# Neurological Sciences



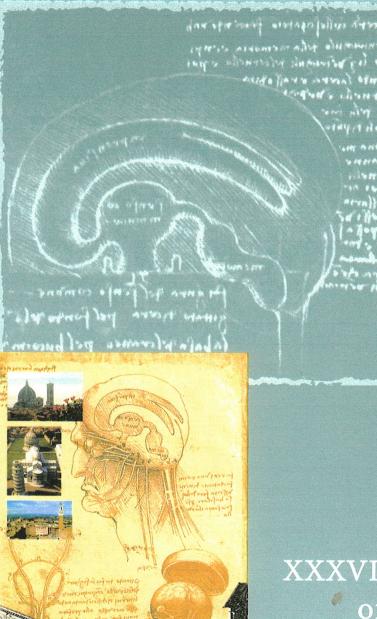
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SUPPLEMENT

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ABSTRACTS



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etiological conditions other than MS. Brain TC and MR showed a multifocal leukoencephalopaty with augmentation of the number of lesions (with respect the previous MR) and a wide right temporal-occipital poroencefalic malacic lesion. EEG showed right temporal slow waves (theta-delta) and recurrent sharp-waves with omolateral and controlateral diffusion. The patient was treated with valproic acid with improvement in two weeks.

**Discussion** Seizures are uncommon in multiple sclerosis and often they are associated with a several year's history. The pathological mechanisms are poorly understood and there is great variability with regard to the type of seizures. Status epilepticus is a rare complication of a old MS. Probably is related to the presence of a cortical-subcortical lesion.

Conclusions This observation draw attention to the fact that an epilectic cause should not be ruled out when a patient with multiple sclerosis presents a sudden neurologic or psychiatric impairment. An early diagnosis allows immediate and efficacy antiepileptic treatment.

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#### THE INTEGRATED APPROACH OF RIABILITATION IN M.S. PATIENTS: METHODS AND RESULTS

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**Objective** The objective is to appraise the effect of an integrated approach (interdisciplinary team) in M.S. pazients, in comparison to an approach classical of rehabilitation.

**Methods** This is a retrospective study in a period of observation of 24 months, not checked, in open, affections from M. S. in the R. R. form and in that S.P.

Materials Of the 30 patients adherent to the PIV and in treatment, 9 patients are selected (7 female and 2 males), with age' 49 year-old average and EDSS understood among 2.5–5. The used tools are: the staircase EDSS, Barthel Index; Tinetti Equilibrio and Walk; STAI, CDQ, SF36.

Results The statistic elaboration of the values of the staircases and the used tests it has shown: for the EDSS values in trend improvement, with a reduction of score to -0.50 (p=0.0008); for the staircase of Barthel the index has furnished constant data or in trend improvement to +0.45 (p=0.0003); the score of the staircase of Tinetti for the equilibrium has furnished data of substantial improvement of +2.67 (p=0.0009), while the score of the staircase of Tinetti for the walk has shown a general middle increase equal to +0.50 (p=0.0003); the questionnaire of the anxiety of state (STAI) has resulted in a score reduced him in the time from 45 (middle anxiety) to 40 (middle-low anxiety) (p=0.001); the test on the depression (CDQ) in the period of observation is passed by a general average of 6.5 to 5.4 (p=0.003); the test SF36, relatively to the inherent items the selfevaluation of the perception of the physical and mental comfort of the patients has shown a meaningful improvement in growing some score in the period of observation.

Conclusions The results show constant values or in trend improvement in comparison to the staircases of evaluation used. Probably such results are due to a best motivation to the treatment and to a more qualified therapeutic trust, that they positively engrave on the tone of the humor of the patient. A great compliance results to the treatment of it with meaningful effects on the quality of the life. In the patients' rehabilitation with multiple sclerosis an integrated approach certainly produces a more effective result in comparison to the simple traditional treatment.

### MULTIPLE SCLEROSIS MIMICKING BRAIN TUMOR AND CONCURRENCE OF BOTH: THE TWO FACES OF JANUS

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The pseudotumoral forms of Multiple Sclerosis (MS) often represent a diagnostic problem. On the contrary, simultaneous primary brain tumor and MS is uncommon. We report two paradigmatic cases. 1) C.C., a 40-year-old healthy female, was admitted for generalized seizure. Neurological examination, Cerebrospinal fluid (CSF) analysis, multi-modality Evoked Potentials and serologic studies for infective and autoimmune diseases were normal. Cerebral Magnetic Resonance Imaging (MRI) revealed two lesions: a large lesion in the left frontal lobe with mass effect, hypointense on T1 and hyperintense on T2 weighted images, with moderate gadolinium enhancement, and a second small lesion in the right parietal lobe. Stereotactic biopsy and histopathological examination revealed perivascular lymphoid cell infiltration, edema and gemistocytic gliosis. MRI examination three months later showed a reduction of lesion size in frontal lobe, but 9 months later patient manifested dysartria. New MRI documented numerous lesions in both emispheres, right side of the pons, periventricular deep white matter. The control of CSF analysis showed the presence of 3 oligoclonal bands with Ig index 2.3. This patient had a relapsing/remitting course, and she manifested any more seizure. 2) V.G., a 65-year-old female, with a 15 years history of initially relapsing/remitting and finally chronic progressive MS. Clinical picture was of tetraparesis. marked to the lower limbs. She was admitted for headache and worsening weakness of left arm, which not responded to corticosteroid treatment. MRI showed a large lesion in the right temporo-parietal lobe, with peripheral ring enhancement, severe mass effect on lateral ventricle and moderate edema, suspected for high-grade glioma. She refused stereotactic biopsy and then she underwent radiotherapy; a following MRI showed worsening of lesion, involving the corpus callosum. Patient died two months later, and the suspected diagnosis of glioma was confirmed by the postmortem brain examination. In conclusion, with stress in the first case the importance of considering a demyelinating process in the differential diagnosis of tumor-like brain lesions. In the second case we emphasize instead the need to perform neuroradiological controls, also in well-established MS patients, especially when they show unexpected clinical deterioration with atypical symptoms.

## GENDER-SPECIFIC INFLUENCE OF THE CHROMOSOME 16 CHEMOKINE GENE CLUSTER ON THE SUSCEPTIBILITY TO MULTIPLE SCLEROSIS

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**Background** Macrophage-derived chemokine (MDC/CCL22) plays a role in Experimental Autoimmune Encephalomyelitis (EAE), the animal model of Multiple Sclerosis (MS). MDC/CCL22 gene is part of a chemokine cluster, which includes also Thymus and Activation-Regulated Chemokine (TARC/CCL17).

**Objective** The frequency of the C/T and C/A Single Nucleotide Polymorphisms (SNPs) in the promoter and coding sequence of CCL22 as well as the C/T SNP in the promoter of CCL17 were determined by allelic discrimination in 277 patients with multiple sclerosis (MS) compared with 269 controls.

**Results** A decreased allelic frequency of the A allele of the CCL22 C/A SNP as well as of the T allele of the CCL17 C/T SNP was found in patients compared with controls (p=0.0137, OR: 0.47, CI: 0.25–0.88 and p=0.0025, OR: 0.42, CI: 0.23–0.77). The frequency