

AUGMENTATION IN RESTLESS LEG SYNDROME: MANAGEMENT CHALLENGES

AMINUR RAHMAN

*Associate Professor & Head, Department of Neurology, Sir Salimullah Medical College, Mitford, Dhaka, Bangladesh.
E-mail: draminur@yahoo.com*

Augmentation is defined as an increase in symptom severity despite (mostly dopaminergic) treatment. Alternatively, there can be an earlier onset of symptoms in the afternoon by at least 4 hours and/or a shorter latency of symptoms at rest, or a spread of symptoms to previously unaffected body parts. Augmentation is the paradoxical worsening of Restless Leg Syndrome (RLS) symptoms after prolonged RLS treatment that typically occurs in 10–68% of patients who underwent sustained treatment with dopamine agonists, usually after 3–10 years of effective management. Excess postsynaptic desensitization of dopamine 2 (D2) receptors in the substantia nigra and putamen with prolonged intermittent dopaminergic stimulation is assumed to be the cause of augmentation, while the exact process is unknown. Smaller dosages of longer-acting dopaminergic agonists, such as ropinirole and pramipexole, are expected to reduce the risk of augmentation; of these agonists, rotigotine has the lowest risk of augmentation due to its longest half-life. Levodopa and other shorter-acting dopaminergic agonists have the greatest chance of producing enhancement when used consistently. The current recommendations for management include stopping the offending substance, improving sleep quality and habits, adding α_2 medicines, or starting opioid therapy, but the latter two options carry a high risk of side effects. The binding sites for the gabapentinoid medications pregabalin and gabapentin are represented by the α_2 -2 and α_2 -1 proteins. Because gabapentin enacarbil has fewer negative effects than regular gabapentin, the FDA has approved it for treatment in RLS. Patients who have developed resistance to first-line RLS treatments can also benefit from low-dose opioid medicines, especially when combined with dopamine agonists. For the majority of individuals, low-dose opioid medicines continue to effectively treat symptoms of refractory RLS over a 2-year follow-up period. The most often given opioid was methadone. Methadone has replaced oxycodone ER as the usual treatment for patients who are refractory to opioids. Its lengthy half-life, once-daily dosage, and lack of euphoric effects make it significantly less likely to be abused. This was the result of a big clinical trial involving opioids. Given its distinct pharmacological profile, aripiprazole, a dopamine receptor partial agonist (DRPA), may offer a further alternative for managing augmentation in RLS.

Keywords: Augmentation in Restless Leg Syndrome, Restless Leg Syndrome

Date of received: 09/05/2024

Date of accepted: 19/05/2024

DOI: <https://doi.org/10.3329/bjm.v35i20.73289> Top of form

Citation: Rahim A, Islam MR, Taha AR, Bhuiyan T. Augmentation in Restless Leg Syndrome: Management Challenges. *Rahman A. Bangladesh J Medicine* 2024; Vol. 35, No. 2, Supplementation: 150