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#### EW0178

### Psychiatric symptomatology as the initial presentation of brain cancer

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Glioblastoma multiforme is the most common primary adult brain tumor. Clinically, non-specific psychiatric symptoms may arise as their first and only manifestation, prior to any neurological deficits. The most form of psychiatric presentation of neurological diseases are depressive complaints, although these may also be accompanied by behavioral and/or cognitive, anxious and psychotic symptoms. By explaining this case report we aim to emphasize the importance of considering the diagnosis of an organic brain disease, even when only primary psychiatric symptoms are evident. The bibliographic research was made using PubMed and Scielo, and analysis of the electronic patient process. Man of 68 years with a history of hypertension, nephrectomy, splenectomy and left brachial plegia after a car accident. He had been previously seen by a psychiatrist for a 6-month history of depressive symptoms, which had been successfully treated. He later developed new behavioral changes such as heteroaggressiveness, social maladjustment and disfasia, for which he was sent to the emergency room. Brain-CT scan displayed a left front temporal expansive injury. Admitted to the Neurology Department for further diagnostic investigation. Subsequent MRI, detected massive infiltrative lesion with significant mass effect and cystic/necrotic area. The anatomopathology disclosed a glioblastoma grade IV. This case reinforces the importance of carrying a imagiologic workup in cases like this, especially on patients with atypical presentation of psychiatric symptoms.

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#### EW0179

### Differential effects of mGluR5 receptor blockade on behavior, schizophrenia-relevant gene expression and neuronal activation patterns from development to aging mice

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*Introduction* The glutamate system is implicated both in mood disorders and schizophrenia. Mice lacking metabotropic mGlu5 receptors (mGluR5 KO) display schizophrenia-like abnormalities. Additionally, mGluR5 antagonists represent promising alternative anxiolytics/antidepressants. However, the underlying age-specific molecular/cellular mechanisms are only partially understood.

*Objectives* We aimed at identifying molecular alterations associated with a genetically induced mGluR5 deletion, which results in a schizophrenia-like phenotype. Additionally, we investigated age-specific effects of mGluR5 antagonists on emotional behaviour and c-fos activation.

*Methods* For analysis of mRNA and protein levels we performed Real-time RT-PCR and Western blot investigations of brains from mGluR5 KO and wild-type mice. Additionally we used classical behavioral tests for determining anxiety- and depression-like changes triggered by the mGluR5 antagonist 2-Methyl-6-(phenylethynyl)pyridine (MPEP). Finally, we used profiling of c-Fos expression, as marker of neuronal activity, induced by MPEP from postnatal day 16 (P16) to adulthood (P90).

*Results* We found reduced expression levels of reelin, GAD65, GAD67, parvalbumin, as well as NMDA and AMPA receptor subunits in mGluR5 KO mice, especially in the prefrontal cortex (PFC). We measured age-specific alterations in emotional behaviour of mGluR5 KO mice, with marked increase of anxiety during aging. There was a remarkably conserved activation of the paraventricular nucleus of the hypothalamus, implicated in stress regulation, by MPEP at all investigated ages, whereas the extended amygdala was specifically activated in adulthood only.

*Conclusions* Our animal data provide new insights into the potential role of mGluR5 in neurochemical and behavioural changes associated with schizophrenia and mood disorders during the life-span.

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#### EW0180

### Influence of personal meaning organization and 5-HTTLPR genotype on cortisol stress reactivity in healthy women

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*Introduction* Reactivity to acute psychosocial stress in the framework of a physiological multidimensional pattern affects several individual-level systems that include genetic factors and features related to personality development. The 5-HTTLPR genotype has been implicated in the modulation of susceptibility to environmental stimuli.

*Objectives* In the present study, 91 healthy young women were investigated (i) for their reactivity to a standardized psychosocial laboratory stressor (TSST), as measured by changes in salivary cortisol; (ii) in terms of 5-HTTLPR genotype and (iii) in terms of their personality profile according to the post-rationalist personal meaning organizations (PMOs), which are considered as adaptive modes of response to environmental stressors.

*Methods* Participants were divided into three 5-HTTLPR genotype groups (s/s; s/l, and l/s). The quantitative and qualitative variables that may affect circulating cortisol were compared among the three groups. A multiple linear quantile regression analysis was then performed to evaluate the effect of the personality profile, as Outward/Inward PMO, and 5-HTTLPR genotype on the median level of cortisol, considered as dependent variable.

*Results* Comparison of the variables that may affect circulating cortisol no significant differences. Salivary cortisol changed significantly in the course of the TSST. Reactivity to stress was affected by personality profile and the 5-HTTLPR genotype and also by body mass index and age.