



20th European Stroke Conference (ESC) Hamburg 24-27 May 2011

Stroke is a devastating disease contributing to a high mortality and morbidity in increasingly aging populations in Europe and worldwide. Although mortality has significantly declined during the past 20 years, the burden of stroke still increases with more people suffering a first and repeat stroke due to atherosclerosis of the large and small brain vessels after years of hypertension, hyperlipidemia, smoking, diabetes, life style risks such as physical inactivity, stress, obesity, dietary problems and more recently identified chronic infections and hyperhomocysteinemia as major risk factors. Furthermore, with increasing age heart rhythm abnormalities and atrial fibrillation (AF) in particular develop in large numbers of the population and already represents a major source of cerebral embolism in more than 20% of all stroke victims.

Stroke prevention addresses early detection of risk factors and risk conditions such as AF in stroke prone, still asymptomatic subjects or in patients, who have already suffered a first event. Strategies to improve emergency management of acute stroke conditions have been established throughout Europe to treat patients as soon as possible in special *Stroke Units (SU)* and *Comprehensive Stroke Centers (CSC)* with early discharge after stabilization to rehabilitation clinics. Along with more recently introduced telemedicine units associated to SUs and CSCs, this has increased the number of patients treated, in metropolitan areas as well as in areas with smaller populations outside big cities. Recent progress in acute stroke management has improved the patients chances to gain full recovery after stroke or live independently even with mild persistence of neurological dysfunction.

Since its foundation in 1990 the ESC has become the largest stroke conference worldwide and will present more than 1200 scientific oral and poster communications during its 20th annual meeting in Hamburg. More than 3000 clinical and research scientists from more than 85 countries are expected to attend the meeting. During four days five educational symposia, 16 scientific symposia, 11 satellite symposia, 10 teaching courses as well as a full day programme for stroke nurses and allied health professionals (AHP) have been organized. In continuity with the tradition, controversies in management and diagnosis, acute treatment, prevention and rehabilitation of both ischaemic and haemorrhagic stroke will be addressed. As in previous years the final programme and full abstracts in an e-book can be taken from our website www.eurostroke.eu.

Particular highlights of the conference are new data from large clinical trials (-to be presented on Wednesday morning 11:30-12:30 Room 1) emphasizing the importance of new anticoagulant drugs for the prevention of cardiogenic embolism to the brain causing ischaemic stroke in patients suffering from atrial fibrillation. The Scandinavian Candesartan stroke trial will report news from refined treatment of hypertension to reduce stroke progression, stroke recurrence and poor functional outcome and exciting results will be communicated from the FLAME study showing improved motor recovery after acute ischaemic stroke.

The European Union Commission has just approved funding of more than 20 Mio. Euro for launching two big international clinical trials to evaluate new treatment strategies against stroke.

The *EuroHYP-1* study will investigate the benefits of moderate hypothermia – the lowering of body temperature below normal –, which has emerged as a most promising therapeutic intervention for acute brain injury. However, until now a large clinical trial was missing due to the difficulties in funding of such a milestone trial. The second big study, the *WAKE-UP* trial, will also start in 2012 and enrol patients, who suffered an acute stroke during sleep and hence could not be identified for early thrombolysis because of an unknown time window between onset of stroke and start of treatment (should be performed within 4.5hrs to achieve an optimum benefit/risk ratio) – modern magnetic

resonance imaging (MRI) is a promising tool to distinguish patients, who will profit most from early thrombolytic treatment from those at a higher risk when treated.