study in 63 patients with severe CVT, randomised to endovascular treatment with thrombolysis and/or mechanical thrombectomy, or anticoagulation alone. The primary outcome was mRS score at 12 months. The trial was stopped at the first interim analysis for futility.

Key findings of the TO-ACT study:

- Endovascular treatment does not alter outcomes in severe cerebral venous sinus thrombosis.
 - There was no significant difference in mRS scores between groups (OR 0.95, 0.34-2.68).

This small study demonstrated no significant benefit from endovascular treatment in severe CVT.

TALOS Study: Potential Benefit of Selective Serotonin Reuptake Inhibitors (SSRIs) After Acute Ischaemic Stroke

Previous studies have demonstrated a possible benefit from antidepressant drugs called SSRIs after acute ischaemic stroke. Principal investigator Prof Kristian Kraglund (Aarhus University Hospital, Denmark) presented the initial findings of the TALOS study in which 642 patients with acute ischaemic stroke were randomised to receive citalopram or placebo.

Key findings from the TALOS study:

- Citalopram was safe in ischaemic stroke.
- There was no significant benefit from citalopram in improving functional status (OR for mRS improvement 1.27, 0.92-1.74, p=0.14).
- There was no difference in rate of recurrent vascular events.

This study shows that further research is required before SSRIs can be used in stroke rehabilitation. “Although we have shown that treatment with citalopram was safe,” said Prof Kraglund. “It is not yet time to recommend the use of SSRIs after stroke in patients without depression.”

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TESPI Study : First Dedicated Study of the Benefit of Intravenous Thrombolysis in Patients >80 Years of Age

Treatment with intravenous alteplase for acute ischaemic stroke (thrombolysis) has been the standard of care for more than 20 years, but there has not yet been a dedicated study in patients over 80 years of age. Co-principal investigator Prof Svetlana Lorenzano (Acute Stroke Unit, Policlinico Umberto Hospital, Rome, Italy) presented the results of the TESPI trial in patients over 80 years of age, within 3 years of onset. Despite early cessation of the study, there was a trend towards benefit in this patient group consistent with findings from studies in younger patients and subgroups of patients over the age of 80 included in other studies.

Key findings from the TESPI study:

- There was a non-significant increase in patients with a good functional outcome measured using the mRS with alteplase (mRS 0-2: OR 1.35, 0.69-2.64)
- There was no increase in rates of symptomatic intracerebral haemorrhage with alteplase.

These findings, in the light of similar results from other studies, support the use of alteplase in this age group. “If we compare these data with those from previous trials, the results of thrombolysis within three hours in elderly patients are similar to those reported in younger patients,” said Prof Lorenzano.

Issued by the ESOC 2017 public relations office:

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