

## OTHERS ARE TO BLAME (DISPLACEMENT IN PATIENTS WITH DRUG-RESISTANT EPILEPSY)

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**Objective:** To evaluate the defense mechanisms (DM) in patients with drug-resistant epilepsy and, to determine whether displacement is associated with seizures.

**Subjects and methods:** Following an examination, 50 patients were diagnosed in accordance with the 2005 proposal of the International League Against Epilepsy and the definition of drug-resistant epilepsy from 2010. The neuropsychological examination used the Defense Style Questionnaire (DSQ-40). We measured the intensity of individual DMs. Mature DMs: sublimation, humor, suppression and anticipation; neurotic DMs: undoing, pseudo-altruism, idealization and reactive formation; and immature DMs: projections, passive aggression, acting out, isolation, devaluation, autistic fantasies, denial, displacement, dissociation, splitting, rationalization and somatization. The values were compared with 50 subjects without epilepsy.

**Results:** Patients with drug-resistant epilepsy use immature defensive styles significantly more ( $p=0.0010$ ). Displacement have a positive correlation with frequency of seizure ( $p=0.0412$ ).

**Conclusion:** Blaming others is a characteristic of the behavior of patients with drug-resistant epilepsy, especially if they have seizures. As such, they may be less adaptable in a micro social environment.

**Key words:** drug-resistant epilepsy - defense mechanisms - displacement - social behavior

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## COGNITIVE FUNCTIONALITY OF PATIENTS WITH DELIRIUM AFTER STROKE

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**Background:** Delirium is a syndrome that occurs in all age groups and in many clinical departments, and is most common in intensive care units. It is an emergency, in the overlapping fields of somatic medicine, neurology and psychiatry. Delirium occurs suddenly, dramatically, and requires a quick reaction, recognition and treatment. There are only a small number of studies that have reported delirium after a stroke. In our study, the goal was to determine the cognitive functionality of patients with delirium after a stroke.

**Subjects and methods:** This is a prospective study in which a group of 100 delirium patients in the acute phase of a stroke were evaluated for cognitive function. The control group consisted of the same number of patients with acute stroke who were not diagnosed with delirium. Neurological, neuropsychiatric and neuropsychological tests were performed in all patients at five different time periods. In these time periods, all patients were evaluated: Glasgow scale; Delirium assessment scale; The American National Institutes of Health Scale Assessment; Information-Memory-Concentration test; Scordementia; Mini Mental Test. The findings of computed tomography of the brain and magnetic resonance imaging of the brain were interpreted by a radiologist who was not familiar with the goals of this study.

**Results:** Cognitive functioning of delirious patients is statistically significantly worse after three and six months, and one year from stroke compared to those without delirium. There is no statistically significant difference in cognitive functioning between delirious patients in relation to gender, age, location and type of stroke and patients without delirium throughout one year from stroke. There is no significant difference in cognitive functioning between delirious patients during one year from stroke in relation to severity and type of delirium, and statistically significantly higher degree of cognitive dysfunction has those older than  $\geq 65$  years.

**Conclusions:** Delirium significantly reduces the cognitive functioning of patients after a stroke.

**Key words:** stroke - delirium - dementia

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## OLEH HORNYKIEWICZ (1926-2020): SIXTY YEARS SINCE THE PIONEERING L-DOPA APPLICATION - ONE YEAR SINCE THE DEATH OF THE PIONEER

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Oleh Hornykiewicz was born on November 17, 1926 in Lamberg, Ukraine. After completing his studies in July 1951, he moved to the "Pharmacological Institute of the University of Vienna". In 1958, he started his research on centrally acting drugs at the same institute and came up with the idea of linking laboratory observations with animals with the basal ganglia of the human brain. Soon, Hornykiewicz initiated a new question: L-DOPA as a therapy for Parkinson's disease? Fortunately, after administration of this new drug, patients were able to perform motor activities which could not be prompted to any comparable degree by any known drug. In the following decades, initial fiction became an unavoidable fact. Dopamine, adapted and combined with carbidopa or benzerazide, has evolved into a drug that no longer recognizes the borders of countries and continents. Distinguished emeritus prof. Oleh Hornykiewicz died on May 26, 2020 at the age of 93 in Vienna, Austria. Unfortunately, despite everything he has done and deserved, the Nobel Prize was not received.

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## THE IMPACT OF DISEASE ACTIVITY ON QUALITY OF LIFE, FATIGUE, FUNCTIONAL STATUS AND PHYSICAL ACTIVITY IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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**Background:** Inflammatory back pain and stiffness are the leading symptoms of ankylosing spondylitis (AS). AS progression leads to substantial functional impairment and can reduce quality of life (QoL). The aim of this study was to determine the impact of disease activity on QoL, fatigue, functional status and physical activity.

**Subjects and methods:** One hundred and fifty AS patients were included in the study, their body mass index (BMI) was calculated and they completed questionnaires regarding disease activity (The Bath Ankylosing Spondylitis Disease Activity Index, BASDAI) functional status (The Bath Ankylosing Spondylitis Functional Index, BASFI) spinal mobility (The Bath Ankylosing Spondylitis Metrology Index, BASMI), physical activity (the International Physical Activity Questionnaire, IPAQ), functional disability (The Health Assessment Questionnaire Disability Index, HAQ-DI), fatigue (The Functional Assessment of Chronic Illness Therapy - fatigue, FACIT-F) and QoL (The Short Form Survey -36, SF-36).

**Results:** Patients with inactive disease (BASDAI <4) had significantly better HAQ scores ( $p=0.001$ ), SF-36 mental component scores - MCS ( $65.68 \pm 19.54$  inactive vs.  $46.89 \pm 21.78$  active disease,  $p=0.001$ ), SF-36 physical component scores - PCS (median score  $56.25$  inactive vs.  $30.00$  active disease,  $p=0.001$ ) and FACIT-F scores ( $38.49 \pm 10.62$  inactive vs.  $26.21 \pm 10.81$  active disease,  $p=0.001$ ). There was no significant difference in patient's physical activity or BMI regarding disease activity ( $p=0.564$  and  $p=0.162$  respectively). Also, there was no significant difference in BASDAI, BASMI or BASFI scores regarding different BMI categories ( $p=0.818$ ,  $p=0.474$ ,  $p=0.436$ , respectively).

**Conclusion:** AS activity increased fatigue, impaired functional ability and QoL, especially the physical component. Although more than half (61.4%) of our patients were categorized as pre-obese or obese according to BMI, this was not related to disease activity, spinal mobility or daily functioning scores. Reported physical activity level had no effect on disease activity. Disease activity influences the course of AS and QoL assessment should be implemented into regular AS evaluation in order to improve treatment outcome.

**Key words:** ankylosing spondylitis - quality of life - fatigue - physical activity - body mass index

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