International Journal of Science and Research (IJSR) ISSN: 2319-7064

SJIF (2022): 7.942

Extrapyramidal Symptoms and Antidepressants - A Perspective

Dr. Ankit Halder

Assistant Professor, Department of Psychiatry, Santiniketan Medical College, Bolpur, West Bengal, India

Abstract: The treatment landscape for Major depressive disorder and a variety of other psychiatric illnesses has witnessed many advances with antidepressants being the most widely prescribed. Despite being apparently safe it also can have some serious side effects with Extrapyramidal symptoms being one of them.

Keywords: Major Depressive Disorder, Extrapyramidal Symptoms Rare

1. Introduction

The treatment landscape for Major depressive disorder and a variety of other psychiatric illnesses, has witnessed noteworthy advancements with the dawn of antidepressant drugs, offering respite to millions worldwide [1 - 5]. Antidepressants significantly and comprehensively improve Quality of life [6-11].

2. Discussion

Extrapyramidal symptoms (EPS) encompass a spectrum of movement disorders characterized by involuntary muscle movements, rigidity, and tremors, often associated with antipsychotic medications [12] but increasingly recognized in the context of antidepressant therapy. Historically, EPS have been predominantly associated with antipsychotic medications, particularly those targeting dopamine receptor blockade. However, emerging evidence suggests a potential link between certain classes of antidepressants and the development of EPS, posing diagnostic and therapeutic challenges in clinical practice. [13]

Selective serotonin reuptake inhibitors (SSRIs), serotonin norepinephrine reuptake inhibitors (SNRIs), and tricyclic antidepressants (TCAs) have all been implicated, albeit to varying extents, in precipitating EPS symptoms [14 - 20]. EPS have been reported with different classes of antidepressants, are not dose related, and can develop with short - term or long - term use. [13]

The pathophysiology underlying antidepressant - induced EPS remains multifactorial and incompletely understood. Proposed mechanisms include alterations in dopaminergic neurotransmission, serotonin - dopamine interactions, and individual susceptibility factors. [21 - 24] Moreover, genetic predispositions and pharmacokinetic properties of specific antidepressants may contribute to the variability in EPS susceptibility across patient populations. [25]

Effective management of antidepressant - induced EPS necessitates a nuanced approach, dose adjustments, and monitoring of EPS symptoms. Additionally, strategies for differential diagnosis are paramount in optimizing patient outcomes and minimizing treatment - related adverse effects. [26, 27]

This research article delves into the intricate relationship between antidepressants and extrapyramidal symptoms, aiming to elucidate the underlying mechanisms, prevalence rates, clinical manifestations, and management strategies. By synthesizing existing literature and drawing insights from clinical observations, we endeavor to provide a comprehensive understanding of this complex interplay, offering valuable perspectives for clinicians, researchers, and patients alike. [28 - 30]

3. Conclusion

In light of the growing recognition of antidepressant - induced EPS and its clinical implications, this research article endeavors to synthesize existing knowledge, identify knowledge gaps, and propose avenues for future research.

References

- [1] Skevington SM, Wright A. Changes in the quality of life of patients receiving antidepressant medication in primary care: Validation of the WHOQOL100. *British Journal of Psychiatry*.2001; 178 (3): 261 267. doi: 10.1192/bjp.178.3.261
- [2] Ravindran NP, Halder A, Harshe D, Harshe S, Harshe G. A qualitative analysis of literature reporting and linking psychosis to COVID 19 infection. Findings from a postgraduate journal club. Asian journal of psychiatry.2022 Jun 1; 72: 103099.
- [3] Ghosal S, Halder A, Keshri S, Ravindran NP, Joshi A. Schizophrenia and Nicotine A Bittersweet Psychiatric Story. Annals of Indian Psychiatry.2024: 10 4103.
- [4] Halder A, Ravindran NP, Nagda P, Harshe D, Harshe G. Review of psychotropic agents associated with Sialorrhoea, except Clozapine. Indian Journal of Psychological Medicine.2023 Jan; 45 (1): 14 8.
- [5] Sharma S, Halder A, Kumar K, Shahani R, Ravindran NP, Kulkarni Y, Nagda P. Psychiatric comorbidities in patients with conversion disorder—A longitudinal study. Telangana Journal of Psychiatry.2023 Jul 1; 9 (2): 128 - 33.
- [6] Halder A, Ravindran NP, Harshe D, Harshe S, Harshe G, Biswas A, Pushpanathan D, Shewale A, Patra S, Nair A. Course of Sexual Dysfunction in Different Domains among Hypertensive Patients: A

Volume 13 Issue 3, March 2024
Fully Refereed | Open Access | Double Blind Peer Reviewed Journal
www.ijsr.net

International Journal of Science and Research (IJSR) ISSN: 2319-7064 SJIF (2022): 7.942

- Longitudinal Study in a Tier 2 City in India. Indian Journal of Private Psychiatry. 2022 Jul; 16 (2): 79.
- Chougule N, Pushpanathan D, Halder A, Ravindran [7] NP, Chougule K, Avula N. A Study to find the Association Between Severity of Alcohol Dependence in Male Patients with Caregiver Burden in Their Spouses. The International Journal of Indian Psychology.
- [8] Halder A, Nair AS. Epileptiform Discharges Presenting as Isolated Episodes of Semen Emission: A Case Report. Journal of Clinical & Diagnostic Research.2024 Feb 1; 18 (2).
- [9] Das A, Halder A, Patil RS, Harshe DG. Susceptibility of clinically depressed patients to COVID - 19: Is there a link?. Indian Journal of Psychiatry. 2021 Jan 1; 63 (1): 112 - 3.
- [10] Nagda P, Harshe D, Halder A, Ravindran NP. Study of Socio - economic, Biochemical and Clinical Predictors of Alcohol Withdrawal and Delirium Tremens in Patients of Alcohol Dependence in Indian Population. Annals of Indian Psychiatry. 2024 Jan 1; 8 (1): 52 - 60.
- Halder A, Ravindran NP, Sharma S, Chougule K. Escitalopram - induced Extrapyramidal Symptoms-A Case Series. Annals of Indian Psychiatry.2023: 10 -
- [12] Marsden CD, Jenner P. The pathophysiology of extrapyramidal side - effects of neuroleptic drugs. Psychological Medicine.1980; 10 (1): 55 - 72. doi: 10.1017/S003329170003960X
- Madhusoodanan S, Alexeenko L, Sanders R, Brenner [13] Extrapyramidal symptoms associated antidepressants - - a review of the literature and an analysis of spontaneous reports. Ann Psychiatry.2010 Aug; 22 (3): 148 - 56. PMID: 20680187.
- [14] Saneja K, Harshe D, Halder A, Ravindran NP, Harshe G. Do Patients Diagnosed with Schizophrenia and their Biological Parents have Concurrent Signs Suggestive of Marfan's Syndrome? A Cross Sectional Study. Annals of Indian Psychiatry. 2023 Jan 1; 7 (1): 71 - 4.
- [15] Halder A, Panchami N, Harshe G. A case of schizophrenia with Capgras delusion responded to donepezil. Indian Journal of Psychiatry. 2022 Mar 1; 64 (2): 219 - 20.
- [16] Halder A, Ravindran NP, Naga D, Keshri S. Sertraline induced Stevens - Johnson syndrome - A case series. Annals of Indian Psychiatry. 2023 Jan 1; 7 (1): 80 - 2.
- Chougule K, Halder A, Behere P, Chougule N. Prevalence, Patterns and Correlation of Behavioral and Emotional Disorders in School - going Children and Adolescents: A Cross - sectional Study. Indian Journal of Private Psychiatry. 2024 Jan 3; 18 (1): 19 - 21.
- [18] Halder A, Ravindran NP. Retrograde ejaculation due to venlafaxine - a rare occurrence. Indian Journal of Psychiatry.2023 Apr 1; 65 (4): 488 - 9.
- Halder A, Ravindran NP, Keshri SM, Harshe G. A rare case of partially empty sella with epileptiform discharges presenting with first episode of mania. Industrial Psychiatry Journal. 2023 Jan 1; 32 (1): 195 -
- [20] Halder A, Panchami N, Harshe G. Escitalopram Associated with Priapism: A Rare Case Report. Indian

Paper ID: SR24325122055

- Journal of Private Psychiatry. 2022 Aug 31; 16 (2): 95
- [21] Halder A, Ravindran NP, Harshe DG, Harshe G. Lithium induced sialorrhoea: a distinctly curious phenomenon. IOSR J Dent Med Sci. 2021; 20: 49 - 50.
- Ravindran NP, Halder A, Shahani RD. The eternal flame: Impressing on stigma against transgender population-A mental health perspective from a Tier 2 Indian City. Annals of Indian Psychiatry. 2022 Oct 1; 6 (4): 398 - 9.
- Keshri S, Shahani R, Halder A, MEDITATION AND PSYCHOSIS: WHERE DO WE STAND!. EPRA International Journal of Multidisciplinary Research (IJMR).2023 Jul 8; 9 (7): 33 - 4.
- Halder A, Ravindran NP, Das A, Harshe D. BINGE WATCHING AND CLINICAL DEPRESSION - ONE HARBINGER FOR ANOTHER?. International Journal of Multidisciplinary Research. 2021; 7 (5): 79 -
- Hedenmalm K, Güzey C, Dahl ML, Yue QY, Spigset [25] O. Risk factors for extrapyramidal symptoms during treatment with selective serotonin reuptake inhibitors, including cytochrome P - 450 enzyme, and serotonin and dopamine transporter and receptor polymorphisms. Journal of clinical psychopharmacology.2006 Apr 1; 26 (2): 192 - 7.
- [26] Das A, Halder AEmergence of PTSD like symptomology in different strata of the society in COVID - 19 pandemic - pathophysiological rationale Int J. Den and Med Research. 2021 March; 3 (1)
- Kaveri C, Nikhil C, Ankit H, Behere P. A Study on Parenting of School - Going Children, with Behavioural and Emotional Disorders. Int J Ind Psychology.2024; 12 (1)
- Shahani R, Halder A, Sravani Y Cognition and EEG [28] Changes in Patients on Hemodialysis - Food for Thought. Int Journal of Dental and Med Sciences Research.2023; 5 (6)
- Pushpanathan D, Halder A, STUDY TO ASSESS THE SEVERITY OF ALCOHOL DEPENDENCE IN MALE PATIENTS AND FIND THE PREVALENCE OF PSYCHIATRIC COMORBIDITIES IN THEIR SPOUSES. Int Journal of scientific Res. 2022: 11 (7)
- Pushpanathan D, Halder A, STUDY TO ASSESS THE [30] SEVERITY OF ALCOHOL DEPENDENCE IN MALE PATIENTS AND FIND THE PREVALENCE OF PSYCHIATRIC COMORBIDITIES IN THEIR SPOUSES Int Journal of scientific Res.2022: 11 (7)

1660

Volume 13 Issue 3, March 2024 Fully Refereed | Open Access | Double Blind Peer Reviewed Journal www.ijsr.net