

magnetic resonance imaging (MRI) are well established diagnostic tools with the supreme value. Since they are not innocuous, we have performed a study with the goal to establish the diagnostic supremacy between the two, in a clinically well established cases of epilepsy with poor control.

Forty-two patients (20 men, 22 women, mean age 32.58 years; range from 7 to 68 years) with therapy resistant intractable seizures of different duration underwent both CT and MRI diagnostic procedures within a variable time span. 61.90% of CT findings were negative while the remaining 38.10% (16 cases) revealed suspect brain tumor (3 cases), tumor (2), calcification (5), brain atrophy (2), cyst (2), ischemic lesions (1) and suspect vascular malformation (1). MRI yielded pathologic findings in all the cases: brain tumors were revealed in 13 cases, tumor relapse in one, brain cysts in 7, atrophy in 5, vascular (AV) malformation in 4, gliosis in 4, mostly in the basal and temporal region, calcification in 2 and chronic cerebritis in one; cerebral infarction, contusional focus, thrombosed aneurysm, scarification and dissemination were represented by one patient, respectively.

MRI proved to show all the major pathologic changes already displayed by CT, while vice versa happened only exceptionally. However, in a few cases MRI reestablished the correct diagnosis while in others it discovered multiple changes. The superiority of MRI is best documented in cases of gliosis, brain tumors in the vicinity of bone struc-

Some authors propose bed rest as an exclusive treatment of acute exacerbation. It is then clear that it is hardly possible to speak about application of any kind of physiotherapy in relapse. Great and rapid changes of clinical picture are also an obstacle for using such a treatment. Thus, the most suitable are the patients in stable phase of the disease with residual impairments of functions, which could be corrected - weakness, spasticity, disorders of sensibility, coordination, sphincter control. Patients in the phase of slow progression are also candidates for rehabilitation. Since patients with many years' complaints are in question, it seems that the most appropriate is the programme of self-management exercise, in which the emphasis is on the exercises of simple mobility and stretching exercises.

There is already video-tape production of these programmes by some centres for MS, but the national MS societies could do even more by active engagement in promoting and distributing valuable programmes.

A great progress has been made in the scope of reconstructive and restorative

neurology. The former, which implies structural modification, has been used in MS patients most commonly as stereotaxic correction of tremor. Unfortunately, this intervention risks provoking new demyelinating lesions all along the path of electrodes.

Restorative neurology is based upon the knowledge on development and growing, regeneration and functional plasticity of the central nervous system. It aims at modifying functions. The methods of restorative neurology have been widely used in MS patients with considerable success. Unfortunately, both methods require top-level, sophisticated technology and a big team of highly specialized experts which includes not only neurologists but also neurophysiologists, surgeons, physiatrists, engineers, etc. Only a few centres provide all the conditions. Therefore comprehensive employment is impossible just now.

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## WORKSHOP: NEUROPHYSIOLOGY

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### **SPATIAL AND TEMPORAL ORGANIZATION OF MOVEMENT RELATED BRAIN MACROPOTENTIALS IN CHILDREN**

The ontogenetic aspects and the spatial and temporal organization of movement related brain macropotentials recorded during the execution of a skilled performance task are reviewed. The skilled performance task is a self-paced, interactive, goal-directed task introduced by Papakostopoulos in 1978. The developmental study, conducted in 119 children from the age of 6 years to adolescence, has demonstrated that these potentials have a specific and independent maturation trend, characteristic of each cerebral area. The relationship of these brain potentials with the outcome of the performance, in terms of target performance and level of accuracy, is present in the frontal and precentral but not in the parietal areas. The magnetic study has shown that there are multiple sources of each of them in various cerebral areas.

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