Post stroke seizures are typically focal. It has been estimated on the basis of epidemiological studies that generalized seizures are diagnosed in 16%, partial seizures with secondary generalization in 25%, partial complex in 48% and partial simplex in 11%.

Prevalence of epilepsy among elderly may be even higher than it has been shown in official statistics because of common difficulties in differential diagnosis. In elderly symptoms due to complex partial seizures often are diagnose as disorders of cerebral circulation, dementia or metabolic dysfunction.

AMOS D. KORCZYN

The vascular contribution to dementia

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Primary degenerative dementia (PDD), prototypically represented by Alzheimer's disease (AD) is usually distinguished from vascular dementia. The primary criteria are clinical and neuroimaging. It is becoming more recognized that many cases represent an overlap between the different etiologies, with a different contribution responsible for each case.

Nevertheless, theoretical and practical problems face this distinction. There are no gold standards, since even autopsy examination of demented persons cannot reveal definitely whether the cause of the cognitive decline is degenerative, vascular, or combined. Indeed, pathological criteria for vascular dementia have changed over the past few decades, and this was further complicated by the recognition of small vessel disease as a frequent contribution to cerebral pathology, particularly dementia in old age. It is unclear when vascular lesions (or AD pathology) should be regarded as coincidental and when it should be considered causative. Essentially, the same problem relates to neuroimaging data.

Lacking diagnostic gold standards, the clinical differentiation between vascular and degenerative dementia is established on clinical guesswork. Recent data suggest that the distinction is largely artefactual and lacking validity. Moreover, available evidence suggests overlap between dementia also in basic processes, e.g. cholinergic deficiency. The presumed distinction between vascular and degenerative dementia leads to attempts to discover different treatments for the two disorders, although the basic assumption may be incorrect. The implications for drug studies will be discussed.

MARKKU KASTE

Strategies to reduce the burden of stroke

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This presentation is based on the Helsingborg Declaration 2006, which reflects research achievements in stroke care. Declaration describes targets to be achieved by the year 2015 although local resources for stroke management differ widely between European nations and thus all countries will not achieve these optimal targets.

Stroke patients should be evaluated as soon as possible in hospitals that can provide acute stroke care and are equipped with adequate imaging modalities such as CT or MRI.

Streamlined multidisciplinary stroke care starts from the emergency call centre, which identifies a potential stroke patient. The emergency call centre should dispatch an ambulance for fast transportation to the nearest hospital with appropriate resources for acute stroke management.

Although resources currently differ between countries, all such efforts need to be made that each country will be able to provide a stepwise development of the essential infrastructure and personnel resources, namely multidisciplinary teams, stroke units and imaging facilities.

The outcome of patients managed in a dedicated stroke unit has been shown to be superior compared to that of patients managed in general medical wards. A stroke unit offers an organized approach to in-patient care through multidisciplinary care by a dedicated stroke team.

Minimum criteria for an appropriate stroke unit include the following items:

– Dedicated beds for stroke patients.

– Dedicated team: stroke physician, trained nurses, physical therapy, speech therapy and occupational therapy.

– Immediate imaging 24 hours (CT or MRI), if not performed at the Emergency Room. It is realized that this criterion may not be met in all stroke units in all countries due to economic constraints.

– Written protocols and pathways for diagnostic procedures, acute treatment, monitoring to prevent complications, and for secondary prevention.

– Availability of neurosurgery, vascular surgery, interventional neuroradiology and cardiology is a part of a comprehensive stroke unit, but not required for a primary stroke unit.

– Immediate start of mobilization after the patient has stabilized and access to early rehabilitation.

– Weekly multidisciplinary team meetings with patient involvement are part of stroke unit care.

– Continuing staff education.

– Continuing education of patients/families/carers.

All stroke patients should have their rehabilitation needs assessed by a multidisciplinary stroke rehabilitation team with medical, nursing, physiotherapy, occupational therapy and speech therapy skills as well as with psychological expertise, when needed. Rehabilitation should be started during the first few days in a stroke unit or on a ward with dedicated stroke beds.

WOJCIECH KOZUBSKI

Post-stroke depression

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Depression is a relatively common psychopathological comorbidity in stroke sufferers – the mean prevalence rate of post-stroke depression, in all stroke victims, ranges from 30 to 50%.

The occurrence of post-stroke depression (both major and minor) increases from 3 months to half a year after the incident. The most encountered types of mood disturbances after stroke are both major and minor depression with the clinical manifestations resembling those of idiosyncratic late-onset depression, with psychomotor retardation more frequently expressed.

Lately, a different form of mood disturbances in CVD had been postulated, i.e. vascular depression, that could be late-onset depressive disorder, found in patients with the overt or silent stroke or subcortical white matter ischemic disease. The symptoms of the disease should consisted of: mood abnormalities, neuropsychological disturbances with – especially -- executive functions impairment, tendency to psychomotor retardation, poor insight and impaired activities of daily living. It seems that many biological factors might be associated with the presence and characteristics of post-stroke depression (e.g. the stroke focus side, the size of the ventricles), however no firm conclusions can be established by now. Post-stroke depression has undoubtedly negative impact on the recovery of cognitive function and on the activities of daily living; what is more – it increases patients' mortality risk. It is strongly suggested that depression and stroke have bidirectional relationship and influence which means that patients with depression (especially the major one) have 2-fold greater risk of developing a stroke, even after controlling for other risk factors. The post-stroke depression should be treated with such antidepressive drugs as SSRI and tricyclic antidepressants of which fluoxetine and nortriptyline, respectively, have been found to be most effective.

K.H. MAURITZ

Evidence based motor rehabilitation after stroke

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Stroke is a leading cause of serious long-term disability in adults. Restoration of walking ability and gait rehabilitation as well as motor rehabilitation of upper extremity functions is therefore highly relevant for stroke patients and their relatives. To restore motor functions, modern concepts of rehabilitation favour a task-specific repetitive approach. In recent years it has also been shown that higher intensities of walking and grasping practice (resulting in more repetitions trained)