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Poster 36

[P-36-01]

Electrophysiological changes in depressive patients with non-suicidal self-injury: An event-related potential study and source analysis

*Sehoon Shim[1], Sangwoo Hahn[2] (1.SOONCHUNHYANG UNIV. CHEONAN HOSPITAL(Korea), 2.SOONCHUNHYANG UNIV. HOSPITAL(Korea))

[P-36-02]

Effective Management of Severe Aggression and Self-Injurious Behaviours with Clozapine in Adults with Autism Spectrum Disorder and Intellectual Disability

*Hui Xin Jenies Foo, Jiaqian Sun, Sajith Sreedharan Geetha (Institute of Mental Health (Singapore))

[P-36-03]

Development of a visual assessment tool for screening major depressive episodes

*Phannaratch Sritongkum, Sirirat Kooptiwoot, Woraphat Ratthaapha (Faculty of medicine, Siriraj Hospital, Mahidol Univ. (Thailand))

[P-36-04]

Survey research on the development of employment support apps for people with disabilities

*Miki MARUTANI Marutani[1], Chie Usui[2], Hiroo Wada[2], Gensei Ishimura[3] (1.National Institute of Public Health(Japan), 2.Juntendo University(Japan), 3.Professional University of Information and Management for Innovation(Japan))

[P-36-05]

Habenular Abnormalities in Bipolar Disorder and Their Molecular Correlates: A Multimodal Imaging Study

*Meng xuan Qiao, Hua Yu, Tao Li (Affiliated Mental Health Center & Hangzhou Seventh People's Hospital and School of Brain Science and Brain Medicine, Zhejiang University School of Medicine(China))

[P-36-06]

Comparison of the treatment strategies of mixed features between bipolar disorder and major depressive disorder: data from Korean Medication Algorithm Project(KMAP) for Bipolar Disorder and Depressive Disorder

*JEONG SEOK SEO (Department of Psychiatry, College of Medicine, Chung-Ang University, Gwangmyeong Hospital, Gwangmyeong-si, Korea(Korea))

[P-36-07]

Expectancy Violation Enhances Inhibitory Learning in Personalized Virtual Reality Exposure Therapy for Panic Disorder: A Randomized Controlled Trial

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Poster 36

[P-36-01] Electrophysiological changes in depressive patients with non-suicidal self-injury: An event-related potential study and source analysis

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Keywords：Interpersonal Relations、NSSI、ERP、EEG、Depression

Introduction: Non-suicidal self-injury (NSSI) is increasingly being observed among adolescents as a maladaptive coping mechanism for alleviating emotional distress. Despite its high prevalence, the neurobiological underpinnings that link interpersonal distress to cognitive control deficits remain underexplored. Electroencephalography (EEG) studies suggest that the no-go P3 component may serve as a biomarker for impulsivity and response inhibition, offering insights into the mechanisms underlying NSSI behaviors. This study aimed to investigate the relationship between psychological characteristics, neural activity, and cognitive control in adolescents with NSSI and healthy controls (HC).Methods: A total of 51 adolescents with NSSI and 50 HC were recruited. Psychological characteristics were assessed using standardized scales including the Interpersonal Needs Questionnaire (INQ) and Short UPPS-P Impulsivity Scale (SUPPS-P). EEG were recorded during a go/no-go task to measure P3 amplitudes. Source analysis was performed to localize the neural activity. Group differences were analyzed using ANCOVA to control for depression and anxiety, followed by partial correlation and mediation analyses to evaluate the relationships among the variables.Results: The NSSI group exhibited significantly lower no-go P3 amplitudes at all electrodes than the HC group ($p < 0.001$), even after controlling for depression and anxiety. No-go P3 amplitudes negatively correlated with INQ scores, suggesting that interpersonal distress affected response inhibition. Source analysis revealed reduced neural activity in the right superior frontal gyrus, the inferior parietal gyrus, and other regions associated with cognitive control and emotional regulation in the NSSI group. However, these differences disappeared after adjusting for depression and anxiety, indicating their potential mediating roles.Conclusions: These findings highlight the interplay between interpersonal distress, depression, anxiety, and cognitive control deficits among adolescents with NSSI. Future longitudinal studies are needed to confirm these pathways and explore therapeutic interventions targeting interpersonal distress and emotional regulation to mitigate NSSI.

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Poster 36

[P-36-02] Effective Management of Severe Aggression and Self-Injurious Behaviours with Clozapine in Adults with Autism Spectrum Disorder and Intellectual Disability

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Keywords：Clozapine、Neurodevelopmental Disorders、Aggression、Autism、Intellectual Disabilities

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Introduction:
Clozapine, effective in managing aggression in treatment-resistant schizophrenia, has shown promise for severe aggression in Autism Spectrum Disorder (ASD), where pharmacological options are limited. We report two adult cases with ASD and intellectual disability (ID) who showed significant improvement in aggression and self-injurious behaviours (SIB) following clozapine treatment.

Methods:
Two male patients (aged 28 and 32) with ASD and ID were admitted to a specialist unit due to severe aggression and SIB unresponsive to behavioural therapy and psychotropics, including risperidone. Clozapine was initiated with family's agreement in patient's best interest. Symptoms were tracked using HoNOS-LD and BPI-S, pre-and post-treatment (4 months).

Results:
The first patient (28yo) was treated with 250mg/day. His HoNOS-LD score dropped from 25 to 17, with reduction in aggression (4 to 2), SIB (4 to 0), and relationship problems (4 to 2). BPI-S scores reported reduction in aggression (29 to 6) and SIB (4 to 1). He no longer required physical restraints, engaged in therapy, and improved family interactions, prompting discharge planning.

The second patient (32yo), received 400mg/day. His HoNOS-LD improved from 32 to 25, with aggression reduced (2 to 1), SIB (3 to 1), and better self-care (3 to 2). BPI-S showed aggression reduced (18 to 11) and SIB resolved completely (7 to 0). He showed enhanced participation in therapeutic sessions and outings.

Both experienced sedation and mild tachycardia, resolved through dose adjustment. Blood monitoring showed no haematological complications.

Discussion:
Clozapine led to marked reductions in both aggression and SIB, alongside functional improvements in therapy participation and social interactions with favourable safety

profile observed. These cases underscore clozapine's potential in ASD, particularly when behavioural and conventional pharmacological interventions fail.

Conclusion:
These findings suggest clozapine may offer significant benefits in select ASD patients. Larger controlled studies are needed to confirm safety, efficacy, and optimal dosing.

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Poster 36

[P-36-03] Development of a visual assessment tool for screening major depressive episodes

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Keywords：Thai-PHQ9、VSD、Depression、communication impairment

Background: Depression is a high-prevalence mental health condition; standardized screening tools are widely used to assess depressive symptoms. These tools rely on linguistic comprehension, which may present barriers for individuals with communication impairments. The researchers designed the novel visual screening depression tools (VSD) specifically for this population. Objective: This study aims to develop and evaluate the validity and reliability of VSD, designed to minimize linguistic demands and improve accessibility for populations with limited verbal communication. This pilot study was conducted in the Thai population to prove the validity of the tools in normal communication ability before using this tool with individuals with communication impairments in the next study.
Methods: Concepts from each item of the PHQ-9 were analyzed and translated into easy-understanding images, each accompanied by a short caption. The VSD was administered alongside the Thai version of the PHQ-9 to 505 participants with normal Thai communication ability in the OPD unit of Siriraj Hospital. Psychometric analysis was used for statistical analyses.Results: The result of the VSD was compared with the Thai PHQ-9 as a gold standard. 501 subjects had completed both the VSD and the Thai-version PHQ-9. At the cut point for screening depression at a score ≧ 9 as the Thai PHQ-9. The sensitivity of the VSD is 94.08 (95% CI: 91.43, 96.73); specificity is 90.86 (95% CI.:86.84, 94.89). The internal consistency assessed through Cronbach's alpha coefficient is 0.885.
Conclusion: The VSD is a promising alternative for assessing depressive symptoms using images with small phrases in the normal Thai communication ability population. Its development may facilitate earlier detection and treatment of depression in the individual with limited language abilities.

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[P-36-04] Survey research on the development of employment support apps for people with disabilities

*Miki MARUTANI Marutani[1], Chie Usui[2], Hiroo Wada[2], Gensei Ishimura[3] (1.National Institute of Public Health(Japan), 2.Juntendo University(Japan), 3.Professional University of Information and Management for Innovation(Japan))

Keywords：employment support、people with disabilities、apps development

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Methods
Participants were people with disabilities recruited by employment transition support providers. From August 2024, for approximately one month, we requested the use of Waraifu to monitor the progress of people with disabilities by comparing their condition with their support environment, and to visualize the factors that hinder or promote employment. Before and after the trial period, we measured the authenticity sense scale (Ito, 2005) using a questionnaire survey, performed a relevant t-test, and investigated changes in self-understanding through self-monitoring. After the trial period, we surveyed users about their impressions of the app. This study was approved by the Ethics Committee of the National Institute of Public Health.
Results
A total of 36 respondents answered the questionnaire before and after using the app. All seven items related to the authenticity sense improved before and after using the app, and two items showed a significant difference. Usability was demonstrated by the fact that the app was well designed, with comments such as "the font size of the app was easy to read" and "the colors of the app were easy to see."
Conclusion
Japanese people tend to view themselves in relation to others, and Waraifu monitors the fluctuations in the condition of people with disabilities and the support environment, leading to a positive change in self-understanding. The small sample size and the fact that the survey was conducted non-face-to-face limit the interpretation of the results.

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Poster 36

[P-36-05] Habenular Abnormalities in Bipolar Disorder and Their Molecular Correlates: A Multimodal Imaging Study

*Meng xuan Qiao, Hua Yu, Tao Li (Affiliated Mental Health Center & Hangzhou Seventh People's Hospital and School of Brain Science and Brain Medicine, Zhejiang University School of Medicine(China))

Keywords：habenula、bipolar disorder、Magnetic Resonance Imaging

Bipolar disorder (BD) is a chronic psychiatric condition marked by alternating manic and depressive episodes and a high degree of heritability. Growing evidence implicates the habenula—a central hub regulating dopaminergic and serotonergic signaling—in the pathophysiology of BD.This study integrated structural and functional neuroimaging with transcriptomic analyses to characterize habenular abnormalities in BD. Structural MRI and resting-state fMRI data from 78 BD patients and 102 healthy controls were analyzed. Habenular volumes were manually segmented and compared via ANCOVA. Resting-state functional connectivity (rs-FC) was assessed using DPABI-SURF, with the habenula as the seed region. Spatial transcriptomic associations were examined using partial least squares correlation with the Allen Human Brain Atlas, followed by gene enrichment and polygenic risk score (PRS) analyses.We observed significantly reduced bilateral habenular volumes in BD patients, particularly during depressive episodes. Habenular volumes were negatively correlated with depressive symptoms and positively associated with manic symptoms. Functional analysis revealed increased rs-FC between the bilateral habenula and the right precentral gyrus during manic states.Transcriptomic analysis indicated that altered habenular rs-FC was associated with genes enriched in synaptic structure and neurotransmission pathways, several of which overlapped with BD risk loci identified in genome-wide association studies. PRS analysis further revealed that habenula–precentral gyrus connectivity was negatively correlated with PRS for G-protein-coupled serotonin receptor signaling, suggesting a genetic basis for these functional alterations.These findings provide multimodal evidence linking structural and functional abnormalities of the habenula to the molecular and genetic architecture of BD. This integrative approach offers novel insights into the neurobiological mechanisms underlying BD and highlights potential targets for individualized therapeutic strategies.

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Poster 36

[P-36-06] Comparison of the treatment strategies of mixed features between bipolar disorder and major depressive disorder: data from Korean Medication Algorithm Project(KMAP) for Bipolar Disorder and Depressive Disorder

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Keywords：Bipolar disorder、KMAP-BP、Mixed features.、Pharmacotherapy

Objectives. Treatment guidelines or an algorithm can help clinicians implement better practices and clinical decisions. Therefore, the Korean Medication Algorithm Project for Bipolar Disorder and Depressive Disorder (KMAP-BP; KMAP-DD) have been regularly revised through a consensus of expert opinion almost every 4 years, since its first development in 2002. We compared the pharmacological strategies for mixed features in the perspective between bipolar disorder and major depressive disorder from the results of KMAP-BP 2022 and KMAP-DD 2018.Methods We revised the KMAP-BP and -DD with an updated questionnaire and conducted a survey with expert clinicians in mood disorder in Korea. Eighty-seven members of the review committee completed the survey in KMAP BP 2022, one hundred forty-three experts reviewed in KMAD-DD 2021. Each treatment strategy or treatment option was statistically calculated with 95% confidence interval, and the treatment option was categorized into the three levels of recommendation of primary, secondary, and tertiary depending on the low value of 95% CI. Treatment of choice (TOC) refers to an item that more than half of the reviewers gave 9 points. Results. A. In first-step strategies for manic episode with mixed features (KMAP-BP 2022) For manic-dominant mixed features, a combination of a mood stabilizer (MS) and an atypical antipsychotic (AAP) is the TOC. And MS monotherapy and AAP monotherapy are preferred strategies. For depressive symptom-dominant mixed features, a combination of MS + AAP, a combination of AAP + lamotrigine (LMT), AAP monotherapy, a combination of MS + LMT, and MS monotherapy were preferred. For mixed features with similar manic symptoms and depressive symptoms, a combination of MS and AAP, AAP monotherapy, and MS monotherapy were preferred. For depressive episode with mixed features (KMAP-DD 2021), preferred strategies were antidepressant (AD) + AAP and AD + MS were recommended. Conclusion. The treatment strategy for the mixed features differed depending on whether it was diagnosed as bipolar disorder or depressive disorder. In addition, there were differences in treatment strategies depending on which symptoms were dominant among bipolar disorders.

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Poster 36

[P-36-07] Expectancy Violation Enhances Inhibitory Learning in Personalized Virtual Reality Exposure Therapy for Panic Disorder: A Randomized Controlled Trial

*Daeyoung Roh[1], Ki Won Jang[1], Han Wool Jung[2] (1.Hallym University(Korea), 2.Yonsei University(Korea))

Keywords：Virtual reality、Panic disorder、Agoraphobia、Personalization、Inhibitory learning

Background: Amid the global shortage of mental health professionals, virtual reality (VR) exposure therapy has emerged as a scalable solution for treating anxiety disorders. While standard hierarchical exposure focuses on habituation, newer models emphasize expectancy violation to foster lasting inhibitory learning. Personalized VR environments—designed to introduce variability and unpredictability—may promote stronger and more durable effects, particularly in panic disorder and agoraphobia.
Methods: We conducted a randomized controlled trial involving participants diagnosed with panic disorder and/or agoraphobia. Participants were assigned to receive either personalized enhancing VR exposure—incorporating variable, expectancy-violating elements—or standard hierarchical VR exposure over four weekly sessions. VR environments included individualized simulations of real-world settings such as supermarkets and roadways, with modifiable sensory elements (e.g., crowd density, brightness, and spatial constraints). Primary outcomes included the Panic Disorder Severity Scale (PDSS), Mobility Inventory for Agoraphobia (MI), State-Trait Anxiety Inventory-State (STAI), and a visual analog scale (VAS) for anxiety.
Results: Participants were randomly assigned with no significant baseline differences between groups. Repeated-measures ANOVA revealed significant main effects of time for STAI ($F(4,34)=2.759$, $p=.043$) and VAS ($F(4,25)=6.613$, $p<.001$), and significant time × group interactions (STAI: $F=3.219$, $p=.024$; VAS: $F=4.610$, $p=.006$), indicating differential treatment response. No such interaction effects were found for PDSS or MI. Post hoc tests showed no group differences from Week 1 to Week 4, but significant differences at the final follow-up (3 months) for both VAS ($p=.006$) and STAI ($p=.016$), which survived Bonferroni correction.
Conclusion: This study highlights the potential of personalized enhancing VR as a scalable, safe, and engaging intervention for anxiety-related disorders, with sustained benefits observed after the intervention period. Furthermore, by embedding expectancy violation principles into immersive, individualized environments, VR exposure therapy may offer a novel pathway to strengthen inhibitory learning and overcome the limitations of traditional stepwise exposure.