hallucinations. As relevant physical history, the patient has AHT, aortic insufficiency, and bladder cancer operated on in 2012. As psychiatric history of interest, the patient has been diagnosed since his 30s with schizoaffective disorder, Parkinson's disease and moderate-severe cognitive impairment secondary to the previous two.
As usual treatment, in addition to anticoagulation and antihypertensive therapy, the patient has been receiving L-dopa for his PD for years, antidepressant treatment with escitalopram 10mg, haloperidol 80 drops a day, divided into three doses, and lormetazepam 2mg as a hypnotic.
In addition to the symptoms described above, the patient had episodes of confusional features, as well as marked stiffness in the cogwheel and significant gait disturbance, having suffered several falls without serious repercussions.
Results: Due to the comorbid neurological pathology, it was decided to progressively modify the treatment, withdrawing the benzodiazepine due to the risk of confusional disorder and replacing it with trazodone. Antipsychotic treatment was gradually replaced by extended-release quetiapine, reaching a maximum dose of 800mg. Likewise, escitalopram treatment is replaced by sertraline.
With this adjustment, there was an improvement in the psychotic symptoms, as well as in the anxious symptoms. Episodes of distress are NOT observed, and the patient's functionality improves, allowing him/her to participate in daily activities, both cognitive stimulation and physiotherapy.
Conclusions: The Spanish Society of Psychogeriatrics recommends that before using antipsychotics, it is advisable to first treat the underlying potentially treatable causes (pain, infections, toxic effects of drugs…), assess non-pharmacological interventions and always, if the use of antipsychotics is required, assess the risk-benefit ratio.
In relation to the above, it is not surprising that in the elderly, the use of second-generation antipsychotics is recommended in the first place, as opposed to the classical ones. The latter are only recommended in emergency situations where an almost immediate effect is required.
For dopaminergic psychosis, there are only controlled trials with clozapine. However, due to prescribing difficulties, aripiprazole or quetiapine is recommended in the first instance.

Disclosure of Interest: None Declared

EPV0682

"Neuropsychiatric manifestation of hyponatremia: a case report"

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doi: 10.1192/j.eurpsy.2024.1332

Introduction: "Electrolyte abnormalities are commonly encountered in daily clinical practice, and their diagnosis relies on routine laboratory results. Electrolyte disturbances can affect the brain among many other organs and tissues and must be promptly recognized, as they can lead to serious and potentially life-threatening complications if neglected or not appropriately treated. Neurological manifestations reflect the severity of acute neuronal dysfunction and thus require urgent treatment. Acute and/or severe electrolyte imbalances can manifest with rapidly progressive neurological symptoms, seizures, and psychiatric manifestations. They are more frequently observed in patients with sodium disorders (especially hyponatremia), hypocalcemia, and hypomagnesemia.
Objectives: Were the psychiatric manifestations secondary to hyponatremia or epilepsy? Or is it a comorbidity? What are the risk factors? And what is the appropriate course of action for this type of patient?"
Methods: We present, through a clinical case, the situation of a 64-year-old patient who experienced status epilepticus secondary to hyponatremia, requiring hospitalization in the neurology department. Subsequently, she developed psychiatric manifestations with a marked change in behavior. She began experiencing symptoms of anxiety and depressive mood, headaches, somatic complaints, and social isolation. Her condition gradually worsened, necessitating hospitalization in the psychiatry department 3 years later.
Results: The patient was placed on Carbamazepine by her neurologist, and since then, she has not experienced epileptic seizures. Her follow-up electrolyte panel initially showed slight disturbances before normalizing. Psychiatric manifestations were concurrent with these somatic symptoms and worsened over time. During her psychiatric hospitalization three years later, after a thorough evaluation, she was prescribed Sertraline ans Risperidone in combination with Carbamazepine, resulting in a significant improvement in her condition.
Conclusions: In summary, this case illustrates the critical impact of electrolyte abnormalities on both neurological and psychiatric health, especially in older patients. Understanding risk factors associated with electrolyte imbalances is crucial for effective diagnosis and management, particularly in the elderly. This underscores the importance of a multidisciplinary approach to address the potential serious consequences of electrolyte disturbances on overall patient well-being.

Disclosure of Interest: None Declared

EPV0684

Cytoprotective mechanism of cerebro-cognitive reserve

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doi: 10.1192/j.eurpsy.2024.1333

Introduction: Consideration of the reserve problem would be incomplete without an analysis of the cytoprotective mechanism. The predominant molecular hallmark of aging and degeneration is the accumulation of altered gene products. Moreover, several conditions, including protein, lipid, or glucose oxidation, disrupt redox homeostasis and lead to the accumulation of unfolded or misfolded proteins in the aging brain in case of AD, and other neurodegenerative diseases that have as a common denominator abnormal protein production, mitochondrial dysfunction and oxidative stress. Some authors classify aging, pathological aging, and neurodegeneration as "protein conformational diseases".

Objectives: scientific publications
Methods: analytical review
Results: The central nervous system has evolved a conserved unfolded protein response mechanism to cope with the accumulation of misfolded proteins. As one of the main intracellular redox systems involved in neuroprotection, the vitagene system becomes a potential neurohormetic target for novel cytoprotective interventions. Vitagens encode the cytoprotective heat shock proteins (Hsp) Hsp70 and heme oxygenase-1, as well as thioredoxin reductase and sirtuins. The cellular stress response is the ability of a cell to withstand stressful conditions, including the heat shock response. The production of heat shock proteins, including protein chaperones, is necessary for the folding and repair of damaged proteins, which promotes cell survival to avoid apoptosis.«Molecular chaperone» are proteins that function as part of an ancient defense system in our cells. They promote cell survival by sequestering damaged proteins and preventing their aggregation. Chaperone complexes are involved in the regulation of mitochondrial functions, assembly of the cytoplasmic proteolytic system of brain cells. The cellular response to stress requires the activation of survival pathways that are under the control of protective genes called vitagens. Vitagens are involved in the production of heat-shock protein molecules, glutathione, and bilirubin. They have antioxidant and anti-apoptotic activity and provide protection against oxidative stress.
Conclusions: Studies have shown that the heat shock response contributes to the maintenance of cellular homeostasis, the establishment of a cytoprotective state in a wide range of human diseases, including inflammation, cancer, aging, and neurodegenerative disorders. Endogenous proteins can be manipulated by food or pharmacological compounds, which represents an innovative approach to therapeutic intervention in neurodegenerative disorders, actually influencing reserve mechanisms and adaptive capacity.

Disclosure of Interest: None Declared

EPV0686

Platelet enzymatic activities in patients with late-onset schizophrenia spectrum disorders

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doi: 10.1192/j.eurpsy.2024.1334

Introduction: Impairments in energy metabolism, glutamate neurotransmitter and antioxidant systems contribute substantially in development of schizophrenia spectrum disorders, especially in late-onset psychosis (LOP).
Objectives: Revealing subgroups of patients with LOP by determining activity of platelet enzymes of energy, glutamate, and glutathione metabolism.
Methods: 62 women of 52-89 years old were studied, with late onset schizophrenia spectrum disorders (F20.0, F25, F22.0, F06.2 by ICD-10). PANSS with its subscales was used to assess the severity of psychotic symptoms. Scores by PANSS and activity levels of platelet cytochrome *c*-oxidase (COX), glutamate dehydrogenase (GDH), glutathione reductase (GR) and glutathione-S-transferase (GST) were evaluated twice: before and on the 28-th day of antipsychotic treatment. Activities of COX, GDH, GR, and GST were measured in 37 women of 50-84 years old comprising the control group.
Results: Clustering of patients by the enzymatic activities resulted in 2 clusters (C1 and C2) significantly different by COX and GST ($p<0.001$). In C1 (n=40), as compared with control, reduced level of GDH activity before and after treatment ($p=0.049$ and $p=0.032$, respectively) and a reduced level of GR activity before treatment ($p=0.026$) were revealed. In C2 (n=22), as compared with the control, COX activity was increased before and after treatment ($p=0.0001$), GDH activity was decreased before and after treatment ($p=0.0002$ and $p=0.0001$, respectively), and GST activity was decreased before and after treatment ($p=0.029$ and $p=0.0029$, respectively). GR activity was not significantly changed in both clusters. Significant correlations were found between enzymatic activities and scores by psychometric scales: in C1, GR activity positively correlated with the score reduction (delta) by PANSS-Pos ($R=0.45$, $p=0.004$), by PANSS-Psy ($R=0.44$, $p=0.005$), and by PANSS ($R=0.47$, $p=0.002$), and GST activity – with the score reduction by PANSS-Psy ($R=0.315$, $p=0.048$). In C2 (n=22), GDH activity negatively correlated with the score reduction by PANSS-Pos ($R=-0.41$, $p=0.050$) and by PANSS ($R=-0.49$, $p=0.021$).
Conclusions: The different correlations revealed in two separated clusters between enzymatic activity levels and clinical measures characterizing the antipsychotic treatment efficacy will allow us to approach differentiated predicting the effectiveness of pharmacotherapy using the biochemical parameters.

Disclosure of Interest: None Declared

EPV0687

Clustering patients with late-life depression by blood glutathione-dependent enzymatic activities for stratification of a heterogeneous group

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doi: 10.1192/j.eurpsy.2024.1335

Introduction: We have previously found significant alterations in activities of glutathione dependent enzymes in blood cells of patients with late-life depression (LLD) compared with age-matched controls.
Objectives: The revealing subgroups of LLD patients by glutathione-metabolism enzymes' activities in blood cells using cluster analysis.
Methods: LLD patients (n=101) of 60-86 age (69 patients with recurrent depression (RD), 23 with bipolar disorder (BD) and 9 patients with a single depressive episode (DE)) were assessed by Hamilton depression rating scale (HAMD-17), and Hamilton Anxiety Rating Scale (HARS). Activity levels of glutathione reductase (GR) and glutathione S-transferase (GST) were