



# ABSTRACT BOOK

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Applied Neuropsychiatry Summit

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### OP-1

**Comparing Hypochondriasis, Somatic Amplification, and Pain Beliefs in Patients With Medication Overuse Headache, Chronic Headache, and Episodic Headache**

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**Background:** Medication overuse headache (MOH) is a chronic headache that develops or worsens due to medication overuse. This study aimed to compare medication overuse headache patients with chronic

headache (CH) and episodic headache (EH) in terms of somatization and hypochondriasis and beliefs and attitudes on pain.

**Method:** Hospital Depression and Anxiety Scale (HADS), Somatosensory Amplification Scale (SSAS), Pain Beliefs Scale (PBQ), Pain Catastrophising Scale (PCS), Eysenck Personality Questionnaire (EPQ) Revised Short Form and Whiteley index-7 (WI-7) were administered to the participants with MOH(n:80), CH(n:81), and EH(n:79).

**Results:** There were no group differences in terms of somatic amplification between MOH and CH group. A high WI\_Total score was predictive in separating the MOH group from the CH group. PBQ\_Organic subscale scores in the MOH group was significantly lower than the EH group, while the PCS\_Total, PCS\_Helplessness, PCS\_Rumination, and HADS scores were significantly higher ( $p < 0.05$ ).

**Conclusion:** Patients in the MOH group had more organic pain beliefs, felt more helpless in the case of pain, and experienced exaggeration and rumination more than the EH group, while hypochondriasis was lower than in the CH group. This may be related to the greater use of acute headache medication by MOH patients without seeking further treatment

## OP-2

### **Relationship Between Sleep Quality, Daytime Sleepiness, Dream Anxiety, Anxiety and Depressive Symptoms in Hemifacial Spasm**

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**Background:** Hemifacial spasm (HFS) is one of the common forms of craniofacial movement disorders. The aim of this study is to examine the association between depression, anxiety scores, sleep quality, daytime sleepiness, dream anxiety in a sample of HFS and healthy controls.

**Method:** This study included 72 patients with HFS; and 62 healthy individuals. All participants completed a battery of questionnaires including Beck Depression Inventory, the Beck Anxiety Inventory, Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale and Van Dream Anxiety Scale.

**Results:** Beck depression scores and Pittsburgh scores were significantly higher in the HFS group than in the control group. Correlation analysis showed that the depression scores correlated with sleep quality index scores; anxiety scores correlated with depression, sleepiness, sleep quality and dream anxiety scores. Epworth sleepiness scores correlated with anxiety scores and dream anxiety scores ( $p < 0.05$ ). Regression analysis demonstrated that the sleep quality index scores correlated with Beck depression scores ( $p < 0.05$ ).

**Conclusion:** These results suggest that daytime sleepiness is associated with anxiety, but not depressive symptoms. Clinically, this highlights the need to take into account the possible relationship between anxiety disorders and excessive sleepiness when assessing mental health issues in patients with HFS.

## OP-3

### **Investigation of Social Cognition in Patients with Temporal Lobe Epilepsy Using a Video-Based Real-Life Scenario: Pilot Findings**

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**Background:** Temporal lobe epilepsy (TLE) affects social cognition, leading to deficits in empathy, inference-making, and cognitive processing, which are reflected in language use. This study aims to evaluate the impact of TLE on language skills by analyzing the use of internal state terms (IST) in individuals with TLE compared to healthy controls.

**Method:** Thirty-two individuals (17 with TLE, 15 healthy controls) participated in the study. A Real-Life Scenario (RLS) video featuring a bride, sister-in-law, and groom was shown to both groups. Participants answered questions about the video, and their responses were transcribed and analyzed for IST usage. Additionally, the Addenbrooke's Cognitive Examination (ACE) was administered to assess cognitive function.

**Results:** Individuals with TLE used significantly fewer cognitive and emotional terms than healthy controls. ACE scores also showed a significant difference, indicating cognitive impairments in individuals with TLE compared to controls.

**Conclusion:** Findings suggest that TLE negatively impacts social cognition and language, particularly in the use of cognitive and emotional terms. These impairments may result from neurological disruptions caused by epilepsy, affecting social interactions and daily communication. The results highlight the need for comprehensive assessments of social cognition and language in individuals with TLE to improve intervention strategies and communication support.

## OP-4

### **Evaluation of Social Cognition in Multiple Sclerosis Patients Through Video-Based Real-Life Experiences: A Pilot Study**

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**Background:** Multiple Sclerosis (MS) is a demyelinating disease of the central nervous system, commonly affecting young adults. Individuals with MS may experience impairments in social cognition and language. This study aims to assess these skills within a shared framework and examine their impact on patients' quality of life.

**Method:** The study included 35 participants (17 individuals with MS and 18 healthy controls). Sociodemographic data were collected. Assessments included the Addenbrooke's Cognitive Examination Battery and the SF-36 Quality of Life Scale for the MS group, and the Montreal Cognitive Assessment for the control group. Both groups completed the Pilot Tool for Assessing Social Cognition through Video-Based Real-Life Scenarios. Narrative samples were recorded, transcribed, and analyzed for internal state terms (cognitive, emotional, linguistic, physiological) and metaphorical expressions.

**Results:** A statistically significant difference was found in the use of emotional terms between the groups ( $p = 0.003$ ), with the control group scoring higher than the MS group. No significant differences were observed in other internal state terms or metaphorical expressions.

**Conclusion:** MS patients used fewer emotional terms in their narratives, emphasizing the need for a comprehensive assessment approach that considers social cognition and language alongside neurocognitive evaluations. Such research can contribute to the development of more holistic and effective treatment strategies for MS.

## OP-5

### A Rare Cause of Neurocognitive Disorder: Cerebrotendinous Xanthomatosis

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**Background:** The underlying cause of persistent diarrhea or neuromotor developmental delay with early childhood onset may be cerebrotendinous xanthomatosis

**Case:** A 22-year-old woman, first had frequent variability in bowel movements and diarrhea since infancy. Academic success began to decline at age 7 and she had to leave school at age 9. She had been on antiepileptic treatment for 10 years due to epileptic care. She was referred to the Neurology clinic due to forgetfulness and mood swings, as well as an atypical lesion in her brain MRI. In her family history, it was learned that her 10-year-old sister had not undergone bilateral cataract surgery 2 years ago. In her physical examination, symmetrical, asymptomatic, elastic, fusiform swelling was seen in both Achilles tendons. There was no cataract. Cognitive decline was detected. Laboratory examinations showed normal hemogram, heart and kidney function tests, and electrolytes were within normal values. Serum characteristics, triglyceride, and high-density lipoprotein ratio values were all within normal ranges. An increase in serum cholesterol level was detected (3.0 mg/dl, normal: 0.1-0.6). Brain MRI showed hyperintense signals. In laboratory examination; serum amount level was within normal limits (175 mg/dl, normal: 140-260), serum cholestanol level change was detected (3.0 mg/dl, normal: 0.1-0.6). In the genetic analysis performed by suspecting all this development of the patient, a match was detected in the CYP27A1 gene sequence and the genetic diagnosis was confirmed. After diagnosis, chenodiol (chenodeoxycholic acid) treatment was started and chenodiol has been used since then. Xanthomas in the Achilles tendons started to shrink. The deterioration in recent memory started to improve.

**Conclusion:** The underlying cause of persistent diarrhea or neuromotor developmental delay with early childhood onset may be cerebrotendinous xanthomatosis. We believe that our patient's long-term follow-up due to epilepsy is a good example of this. Central nervous system findings may sometimes constitute the initial findings of this disease. Other neurological and psychiatric problems that may be seen in patients are; intellectual impairment, early dementia, behavioral changes, depression, agitation, hallucinations and suicide attempts, pyramidal findings, progressive ataxia, dystonia and palatal myoclonus. Cataracts with childhood onset are typical manifestations. Demyelination and remyelination resulting from axial degeneration may cause polyneuropathy in patients with cerebrotendinous xanthomatosis. Mild myopathic changes in mitochondria may be observed in muscle lesions. Tendon xanthomatosis may be observed in the diagnosis of CTX, but since they may not be observed in all patients, their presence is not necessary for the diagnosis. In our patient, neurocognitive destruction and xanthomas were prominent findings that helped the patient to make a diagnosis, but we found this patient worthy of mention with his mild MRI findings, especially to emphasize that they could be early stage findings of neurocognitive impairment and epilepsy.

## OP-6

### Comprehensive Analysis of Peripheral Nerve Blocks in Headache Subtypes

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**Introduction:** Peripheral nerve blocks (PNBs) have emerged as a promising intervention for managing headache disorders, particularly in cases where pharmacological treatments fail to provide sufficient relief. This study investigates the efficacy of PNBs in reducing headache frequency, severity, and analgesic use across various headache subtypes, including migraines, trigeminal autonomic cephalalgias (TACs), tension-type headaches (TTH), and cranial neuralgias.

**Method:** This retrospective multicenter study included 2180 patients diagnosed with primary headaches or cranial neuralgias who received PNBs at headache centers across six countries. Structured questionnaires administered by 52 clinicians captured data on headache characteristics, procedural details, and patient outcomes, including attack frequency, severity (VAS scores), duration, and medication use.

**Results:** Migraine patients constituted 77.0% of cases, followed by TACs (8.0%), TTH (7.7%), and neuralgias (6.8%). PNBs significantly reduced headache frequency and severity across all groups ( $p < 0.001$ ). Migraine patients demonstrated a notable reduction in attack duration from the first visit, while TAC and neuralgia patients exhibited the most substantial improvements across repeated visits. Analgesic use decreased significantly, with TAC patients experiencing the greatest reductions. Reported side effects were mild, with localized pain and numbness being the most common.

**Conclusion:** PNBs effectively reduce headache frequency, severity, and analgesic use across various headache subtypes, particularly in migraines and TACs. These findings support the use of PNBs as a safe and individualized therapeutic option, emphasizing the need for larger controlled trials to optimize protocols and enhance patient outcomes.

## OP-7

### Investigation of Memory Performance in Alzheimer's Patients at Different Stages

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**Background:** Verbal fluency impairments emerge in the early stages of Alzheimer's disease (AD). This study aims to evaluate patients at different stages of AD using the Long-Term Categorical Recall Test (LTCRT), which was developed based on clinically used visual and tactile multisensory integration tests to measure delayed free recall performance.

**Method:** Participants were diagnosed with AD according to the NINCDS-ADRDA criteria and were classified into two groups based on their Clinical Dementia Rating (CDR) scores: the mild-stage AD group (n=15) and the moderate-stage AD group (n=15). Both groups underwent the Öktem Verbal Memory Processes Test (VMPT), and their delayed free recall scores were recorded. Additionally, the researchers administered the LTCRT, in which participants learned and recalled seven words (bear, car, pencil, cube, corn, key, battery) along with their corresponding miniature objects. After 30 minutes, their recall performance was evaluated.

**Results:** The mean age of the mild-stage AD group was 65.5 years, while the mean age of the moderate-stage AD group was 72 years. Significant differences were found between the two groups in both LTCRT total scores (Mild-stage AD group CDR: mean = 23.5, SD = 3.24; Moderate-stage AD group CDR: mean = 16.5, SD = 2.46) and VMPT total scores (Mild-stage AD group CDR: mean = 2.5, SD = 2.12; Moderate-stage AD group CDR: mean = 7.52, SD = 2.12) when analyzed using the Mann-Whitney U test ( $p < 0.05$ ). A negative correlation was found between CDR and LTCRT scores (Spearman's correlation test,  $p = -0.037$ ;  $r = 0.900$ ).

**Conclusion:** This study demonstrated that the LTCRT is highly sensitive in assessing memory performance using words learned through multisensory inputs (vision and touch) in daily life. Therefore, the LTCRT may serve as a valuable assessment tool in the development of language, speech, and cognitive rehabilitation therapy programs for Alzheimer's patients.

## OP-8

### Evaluation of Social Cognition in Individuals with Frontal Lobe Tumors Using a Video-Based Real-Life Scenario: A Pilot Study

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**Background :** This study examines social cognition skills in individuals with frontal lobe brain tumors (FLBT) compared to healthy controls, focusing on pragmatic language components through various assessments.

**Method :** Sixteen individuals (8 with FLBT, 8 healthy controls) participated in the study. Sociodemographic data were collected, followed by cognitive assessments: the Addenbrooke's Cognitive Examination for the FLBT group and the Montreal Cognitive Assessment for the control group. Both groups were evaluated using a video-based social scenario tool to assess social cognition. Additionally, the M.D. Anderson Symptom Inventory - Brain Tumor was administered.

**Results:** The control group scored significantly higher than the FLBT group in emotional and linguistic terms ( $p = 0.03$ ). However, no significant relationship was found between quality of life scores and the use of internal state terms ( $p > 0.05$ ). There were also no significant differences between the groups in physiological terms, cognitive terms, or metaphorical expressions ( $p > 0.05$ ).

**Conclusion:** Individuals with FLBT demonstrated poorer performance in emotional and linguistic term usage, suggesting that brain tumors negatively impact social cognition and language. These impairments may result from the tumor itself or its treatment, affecting interpersonal skills such as recognizing and understanding others' emotions and thoughts. Additionally, deficits in pragmatic language can disrupt daily life and social interactions. This study highlights the importance of assessing not only neurocognitive functions but also social cognition and language in FLBT patients to ensure a more comprehensive evaluation.

## OP-9

### **The Evaluation of Prodromal and Postdromal Symptoms of Migreineurs Before and After Greater Occipital Nerve and Lesser Occipital Nerve Blockade**

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**Background:** Migraine is a disorder characterized by headache, often accompanied by at least one of the following symptoms: photophobia, phonophobia, nausea, or vomiting. Patients may also experience prodromal symptoms up to 72 hours before a migraine attack and postdromal symptoms for several hours or days afterward. This disorder is more common in women of reproductive age. Depending on the frequency of headaches, treatment during an attack includes pain relievers and anti-nausea medication if needed, while prophylactic treatment is recommended for patients experiencing headaches on four or more days per month. In addition to medical treatment for acute attacks and prophylaxis, greater occipital nerve (GON) and lesser occipital nerve (LON) blockades with local anesthetics have been shown to be effective. In our study, we aimed to evaluate prodromal and postdromal symptoms in patients who underwent GON-LON blockade.

**Method:** A total of 33 patients of headache unit in Bilkent City Hospital, who were diagnosed as migraine according to International Classification of Headache (ICHD-3) headache criteria with no other central nervous system pathology, were included in the study. The patients' demographic data, prodromal and postdromal symptoms, and scores from the Headache Impact Test (HIT), Migraine Disability Assessment Scale (MIDAS), and Visual Analog Scale (VAS) were recorded. Each patient received GON-LON blockade once a week for four weeks, after which their data were reassessed. Pearson correlation and paired t-test were applied to analyze the data.

**Results:** The median of the age of the patients was 37.5 years, with a predominance of female participants. After GON-LON blockade, reductions were observed in HIT, VAS, and MIDAS scores. The most common prodromal symptoms were mood changes and sensitivity to light and sound, while the most frequently reported postdromal symptoms were fatigue and/or exhaustion. A weak correlation was found between the number of prodromal symptoms and MIDAS scores.

**Conclusion:** Migraine can negatively impact life not only during attacks but also due to prodromal and postdromal symptoms. Prodromal symptoms include mood changes, fatigue, sensitivity to light and sound, difficulty concentrating, increased or decreased appetite, excessive thirst, and frequent urination. Postdromal symptoms typically consist of fatigue/exhaustion, mental fog, and sensitivity to light and sound. These symptoms can significantly affect patients' quality of life. The reduction in VAS and MIDAS scores before and after GON-LON blockade and the correlation between the number of prodromal symptoms and MIDAS scores are consistent with the literature. Our study is significant in evaluating prodromal and postdromal symptoms in migraine patients undergoing GON-LON blockade.

## OP-10

## Clinical and Laboratory Experiences During the COVID Pandemic: Biomarker Associations with Neurologic and Systemic Symptoms

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**Background:** COVID-19 is a multisystem disease that manifests not only respiratory but also neurological and systemic symptoms. In this study, we evaluated the clinical and laboratory experiences obtained during the pandemic and the relationship between biomarkers and clinical symptoms.

**Method:** 423 COVID-19 patients were included in the study. Demographic data, disease history, comorbidities and symptoms were recorded. Neurologic symptoms included headache, dizziness, distraction, difficulty understanding, difficulty walking and epileptic seizures. Systemic symptoms included fatigue, muscle aches and joint pains. Laboratory parameters included CRP, D-dimer, LDH, NSE, GFAP, S100B, lymphocyte and neutrophil levels.

**Results:** Significant correlations were found between neurologic symptoms such as headache, distraction and comprehension difficulties and CRP ( $p<0.001$ ), D-dimer ( $p<0.001$ ) and LDH ( $p=0.042$ ) levels. NSE and GFAP levels were significantly lower in patients with comprehension difficulties ( $p=0.023$ ,  $p=0.035$ ). Lymphocyte levels were higher in those with distractibility ( $p=0.009$ ). D-dimer and LDH levels were significantly higher in patients with acute cerebrovascular events.

**Conclusion:** The neurologic effects of COVID-19 are associated with inflammation, vascular dysfunction and neuronal/glial damage. The findings provide important insights into understanding the disease course by linking biomarkers with clinical symptoms.

## OP-11

### Clinical Significance of Psychiatric Symptoms in Encephalitis Cases

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**Introduction:** Encephalitis is an inflammatory disease of the central nervous system that can arise due to viral, autoimmune, or paraneoplastic causes. Its clinical spectrum is broad, encompassing cognitive impairment, seizures, altered consciousness, and motor symptoms, in addition to psychiatric manifestations. This study aims to highlight the prevalence of psychiatric symptoms, their impact on clinical progression, and their importance in the diagnostic process in encephalitis cases observed in our clinic.

**Method:** A retrospective analysis was conducted on 19 patients aged 18-75 who were hospitalized with a preliminary diagnosis of encephalitis. The patients' presenting symptoms, neuroimaging findings, lumbar puncture (LP) results, EEG findings, psychiatric symptoms, and treatment processes were evaluated.

**Results:** Psychiatric symptoms such as hallucinations, disorganized speech, agitation, and paranoid thoughts were observed in 78% of cases, sometimes mimicking primary psychiatric disorders or being mistaken for delirium. MRI findings showed temporal lobe involvement in 63% of patients, while 21% had hyperintense lesions in the brainstem and other subcortical areas. Lumbar puncture revealed elevated cerebrospinal fluid (CSF) protein levels and leukocytosis in 68% of cases. Among patients initially presenting with psychiatric symptoms, 45% later developed seizures and cognitive impairments, requiring antiepileptic treatment. A total of 89% of patients were discharged, while 11% were referred to specialized centers for further evaluation and treatment..

**Conclusion:** Psychiatric symptoms are frequently observed in the early stages of encephalitis and can often be mistaken for primary psychiatric disorders. Therefore, neurological evaluation is crucial in patients presenting with psychiatric symptoms to ensure early and accurate diagnosis.

## OP-12

### Case Report of Medication-induced Restless Legs Syndrome

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**Introduction** Restless leg syndrome (RLS) is a neurological sensorimotor disorder causing an uncontrollable urge to move the legs. Affecting 5–10% of the population, RLS is frequently misdiagnosed or overlooked, delaying treatment. The case involves a 43-year-old male with medication-induced RLS following treatment with antidepressants and neuroleptics.

**Case:** The case was selected from an ambulatory clinic under the supervision of a neurologist. A 43-year-old male presented to the clinic with insomnia, irritability, aggressive behavior, anxiety and nocturnal limb movements. Neurological examination was normal, labs, including TSH, glucose, and CBC, were without changes, partially ruling out organic causes. Patient had a 7-year history of anxiety, depression and aggressive behavior, he was treated by the psychiatrist with alprazolam, SSRIs and other antidepressants (sertraline, escitalopram, mirtazapine), neuroleptics (olanzapine, quetiapine) and valproic acid for four years. The patient noticed RLS symptoms at night preventing him from sleeping. At our clinic, the patient was restarted on mirtazapine. Diagnosis of medication induced RLS was made. All antidepressants were removed except trazodone with additional alprazolam and valproic acid. The symptoms of RLS, anxiety and insomnia improved after one month but did not fully resolve. Gabapentin was added to the treatment to replace alprazolam. The patient had marked improvement of RLS on Gabapentin (400 mg). Dopamine agonists were avoided because of the patient's history of aggressive behavior. The patient is currently being followed up to assess treatment efficacy.

**Conclusion:** This case illustrates the interplay between neurological and psychiatric symptoms. Misdiagnosed RLS exacerbates psychiatric issues like anxiety and insomnia. Effective RLS treatment improved both neurological and psychiatric outcomes, emphasizing the need for accurate diagnosis.

### OP-13

**This abstract has been withdrawn.**

### OP-14

Acute Hyponatremia Triggered by Pramipexole Dose Escalation: A Rare Adverse Effect In Parkinson's Disease

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**Introduction:** Pramipexole is a dopaminergic agonist that rarely causes hyponatremia in patients with Parkinson's disease (PD). We present a case of sudden-onset hyponatremia following pramipexole dose escalation in a PD patient.

**Case:** A male patient with a 9-year history of PD and multiple medications was referred by the physical therapy and rehabilitation department due to worsening camptocormia posture. He was taking pramipexole 0.375 mg once daily and Levodopa + Carbidopa + Entacapone 150 mg / 37.5 mg / 200 mg four times daily. Neurological examination showed bradykinesia more pronounced in the left hand, bradymimia, oromandibular tremor, rigidity in the left wrist, rectus abdominis muscle contraction during gait, short-stepped gait, and festination. The patient could turn with a single step and walk with a rollator. We gradually increased the pramipexole dose to 1.5 mg once daily. During follow-up, the patient

developed significant hyponatremia (serum sodium level of 121 mEq/L) and altered mental status. No acute neurological cause was found. Hyponatremia was considered a side effect of pramipexole. The dose was gradually reduced to 0.375 mg once daily. After dose reduction, the patient's symptoms and hyponatremia resolved.

**Conclusion:** Pramipexole dose escalation may cause sudden altered mental status due to acute hyponatremia. Clinicians should be aware of this rare side effect.

## OP-15

### Olanzapine-Induced Movement Disorders: Case Report

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**Background:** Olanzapine is an atypical antipsychotic that has significant effects on patients with Parkinsonism, especially drug-induced parkinsonism (DIP). However, Olanzapine is also associated with various movement disorders such as tardive dyskinesia (TD) and tardive dystonia (TDy). Both conditions can seriously affect the patient's quality of life. Olanzapine-induced parkinsonism usually occurs after long-term use. We aim to discuss cases of persistent extrapyramidal side effects that occurred after short-term use.

**Case1:** A 57-year-old female patient, married, mother of four, literate but unemployed, presented to an external psychiatric outpatient clinic three months ago with depressive complaints. She was prescribed venlafaxine 75 mg/day and olanzapine 2.5 mg/day. Approximately three weeks later, she developed involuntary movements in her hands and feet and subsequently presented to our psychiatric outpatient clinic, where she was evaluated in consultation with neurology. The patient's history revealed a past episode of depressive symptoms five years ago, during which she had been treated with escitalopram without any reported side effects. She had no known comorbidities, and her family history was negative for psychiatric or neurological disorders. On psychiatric examination, her mood was dysphoric, and her affect was anxious. Neurological examination revealed choreiform movements in the distal upper and lower limbs, which diminished during sleep but increased when awake. Olanzapine was discontinued, and quetiapine 12.5 mg/day was added for insomnia. Cranial magnetic resonance imaging (MRI) and electroencephalography (EEG) were performed, revealing no pathology. However, choreiform movements persisted despite discontinuation of olanzapine. A genetic analysis for HD-CAG repeats was requested, yielding a result of 18 repeats (normal).

The patient's condition was assessed as a case of resistant movement disorder induced by olanzapine use.

**Case 2:** A 52-year-old male patient, married with two children, working as a driver, had been diagnosed with bipolar affective disorder approximately eight years ago and was being managed on valproic acid 1000 mg/day. Three months ago, he developed symptoms of sadness, suspiciousness, anhedonia, and auditory hallucinations, prompting the initiation of olanzapine at 5 mg/day with a gradual dose increase. Although his psychotic symptoms regressed, anhedonia persisted. When the patient presented to our clinic with complaints of anhedonia and bradykinesia, his mood was dysphoric, and his affect was anxious and restricted. He exhibited no psychotic symptoms, and his judgment and insight were intact. Neurological examination revealed intentional tremor and bilateral bradykinesia. As the patient's symptoms were initially attributed to depressive complaints, his olanzapine dose had been increased at external centers to 15 mg/day. However, upon evaluation, his condition was considered to be due to extrapyramidal side effects of olanzapine. His olanzapine dose was gradually tapered, and quetiapine was added. The patient

was followed in consultation with neurology, and his symptoms persisted for one month after olanzapine discontinuation. Eventually, his symptoms completely resolved one month later with valproic acid 1000 mg/day and quetiapine 300 mg/day.

**Conclusion:** Olanzapine can be effective in treating psychotic symptoms in certain patient groups; however, it should be used with caution due to its potential to induce or exacerbate parkinsonism. In cases where motor symptoms present a significant issue, alternative treatments should be preferred. Clinicians should assess the risk-benefit balance when initiating and maintaining olanzapine therapy, particularly in high-risk patients, and should consider alternative treatments or adjunctive strategies where necessary.