

puter tomography. The man while showing a general improvement he subsequently had a stroke after which he had a slight deterioration. The results showed that the appearance of DAN in MS patients could be due to genetic predisposition. They also indicate therapeutic resistance and bad prognoses

#### 27P41

##### **Medial Temporal and Parietal N-acetylaspartate Reduction in Elderly Adults Mild Cognitive Impairment**

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There has been growing interest in elderly adults who suffer from cognitive impairment greater than that which accompanies normal aging because these subjects have higher rates (12-15% per year) of developing Alzheimer's disease (AD) than elderly subjects who are cognitively normal (1-2% per year). It is likely that cognitively impaired elderly adults have pathologic brain changes that correspond to an early phase of AD. The current study used magnetic resonance spectroscopic imaging to examine N-acetylaspartate (NAA) concentrations in different regions of the brain. NAA is a neuronal marker; therefore a decrease in its concentration suggests neuronal loss or dysfunction. We also investigated the relationship between NAA concentration and performance on the Memory Assessment Scales word list learning test because memory impairment is a cardinal feature of AD. Twenty-four AD patients, 21 cognitively impaired but not demented (CIND) subjects, and 24 age-matched cognitively normal subjects were studied. Relative to controls, CIND and AD and subjects both had lower NAA concentrations in parietal ( $p=0.01$ ) and medial temporal lobe gray matter ( $p=0.001$ ). Moreover, there were no significant differences in NAA concentrations between AD and CIND subjects in these brain regions. This suggests that CIND subjects have AD-like pathology in brain regions predominately impacted by the disease. In CIND subjects, medial temporal lobe NAA concentration correlated positively ( $r=0.44$ ,  $p<0.05$ ) with performance on delayed list recall. This finding underscores the functional significance of reduced NAA in the brains of CIND subjects.

#### 27P42

##### **Calcium is the unifying molecule in neurodegenerative disorders**

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Efforts to elucidate the pathomechanism of Alzheimer's disease and other neurodegenerative disorders have yielded an increasing pile of hypotheses. When analyzing thousands of scientific papers, the involvement of the central secondary messenger, calcium, becomes apparent. We demonstrate that disturbed calcium homeostasis might be a common underlying factor in brain pathologies. By targeting calcium, this new information promises to broaden our understanding of health and illness and the approaches we take to treating disease.

#### 27P43

##### **Complications of the Pharmacological manipulations in aged people with paralytical sequels of chronical brain-vascular diseases submitted to Neurological Restoration Programs. Five years of experience**

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A retrospective study was done in aged people with paralytic sequels of chronic brain-vascular diseases that were submitted to Neurological Restoration Programs (4 weeks) in the CIREN in the last 5 years (118 patients), to know the main complications of the pharmacological manipulations in relation to the control of risk factors, sequels and self-complications of this type of affection, to determine the poly-pharmacy level in the studied sample and its possible relationships with adverse effects. It is found a real poly-pharmacy prevalence in the studied sample (25.75 of the cases had indicated 6 or more medicaments daily). The main adverse manifestations related to the medication were: gastric troubles, ortostatic hypotension, constipation, somnolence and delirium. The main groups of medicaments involved in adverse reactions in order of frequency were: the benzodiazepines, tricyclic antidepressives, homorreologics, beta-blockers and anti-aggregants. It calls the attention the low incidence of secondary effects in the aspirin use. It is shown a high incidence in the adverse effects related to the quantity of used medicaments (57.1 % of the cases consumed 6 or more me-