

Global Summit on Stroke

August 03-05, 2015 Birmingham, UK



Saema Ansar

Lund University, Sweden

Novel strategy to improve stroke therapy

Substantial efforts have been made over the last three decades to understand the biochemical mechanisms involved in ischemic brain damage and to develop potential remedies to protect the brain after stroke. However, although more than 1,000 experimental neuroprotective agents and procedures have been tried, they have all failed in major clinical trials. Thus, it is necessary to reconsider the premises upon which these failed treatments were developed and find novel ways to understand and treat acute cerebral ischemia. Stroke is primarily a vascular disease, with devastating consequences for brain tissue/neurons. However, the primary focus for much of stroke research has hitherto been on the protection of neurons. Our research group has taken a different approach: we have focused instead on the cerebral vasculature and the changes that occur in this tissue in the days following a stroke. This work is driven by the basic consideration that without properly regulated blood circulation in the brain, any attempt at neuroprotection will have a low chance of success. Our research group is the first to discover the inherent capability of cerebral vessels to increase the expression and function of vasoconstrictor receptors in the smooth muscle cells as a response to cerebral ischemia. We recently discovered that inhibition of the MEK signaling pathway in the cerebral vasculature improves acute outcome in all types of experimental stroke. These exciting initial findings are propelling our current research program.

Biography

Saema Ansar has completed her PhD at Lund University, Sweden in 2007. After her two post-doctoral trainings at Department of Neurology at Heidelberg University, Germany and at Glostrup Research Institute, Copenhagen University, Denmark, she has been working as senior researcher at Department of Clinical Science of Lund University. She has well-recognized expertise in the field of stroke, vascular research, pharmacology, drug delivery and advanced imaging technology such as MRI. She has supervised more than 15 graduate and undergraduate students and has published more than 20 papers in reputed journals.

saema.ansar@med.lu.se

Stroke-2015 August 03-05, 2015