Psychiatria Danubina, 2025 Vol. 37, No. 1, pp 102-104 https://doi.org/10.24869/psyd.2025.102 *Case report*

Catatonic stupor or dissociative disorder? – A case report

Karla Laškarin[1], Sandra Vuk Pisk[1,2], Vladimir Grošić[1,2] & Igor Filipčić[1,2,3]

1 Clinic for Psychiatry „Sveti Ivan", Zagreb, Croatia
2 Faculty of Dental Medicine and Health, "Josip Juraj Strossmayer" University of Osijek, Osijek, Croatia
3 School of Medicine, University of Zagreb, Zagreb, Croatia

received: 6. 8. 2023; revised: 18. 2. 2024; accepted: 13. 11. 2024

* * * * *

INTRODUCTION

The term hysteria derives from the Greek word for womb – hystera, and the symptoms of hysteria could already be found in the records of the Babylonians and Assyrians from the end of the second millennium. In the third edition of the DSM, published in 1980, hysteria disappears as a unique entity and its symptoms find their place in conversion, somatization disorders, personality disorders, etc. (Matačić, 2017).

In ICD-11, dissociative disorders encompass various conditions like dissociative neurological symptom disorders (including conversion disorder), dissociative amnesia, trance, and possession states, dissociative identity disorder, and other specified and unspecified dissociative disorders. DSM-5 includes similar categories with dissociative identity disorder, amnesia (including fugue), depersonalization/derealization disorder, and others, but places conversion disorder under somatic symptom and related disorders.

Both ICD-11 and DSM-5 separate catatonia from schizophrenia, In ICD-11 it is categorized as catatonia with mental disorders, substance-induced catatonia (6A41), secondary catatonic syndrome (6E69), and unspecified catatonia (6A4Z). DSM-5 groups catatonia with schizophrenia spectrum and other psychotic disorders. A stupor is an extreme form of akinesia. The most common type of stupor is catatonic, linked to catatonic schizophrenia, but it can also be linked to mood disorders as well as certain neurological conditions and dissociative conditions (Begić, 2021) (World Health Organization, 2019).

Approximately 20-25 percent of hospitalized psychiatric patients have individual symptoms of conversion, and 5 percent of those patients meet the criteria for conversion disorder. (Ali et al., 2015). They occur between two and ten times more often in women than in men, most often between the ages of 30 and 39.

We here present a case of a patient with a clinical picture of conversion motor disorder.

CASE REPORT

The patient, a 37-year-old married mother of two children, spent most of her childhood with her grandmother after her parents divorced when she was two years old. During the Croatian War of Independence at the age of 4, a grenade explosion in her grandmother's yard resulted in her grandmother's death and severe physical injuries to the patient's thorax and lower leg. She underwent several surgeries and recovered well. Eight years before the current hospitalization, she experienced a suspected episode of dissociative motor disorder during which she couldn't move her toes for several months despite multiple neurological examinations revealing no organic cause.

Early October 2022, she was brought in for treatment via ambulance after examination at the local Clinical Hospital Center, where a lumbar puncture and MSCT of the brain excluded an acute pathomorphological substrate. She was admitted to the University Psychiatric Hospital Sveti Ivan for treatment under the diagnosis of catatonic stupor and unspecified inorganic psychosis. On admission, she was conscious, and her vital parameters were normal, but she was mutistic and negativistic.

During the first two days of hospitalization, the patient lies in bed with her eyes firmly closed, and does not respond to attempts to establish communication. On the third day, she opens her eyes, and on the fifth day of hospitalization, she is interviewed. It is learned that she does not remember events between 2 days before the admission up until the 4th day of hospitalization. Upon opening her eyes and realizing she couldn't speak, she felt powerless, confused, and upset. She denied recent conflicts, stressful life events, suicidal ideation, mood swings, productive symptoms, and fears.

Psychodiagnostics showed aberrations at the level of personality structure, affective instability, and increased focus on oneself with the possibility of aggressive reactions in frustrating situations. Laboratory values showed mild leukocytosis and neutrophilia upon arrival, but since the patient was afebrile and asymptomatic, antibiotic

therapy was not prescribed. She was neurologically examined the day after admission, but no symptoms of acute neurological conditions were found.

The treatment was started with diazepam diluted in saline infusion and administered intravenously. Upon establishing verbal contact, parenteral diazepam was replaced by an oral form, and sulpiride was introduced.

During the 18-day hospitalization, the patient's motor skills and the ability to articulate words gradually recovered and the speed of her speech improved. She was discharged with a diagnosis of dissociative motor disorder (F44.4) and was prescribed sulpiride 50 mg, diazepam 2 mg, mirtazapine 15 mg, and quetiapine 25 mg. Sulpiride was prescribed to augment the antidepressant effect of mirtazapine, which is indicated as an antidepressant in depressive and anxiety disorders. Diazepam, due to a good therapeutic response and symptom withdrawal upon its intravenous administration, was continued on an as-needed basis, while quetiapine was prescribed at a dose of 25 milligrams due to its hypnotic effect. After discharge, she had 3 outpatient follow-ups in which, due to elevated serum prolactin concentration, sulpiride was stopped. The patient has had no signs of relapse or other symptoms of conversion disorder.

DISCUSSION

Both F44.2 (dissociative stupor) and F44.4 (dissociative motor disorders) are part of the dissociative disorders in the ICD-10 system. Dissociative stupor involves profound unresponsiveness to stimuli, while dissociative motor disorders affect motor control, leading to sudden limb immobility or tremors without clear neurological causes. Despite the patient's initial presentation aligning more with dissociative stupor upon admission, we diagnosed dissociative motor disorder upon discharge. This decision was influenced by the sporadic hand muscle cramps observed during discharge and the patient's history of a previous episode involving leg paralysis due to a dissociative motor condition.

The onset was sudden, and the clinical picture changed abruptly. The patient responded quickly to diazepam. Collateral history obtained from family and the patient's anamnesis didn't point out any delusions or hallucinations, leading to the exclusion of catatonic stupor diagnosis.

It is believed that conversion disorders have no organic basis, but neuroimaging techniques in people with conversion motor symptoms show changes in regional blood flow, and a decrease in the volume of the right and left basal ganglia and the right thalamus. Somatosensory evoked potentials (SSEP) and electroencephalogram (EEG) findings are different compared to healthy controls (Blakemore et al., 2013).

It is therefore important to firstly rule out neurological diseases. A neurological examination is performed, and depending on the findings, further tests such as EEG, EMNG, CT, measurement of evoked potentials, and MRI are done. Nowadays the percentage of missed organic diseases has been reduced to 4 to 15 percent (Moene et al., 2000).

Regarding treatment, cognitive behavioral therapy (CBT) has the most evidence of effectiveness in the treatment of conversion disorders, as well as psychodynamic psychotherapy (Gutkin et al., 2021), (Kompoliti et al., 2014). Physical therapy also has strong evidence for treating conversion motor symptoms. (Maggio et al., 2020). Some publications show the effectiveness of transcranial magnetic stimulation (TMS) as well as transcranial direct current stimulation (tDCS) (Gonsalvez et al., 2021).

There have been several studies showing a reduction in symptoms after the administration of paroxetine, venlafaxine, sulpiride, and olanzapine (Mitic & Trajanovska, 2018) but as of now, no placebo-controlled randomized trials have proven the effectiveness of medication in treating conversion disorders.

CONCLUSION

The presented patient was admitted to the hospital after an initial examination in the emergency department with a diagnosis of catatonic stupor and unspecified organic psychosis. The diagnosis was changed to dissociative motor disorder after changes in her clinical presentation, obtaining a collateral history, and talking with the patient, from which it became clear that she had experienced several traumatic events throughout her life and had previously had a probable conversion episode. This case highlights the importance of thorough history-taking and collateral information, as the same clinical presentation can be interpreted differently by different clinicians.

Future psychiatric classifications should aim to better distinguish between catatonic and dissociative stupor. This involves refining diagnostic criteria to separate these conditions more accurately, considering overlapping symptoms with other mental health issues, integrating neurobiological findings for more objective assessments, and acknowledging cultural influences on symptom expression. The goal should be to create detailed classifications that capture diverse presentations and mechanisms,

aiming for more precise diagnoses that may provide targeted treatment guidelines based on accurate identifications of each condition

Acknowledgments: This manuscript did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Funding: There was no financial support for the creation, writing and publication of the article.

Conflict of interest: The authors declare they have no competing interests.

Author contributions: Karla Laškarin: conceptualization, literature search and analyses, writing original draft, editing. Sandra Vuk Pisk: writing review, editing. Vladimir Grošić: supervision. Igor Filipčić: supervision

References

Ali, S., Jabeen, S., Pate, R. J., et al. (2015). Conversion Disorder—Mind versus Body: A Review. *Innovations in Clinical Neuroscience*, *12*(5-6), 27.

Begić, D. (2021). *Psihopatologija*. 4th ed. Zagreb: Medicinska Naklada.

Blakemore, R. L., Hyland, B. I., Hammond-Tooke, G. D., & Anson, J. G. (2013). Distinct Modulation of Event-Related Potentials during Motor Preparation in Patients with Motor Conversion Disorder. *PLoS One*, *8*(4), e62539.

Gonsalvez, I., Spagnolo, P., Dworetzky, B., & Baslet, G. (2021). Neurostimulation for the treatment of functional neurological disorder: A systematic review. *Epilepsy & Behavior Reports*, *16*, 100501.

Gutkin, M., McLean, L., Brown, R., & Kanaan, R. A. (2021). Systematic review of psychotherapy for adults with a functional neurological disorder. *Journal of Neurology, Neurosurgery & Psychiatry*, *92*(1), 36-44.

Kompoliti, K., Wilson, B., Stebbins, G., Bernard, B., & Hinson, V. (2014). Immediate vs. delayed treatment of psychogenic movement disorders with short-term psychodynamic psychotherapy: randomized clinical trial. *Parkinsonism & Related Disorders*, *20*(1), 60-63.

Maggio, J. B., Ospina, J. P., Callahan, J., Hunt, A. L., Stephen, C. D., & Perez, D. L. (2020). Outpatient Physical Therapy for Functional Neurological Disorder: A Preliminary Feasibility and Naturalistic Outcome Study in a U.S. Cohort. *Journal of Neuropsychiatry and Clinical Neurosciences*, *32*(1), 85-89.

Matačić, S., & Borovečki-Jakovljev, S. (2017). Funkcionalni poremećaji odnosno histerija: Od nozologije do psihoterapije. *Psihoterapija*, *31*(1), 20-40.

Mitic, Z., & Trajanovska, A. S. (2018). Use of adjuvant doses of olanzapine in anxiety calming in some neurotic diseases (obsessive, conversive, and somatoform disorders). *Psychiatria Danubina*, *30*(Suppl. 1), 66.

Moene, F. C., Landberg, E. H., Hoogduin, K. A. L., et al. (2000). Organic syndromes diagnosed as conversion disorder: Identification and frequency in a study of 85 patients. *Journal of Psychosomatic Research*, *49*(1), 7-12.

Correspondence:
Karla Laškarin
Clinic for Psychiatry „Sveti Ivan“, Zagreb, Croatia
karla.laskarin@pbsvi.hr