



10th May 2016

Highlights from the First Plenary Session of the 2nd European Stroke Organisation Conference 2016 (ESOC 2016) in Barcelona.

Over 3500 delegates attended ESOC 2016 today in Barcelona. Today's program included teaching courses, scientific presentations, an official welcome from the ESOC President Professor Kennedy Lees and from Professor Angel Chamorro, and presentations from major clinical trials. These trials will have an immediate impact on how we care for patients with stroke.

Highlighted trials from the first plenary session included;

SOCRATES

Principal Investigator: Professor Claiborne Johnston, University of Texas, Austin, Texas, USA, for the SOCRATES Investigators. Sponsor Astra-Zeneca.

SOCRATES tested whether ticagrelor, a new blood thinning drug, was more effective at reducing further strokes than aspirin in patients with very recent ischaemic stroke or transient ischaemic attack. It included over 13000 patients with recent ischaemic stroke or transient ischaemic attack.

Key Findings:

- Ticagrelor did not significantly reduce the number of second strokes or death.
- Rates of major haemorrhage and other bleeding complications were similar between groups.

Prof Johnston, lead author of the study published in The New England Journal of Medicine today, said, "although many important events were numerically fewer in patients treated with ticagrelor, this difference was not significant. Ticagrelor appears as safe as aspirin and may be better in some patients and we need to explore this further."

See Prof Johnston discuss the results of this seminal study with the President of the European Stroke Organisation, Prof Kennedy Lees at www.esoc2016.com

And read the paper in full at www.nejm.org

ENCHANTED

Principal Investigator: Prof Craig Anderson, George Institute for Global Health and University of Sydney, Australia, for the ENCHANTED Investigators.

ENCHANTED tested whether a lower dose of the clot-busting drug intravenous rtPA (or alteplase) was safer and as effective as the dose currently used in patients with ischaemic stroke. rtPA is given to help break up blood clots blocking the flow of blood to the brain. However, it can cause serious bleeding in the brain in around five per

cent of cases, with many of these proving fatal. It included over 3000 patients with ischaemic stroke.

Key Findings:

- Low dose treatment reduced serious brain bleeding by two-thirds and reduced death by 90-days (from 10.3% to 8.5% with low dose treatment).
- There was a slight rise in patients with ongoing disability.
- For every 1000 patients treated with low dose rtPA, compared to the standard dose, 41 more people had physical disabilities, such as needing help dressing or walking, but 19 fewer people died.

Professor Anderson, lead author of the study published in The New England Journal of Medicine today, said he hoped the lower dose would become the standard in situations where a doctor considers the risk of cerebral haemorrhage to be high in a particular patient. "... What we have shown is that if we reduce the dose level, we maintain most of the clot busting benefits of the higher dose but with significantly less major bleeds and improved survival rates. On a global scale, this approach could save the lives of many tens of thousands of people."

See Prof Craig Anderson discuss the results of this seminal study with the incoming President of the European Stroke Organisation, Prof Valeria Caso at esoc2016.com.

And read the paper in full at www.nejm.org

ATACH-II

Principal Investigator: Prof Adnan Qureshi, University of Minnesota, USA, for the ATACH-II Investigators.

ATACH-II tested whether lowering the blood pressure intensively (to <140 mmHg) in patients with intracerebral haemorrhage and high blood pressure improved outcome compared to less intensive reduction (to between 140 and 179 mmHg). It included 1000 patients with intracerebral haemorrhage or stroke caused by bleeding on the brain. Blood pressure often rises after intracerebral haemorrhage but whether to lower it with drugs has been a debated question for many years.

Key Findings:

- The trial was stopped early after enrolment of 1000 patients due to futility.
- Blood pressure was lowered most in the intensive group (to 129 vs 141 mmHg at 2 hours after treatment).
- There was no difference in recovery from stroke; the rates of death and disability were the same in both groups (38.7% with intensive treatment vs. 37.7%).

Prof Qureshi, lead author of the study published in the New England Journal of Medicine today said "...the results do not support the notion that acute systolic blood pressure reduction to a target of 110-139mmHg in patients with intracerebral hemorrhage is effective in improving functional outcome compared with reduction to a target of 140-179mmHg. The results are expected to answer a question that has persisted over three decades a guide evidence based treatment of acute hypertensive response in patients with intracerebral hemorrhage."

See Prof Adnan Qureshi discuss the results of this seminal study with the current Secretary of the European Stroke Organisation, Prof Urs Fischer at

www.esoc2016.com

A Randomized Trial of Unruptured Brain Arteriovenous Malformations (ARUBA)

Principal Investigator: Christian Stapf, CRCHUM, Universite de Montreal, Canada, for the ARUBA investigators.

Unruptured brain arteriovenous malformations (AVMs) can cause intracerebral haemorrhage with potentially devastating consequences for the patient. However, treatment is itself associated with significant risks. ARUBA is the largest randomised controlled trial to assess whether intervention for unruptured AVMs is safe and effective. In 2013, patient recruitment was halted as a planned interim analysis had shown a 70% lower risk of death or stroke in patients without and intervention. Today, Prof Christian Stapf presented the final, 5-year follow up results of this seminal trial.

Key Findings

- The risk of death and stroke was reduced by 69% in the non-intervention group.
- The number needed to harm for intervention was 5, meaning if 5 patients receive intervention, one extra case of death or stroke would occur.

Prof Stapf, lead author of the study, said “these 5-year results of the trial gives us a better understanding of the risks and benefits of intervention. They show that preventative intervention for unruptured AVMs is harmful and cannot be safely recommended for our patients.”

See Professor Stapf discuss the results of this seminal study with the President of the European Stroke Organisation, Professor Kennedy Lees, at www.esoc2016.com

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