

strokeupdate



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Eye Blood Vessels and the Risk of Stroke

The pathological changes in the walls of the retinal blood vessels can be an indicative of other cardiovascular diseases. The narrowed arteriolar calibres in the retina for example are associated with the risk of cardiovascular diseases.

Including 5518 patients from the prospective population-based Rotterdam Study, the research team from Erasmus University Medical Centre in the Netherland were managed to screen the digital retinal images that were available for persons who where stroke free at baseline. Follow-up for incident

stroke was complete up to January 1, 2007 (Stroke 2010; 41: 2757). During an average follow-up of 11.5 years, 623 participants developed a first-ever stroke (50 haemorrhagic, 361 ischaemic, 212 unspecified).

The study concluded that Retinal vascular calibers were strongly associated with lobar haemorrhages and oral anticoagulant-related haemorrhages.

Larger retinal venular caliber is associated with an increased risk for stroke in the general population and, in particular, with an increased risk for intracerebral haemorrhage.

Tool to Assess the Quality of Stroke Care in Europe

The available care pathways, guidelines and protocols for stroke care make one thinks that there is almost a unity between the European centres in providing the expected level of stroke care in primary or secondary care setup. But the reality is different. Wellwood I. et al in his recent article published in May issue of 'stroke' (Stroke. 2011; 42:1207-1211) mentioned that there are significant differences in the provision of care and outcome after stroke across European countries. To address this issue a research team developed and field-tested a quality tool that was delivered by post and later by site visit at 7 centres across Europe. Systematic reviews and

stroke care evidences grading were used for this purpose. The tool included 251 items across 11 domains, of which 214 items could be categorized by any level of evidence. The results of this tool implementation showed that in field testing, the proportion of positive responses to evidence-based items ranged from 43% to 79% across populations. The authors concluded that the European Registers of Stroke Quality Assessment Tool has potential to be used as a framework to compare services and promote increased implementation of evidence-based care.

STROKE REHABILITATION: VIRTUAL REALITY WORKS

In this interesting meta-analysis about the effects of virtual reality technology on the functional outcome of upper limb motor weakness after stroke, Saposnik G et al mentioned that Virtual reality (VR) technology is a novel adjunctive therapy that could be applied in neurorehabilitation. (Stroke. 2011; 42:1380-1386).

Eleven of 12 studies showed a significant benefit toward VR for the selected outcomes. The results showed that among observational studies, there was a 14.7% improvement in motor impairment and a 20.1% improvement in motor function after VR.

The authors concluded their meta-analysis by stating that VR and video game applications are novel and potentially useful technologies that can be combined with conventional rehabilitation for upper arm improvement after stroke.



Botulinum Toxin and the Function of the Upper Limb After Stroke: (BoTULS) Trial

There are many neurological complications following stroke, ischaemic or haemorrhagic. Limb spasticity is the main complication which can lead to symptoms in up to 60% of strokes. The recent BoTULS Trial which evaluates botulinum toxin injection for upper limb spasticity and function poststroke was published in May issue of 'Stroke' Journal (Stroke. 2011; 42: 1371-1379). Three hundred thirty-three patients with stroke with upper limb spasticity and reduced arm function participated in a multicenter randomized controlled trial. The intervention group received botulinum toxin type A injection(s) plus a 4-week

therapy program. The control group received the therapy program alone. The primary outcome was upper limb function at 1 month. Secondary outcomes included measures of impairment, activity limitation, and pain at 1, 3, and 12 months.

The results showed that there was no significant difference in achievement of improved arm function at 1 month. However; the trialists have demonstrated that there was a significant difference in favour of the intervention group in muscle tone at 1 month, upper limb strength at 3 months, basic arm functional tasks at 1, 3 and 12 months; and pain at 12 months.

The research team concluded that Botulinum toxin type A is unlikely to be useful for improving active upper limb function (eg, reaching and grasping) in the majority of patients with spasticity after stroke, but it may improve basic upper limb tasks (hand hygiene, facilitation of dressing) and pain.

European Stroke Conference (ESC): Hamburg from 24 – 27 May 2011

Following the successful history of the ESC from 1990 to its 20th anniversary conference, the Scientific and Programme Committees will prepare a truly international conference that will collect excellent work of basic science and clinical research related to stroke and cerebrovascular diseases as submitted from continuously increasing numbers of researchers from all over the world.

Along these lines the organisers of the conference will increase the number of joint symposia with other European and World wide operating societies active in the fight against the burden of stroke.

In continuity with the tradition, controversies in diagnosis and management, scientific mini-symposia addressing particularly interesting aspects of treatment and prevention and more generally oriented educational symposia covering the full scope of stroke related interests will be organised.



Blood Pressure Control after Thrombolysing Stroke Patients

Stabilising the blood pressure and the hemodynamic status of the stroke patients can be problematic especially after thrombolysing an ischaemic stroke patient. This article which is titled as intravenous thrombolysis for acute ischaemic stroke: effective blood pressure control matters, summarises the observational evidence endorsing current guidelines that advocate effective blood pressure control before and during an rtPA infusion (International Journal of Stroke 2011;6: 125-127) . It indicates that a more active blood pressure-lowering approach immediately after intravenous thrombolysis appears to be a promising therapeutic option that should be formerly evaluated in a randomised clinical trial setting.

10th Welsh Stroke Conference/River Front Centre, Newport City/Wales

For the tenth year running the stroke conference team in Wales is organising the Welsh Stroke Conference and managing to attract hundreds of Stroke Doctors and allied health professionals.

The Conference this year will be held at the River Front Centre in Newport/ Wales and on 17th June 2011. The main speakers are Professor of Neurosurgery in Newcastle upon Tyne David Mendelow. His lecture is about Intracerebral Haemorrhage: time is brain.

From Houston, Sean Savitz, Associate Professor in Neurology is speaking about Emerging therapies for acute

stroke. Dr. Savitz main interest is in stem cell therapy for stroke.

From University of Southampton, Professor of restorative neuroscience, Jane Burridge is talking to the conference about Robotics for stroke rehabilitation.

Professor Roger Boyle CBE is presenting Bhowmick Lecture this year. The subject of the lecture is implementing a stroke strategy. Dr. Anthony Rudd, Consultant Stroke Physician in St Thoams' hospital in London is briefing the conference about the results of the Royal College of Physicians Audit for stroke in Wales.

There will be two parallel sessions in the conference as well. The first one is updating the audience about the latest developments in the field of stroke rehabilitation and the second is an update about uncommon causes of stroke. A space has been allocated for the stroke researchers posters from all over Wales.



Stroke Medicine by Oxford University Press:

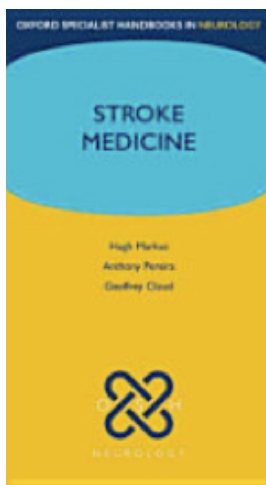
ISBN 9780199218776

Stroke Medicine is a practical handbook for the practising physician. Written by a multidisciplinary team of three practising consultants from a leading UK stroke service, it provides an up-to-date and easily accessible source of information on all aspects of stroke care from acute care, through to rehabilitation and secondary prevention. Designed to be used both on the ward and in the outpatient room, it provides a practical approach to managing the stroke patient, and is an invaluable source of information for stroke physicians, neurologists, geriatricians and other specialists involved in the care of stroke patients. It will also prove to be a useful handbook for

Peter Sandercock: IST3 Recruiting 2670 Patients and More Needed

As part of the academic activity of the Welsh stroke physicians, professor Peter Sandercock was invited to talk about the latest developments regarding the international stroke trial 3 (IST3) via a video link from his centre in Edinburgh. This trial is targeting thrombolysing ischaemic stroke patients up to 6 hours following their presentations with signs and symptoms of stroke. It was confirmed that so far the trial has managed to recruit 2670 patients and the final target is 3000 patients which should be achieved by the end of June 2011, the date for ending the trial and analysing the data. In his presentation Professor Sandercock confirmed that UK is recruiting the highest number of patients throughout Europe. He mentioned that there are another two trials regarding thrombolysing ischaemic stroke patients. One of these trials is Extend which is

consultants and doctors in training. Designed to cover the curriculum of the UK Specialist Stroke training programme for clinicians in training, it is likely to provide similar levels of coverage for emerging stroke training programmes in other parts of the world.



looking into the mismatch of DWI/PWI radiological techniques for thrombolysing stroke patients 9 hours after their presentations with the stroke symptoms. The second trial is Tepsi which is recruiting patients at the age over 80 years after their presentation with stroke up to three hours. Thrombolysis is not licensed at present for stroke patients above 80 years of age. In the videoconference link from Edinburgh, Prof. Sandercock reminded the audience about two educational web sites for stroke physicians. The first one is www.neuroimage.co.uk and the second is www.stroketraining.org.



STROKE UPDATE

The editor of the newsletter and web site is a clinician who works in UK. This publication is for the doctors, researchers, stroke patients and their carers and for the readers who are interested in stroke and the new developments in stroke medicine.

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