SP083

Immunometabolic function in depression: From etiology to treatment

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Abstract: Background: Major depressive disorder is a common, disabling mental disorder characterized by extensive etiological and phenotypic heterogeneity. This heterogeneity makes treatment approaches imprecise and often ineffective. Insight into the underlying biological mechanisms underpinning depression and its subtypes may enable more personalized treatments.
Methods: A review of the literature as well as data analyses from 2981 individuals from the Netherlands Study of Depression and Anxiety (NESDA), of whom ˜1900 persons have or lifetime or current Major Depressive Disorder and 650 were healthy controls.
Results: Significant immuno-metabolic dysregulations are present in about 20-30% of people with depression. Such immuno-metabolic depression is characterized by the clustering of 1) atypical, energy-related depressive symptoms such as hypersomnia, fatigue, hyperphagia, and possibly anhedonia, 2) systemic low-grade inflammation with elevated levels of e.g. C-reactive protein, cytokines and glycoprotein acetyls, and 3) metabolic abnormalities involving e.g. obesity, dyslipidaemia, insulin and leptin resistance. Evidence for such clustering is confirmed in large-scale proteomic, metabolomic, gene expression as well as genome-wide data analyses. Persons with immuno-metabolic depression are at a higher risk for cardiometabolic diseases and – from pooled analyses of 4 RCTs in over 1000 individuals - seem to respond less well to standard antidepressant treatment.
Discussion: Interventions targeting inflammation, metabolism or lifestyle may be more effective treatment options for individuals with immuno-metabolic depression, in line with principles of precision psychiatry.

Disclosure of Interest: None Declared

SP082

Advancing Biomarker Research in Depression: The role of neuroprotective and inflammatory markers

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Abstract: The search for biomarkers to diagnose depression is an endeavor being pursued in psychiatric research since the 1980s, but hasn't resulted in clinical application. This remains challenging since the symptomatology of depression is very heterogeneous and because there is no diagnostic gold standard that focuses on an underlying biological mechanism. Despite knowing about the metabolic, endocrine, inflammatory as well as autonomous dysregulation that has been observed in depressed patients, none of these are broadly used to stratify patients. A novel area of research involves the insulin-like growth factor (IGF) system, which plays a vital role in brain development, neurogenesis, and neuroprotection. The insulin-like growth factor (IGF) system, encompassing IGF-I, IGF-II, IGFBPs (1-6), and their receptors, is critical for brain development, neurogenesis, neuroplasticity, and neuroprotection. Insulin-like growth factor binding protein-2 (IGFBP-2), the predominant IGFBP in the central nervous system, regulates IGF-I and IGF-II bioavailability, half-life, localization, and receptor interactions. Serum levels of IGFBP-2 inversely correlate with DTI-derived myelin integrity measures, especially in anterior brain regions.
In a data-driven clustering analysis of a depressed cohort, elevated IGFBP-2 levels delineated a healthier subgroup within a hospitalized cohort of patients with unipolar depression. Additionally we discovered, that patients with higher IGFBP2 levels at inclusion were more likely to remit faster concerning their depressive symptoms, in contrast to an inflammatory marker-defined subgroup. These findings suggest IGFBP-2 as a biomarker for stratifying patients and tailoring interventions in depression. Future research should explore IGFBP-2 and inflammatory markers to better stratify patients and develop targeted therapies, advancing precision medicine for depression and related disorders.

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SP083

State- versus trait- dependent immune alterations in major depression: Exploring CRP, numerical and functional changes in neutrophils and monocytes

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Abstract: Background: Inflammatory processes and innate immune system activation have been implicated in psychiatric disorders. While our prior research highlighted elevated neutrophils, monocytes, and C-reactive protein (CRP) associated with symptom severity in schizophrenia, this study investigates whether similar immune alterations characterize major depression (MD).
Methods: Differential blood counts, CRP levels, depression severity (HAMD-21), and psychosocial functioning (GAF) were assessed in controls (n = 129) and patients with first-episode (FEMD: n = 82) or recurrent (RMD: n = 47) MD at hospital admission (T0) and after 6 weeks of treatment (T6). Functional immune parameters, including the phagocytic activity of neutrophils and monocytes, were also measured in a subset of patients with MD (n = 16) and healthy controls (n = 27).
Results: At T0, both FEMD and RMD patients exhibited increased neutrophils ($p = 0.034$) and CRP levels (FEMD: $p < 0.001$, RMD: $p = 0.021$) and decreased eosinophils (FEMD: $p = 0.005$, RMD: $p = 0.004$) compared with controls, adjusted for covariates (smoking, BMI, gender). Baseline lymphocyte counts were elevated in RMD ($p = 0.003$) but not FEMD. Functional analyses revealed significantly increased phagocytic activity of neutrophils in MDD

patients compared to controls, both at baseline and T6. Changes in monocyte phagocytic activity correlated with ΔHAMD, indicating a link between immune cell function and symptom improvement.
At T6, eosinophils increased in FEMD (p = 0.011) without significant changes in RMD. Improvement in depression severity correlated with changes in neutrophil counts in FEMD (r = 0.364, p = 0.024). Comparatively, immune alterations in MD showed smaller effect sizes than those observed in schizophrenia. Notably, lymphocyte elevations were specific to recurrent MD, suggesting potential involvement of adaptive immunity in chronic MD.
Conclusions: These findings highlight state- and trait-dependent immune alterations in MD, including heightened neutrophil activity in early stages and adaptive immune involvement in recurrent cases. Functional data further support the role of innate immune activation in MD, with phagocytic activity potentially serving as a biomarker for treatment response. Future studies may inform stage-specific immune-targeted interventions in MD.

Disclosure of Interest: None Declared

SP084

The Association Between Childhood Maltreatment and Somatic Symptoms in Adulthood

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Abstract: Background: Childhood maltreatment (CM) encompasses various forms of abuse and neglect before age 18 and frequently manifests in somatic symptoms (SS) such as chronic pain or fatigue. Despite growing recognition of this connection, the relationship between specific CM types and SS, as well as the mechanisms underlying this link, remains incompletely understood.
Objective: To examine the current understanding of the association between CM and SS, to highlight gaps in the literature, and propose directions for future research.
Method: A state-of-the-art review searching a range of different databases was performed to explore the interplay between CM (exposure) and SS (outcome) in adults (over age 18).
Results: Identified literature gaps include 1) inconsistency regarding the specific impact of subtypes of CM, specifically of neglect, on the development of SS; 2) narrowing the focus to specific functional syndromes (e.g., fibromyalgia), or selected health outcomes (e.g., respiratory disease) rather than SS as a broad category; and 3) underexploring the impact of culture.
Discussion: Key recommendations for future research include adopting standardized WHO definitions for CM subtypes, expanding SS diagnostic criteria (e.g. through using comprehensive ICD-11 coding), and integrating cultural moderators (e.g. different health beliefs) into research methodologies. By adopting these recommendations, research could significantly improve patient care and mitigate the broader societal consequences of childhood trauma.

Disclosure of Interest: None Declared

SP085

Psychotherapy training in Turkey and Europe, similarities and differences

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Abstract: Evidence for efficacy of various modalities of psychotherapies is growing and such therapies are increasingly recommended in international guidelines for the treatment of psychiatric disorders. Psychiatrists with strong psychotherapy skills are better positioned to provide individualized and multidisciplinary care. Training in psychotherapy also fosters the development of reflective practice, empathy, and cultural competence, all of which are vital in addressing the diverse needs of patients. Accessibility of psychotherapeutic treatment for the patients can be improved through integrating psychotherapy training in psychiatric training, together with continuous medial education activities. European and other international organisations have published guidelines requiring programs to promote psychotherapeutic competences among psychiatry trainees. However, psychotherapy education and supervision can often become a luxury rather than being a mandatory component of training; and resources are heterogenous. In this presentation, psychotherapy training availabilities and limitations in Turkey will be discussed, with a focus on the psychotherapy courses of Psychiatric Association of Turkey among other initiatives.

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SP086

Legal, professional, and practical aspects of psychotherapy education of psychiatrists in Germany

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Abstract: In Germany there are about 40.000 licensed psychological psychotherapists, 4.000 physicians who work as psychotherapists only, 8.000 psychiatrists who also are specialised in psychotherapy, 4.000 physicians specialised in psychosomatic medicine and psychotherapy, 1.000 physicians of child psychiatry, 35.000 somatic physicians with a training in psychosomatic basic care. This accounts for about 1 therapist for 1.000 inhabitants or 1 per 200 persons with mental problems in ambulatory care. All these therapists are fully reimbursed by health insurance. About 60% of all persons with mental problems have been treated in specialised outpatient psychotherapy.
There are furthermore 900.000 patients per year who are treated for 30 days on average in inpatient departments of psychiatry,