Case Report

Clenched Cues: Unraveling the Overlap of Bruxism and Restless Leg Syndrome without Polysomnography- A Case Report

Swapnil Jain, Shitij K Murari, Mitali Soni Loya
Department of Psychiatry, People's College of Medical Sciences & Research Centre, People's University, Bhopal (Madhya Pradesh)

ABSTRACT:
Sleep disorders are a prevalent and complex group of conditions that disrupt normal sleep patterns, significantly impacting overall health, safety, and quality of life. Sleep disorders can occur as primary disorder or in combination with other psychiatric disorders or sleep disorders. This case report presents a 40-year-old male with a complex set of symptoms characterized by bruxism and restless legs syndrome (RLS). A therapeutic trial was successful but challenges in diagnosing still persisted. This case highlights the complexities of coexisting sleep disorders and the importance of personalized treatment approaches, emphasizing the need for further research into the treatment of these complex sleep disorders.

KEY WORDS: Sleep disorders, Bruxism, Restless Legs Syndrome, Pramipexole, Coexisting sleep disorders

Address for correspondence : Dr. Swapnil Jain, Post Graduate Resident, Department of Psychiatry, People's College of Medical Sciences & Research Centre, Bhopal-462026, (Madhya Pradesh), India, E-mail: swapnill256@gmail.com
Submitted: 17.02.2025, **Accepted:** 26.05.2025, **Published:** 10.06.2025

INTRODUCTION:

Sleep disorders disrupt normal sleep patterns and are common in medical practice, impacting physical, mental, social, and emotional functioning. Non-restorative sleep, such as insomnia, significantly impairs functioning.A study highlighted the substantial impairment in quality of life in patients with insomnia, underscoring the importance of addressing sleep disorders.[1] The International Classification of Sleep Disorders provides a framework for classification. Bruxism, a parasomnia, involves teeth clenching or grinding during sleep and can be tonic, phasic, or combined.[2] Its unclear etiology complicates diagnosis.[3] Restless Leg Syndrome (RLS), a dyssomnia, causes unpleasant leg sensations and an irresistible urge to move the legs before sleep. Coexisting sleep disorders, like bruxism and RLS, present diagnostic challenges, highlighting their complex interactions.

Access this article online

Quick Response Code:

Website: www.pjsr.org

DOI: https://doi.org/10.5281/zenodo.15702802

CASE REPORT:

A 40-year-old male presented to the department of Psychiatry with a complex set of symptoms eight months duration. His primary complaint was the sensation of clenching of teeth while falling asleep, which was accompanied by pain in the jaw and around the temporomandibular joint, particularly in the morning. Additionally, he experienced a stretching sensation in his arms at rest, predominantly at night. Notably, the patient had a history of RLS that had resolved on its own a year prior to his presentation.

Upon mental status examination, the patient was found to be grossly normal, with an anxious affect. This suggested that his symptoms were not solely related to a psychiatric condition, but rather a complex interplay of neurological and sleep-related factors.

How to cite this article: Jain S, Murari SK, Loya MS. Clenched Cues: Unraveling the Overlap of Bruxism and Restless Leg Syndrome without Polysomno-graphy- A Case Report. PJSR. 2025;18(1):100-103.

Table 1: Assessment of diagnosis

	Points favouring diagnosis	Points against diagnosis
BRUXISM	• Experiencing jaw pain in morning • Clenching felt while in deep sleep	• Unusual presentation (clenching, commonly presents as grinding) • Teeth guard exacerbated symptoms • Response to therapeutic trial
FACE VARIANT OF RLS	• Arm variant of RLS at night • h/o RLS in past	• Jaw pain experienced in morning after waking up • No difficulty in sleep initiation

Given the patient's unique set of symptoms, a therapeutic trial was given. He was started on pregabalin 50 mg. Later, pramipexole 0.125 mg was added to his treatment regimen on follow up.

On serial follow-ups, the patient reported significant improvement in his bruxism symptoms, characterized by reduced teeth clenching, as well as a decrease in arm restlessness. However, he continued to experience difficulties with deep sleep and reported having nightmares off and on. This suggested that while the treatment regimen was effective in managing some of his symptoms, further adjustments may be necessary to fully address his sleep-related issues.

The treatment of bruxism is challenging, and there is limited evidence to support the use of certain medications, such as clonazepam, clonidine, and pramipexole. However, in this case, the patient responded well to a therapeutic trial of pregabalin and pramipexole, suggesting that this combination may be a viable treatment option for some patients with bruxism and face variant of RLS.

DISCUSSION:

This case presented a diagnostic challenge due to the presence of multiple possible differential diagnoses, including a facial variant of RLS, bruxism, seizure disorder, and somatic symptom disorder. Table 1 explains the diagnostic dilemma faced while managing the given case. Although the patient responded positively to treatment, uncertainty around the exact diagnosis persisted. Pramipexole, a dopamine agonist commonly used in RLS, is known to disrupt sleep in the early stages of treatment.[4] The patient initially experienced worsened sleep after starting pramipexole, but over time reported a marked improvement in bruxism. This seemingly contradictory response added to the diagnostic complexity. While the clinical features suggested bruxism, the therapeutic response to a medication typically used for RLS raised the possibility of an underlying RLS component, making it difficult to establish a single definitive diagnosis. Unlike many medical conditions where visible signs help in diagnosis, sleep disorders often depend heavily on the patient's subjective experience. Objective tests like polysomnography (PSG) are valuable, but not always accessible. In this case, despite the unavailability of PSG, careful history-taking revealed overlapping symptoms of bruxism and arm restlessness, suggesting a comorbid presentation rather than a single isolated condition.

Research supports the possibility of such overlap.[3-5] A Canadian study by Lavigne GJ et al,found that a notable proportion of people with RLS also experienced symptoms of sleep bruxism.[5] Similarly, a study by Dickoff D reported that over 40% of RLS patients had a history of bruxism, and among those treated with dopamine agonists, a significant number showed improvement in both RLS and bruxism symptoms.[6]

Current clinical guidelines for managing RLS, developed by the International Restless Legs Syndrome Study Group, recommend medications such as pregabalin, ropinirole, pramipexole, and rotigotine.[7] Iron supplementation is also advised for patients with low ferritin levels, as iron deficiency can exacerbate symptoms.[8]

In this case, the patient was initially treated with pregabalin 50 mg, followed by the addition of pramipexole 0.125 mg during follow-up. This combination resulted in significant relief from both bruxism and arm restlessness, supporting the possibility of an RLS variant with overlapping features.

Sleep disorders are a crucial but often under-recognised area within psychiatry. The recent ICD-11 classification removed sleep disorders from the domain of psychiatric diagnoses, which may inadvertently delay timely recognition and management—especially when these disorders present in unusual or complex ways. This highlights the need for better training of mental health professionals in recognising sleep-related issues. A holistic, multidisciplinary approach is essential when evaluating sleep complaints, particularly given how frequently they co-occur with other physical or psychological conditions.[6]

CONCLUSION:

This case throws the light on the diagnostic complexity and therapeutic challenges associated with bruxism presenting as a facial variant of RLS. Effective management requires a comprehensive approach, encompassing detailed clinical evaluation and therapeutic trials. Given the rarity of this presentation, further research is warranted to better understand its underlying pathophysiology and to establish evidence-based treatment strategies. In settings where advanced investigations such as PSG are unavailable, clinicians can still achieve accurate diagnosis and effective treatment through meticulous history-taking and a committed, holistic approach. This case reinforces the value of clinical acumen and the psychiatrist's role in managing atypical and under recognized conditions.

DECLARATION OF PATIENT CONSENT:

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial Support and Sponsorship

Nil.

Conflicts of Interest

There are no conflicts of interest.

REFERENCES:

1. Zammit GK, Weiner J, Damato N, Sillup GP, McMillan CA. Quality of life in people with insomnia. Sleep. 1999 May 1;22Suppl 2:S379-85. PMID: 10394611.
2. Parasomnia, sleep bruxism type. Available at: https://www.ncbi.nlm.nih.gov/medgen/339751
3. Murali RV, Rangarajan P, Mounissamy A. Bruxism: Conceptual discussion and review. J Pharm Bioallied Sci. 2015 Apr;7(Suppl 1):S265-70. doi: 10.4103/0975-7406.155948. PMID: 26015729; PMCID: PMC4439689.
4. Sharma S, Hadigal S, Wagner MH, Ryals S, Berry RB. Patient With a New Parasomnia. J Clin Sleep Med. 2019 Jun 15;15(6):929-930. doi: 10.5664/jcsm.7854. PMID: 31138391; PMCID: PMC6557655.
5. Lavigne GJ, Montplaisir JY. Restless legs syndrome and sleep bruxism: prevalence and association among Canadians. Sleep. 1994 Dec;17(8):739-43. PMID: 7701186.
6. D. Dickoff, S. Dontje, R. Sirkin, N. Ditkoff. Bruxism Associated with Restless Limbs Syndrome (RLS): A Dopamine Responsive Movement Disorder [abstract]. MovDisord. 2020; 35 (suppl 1). https://www.mdsabstracts.org/abstract/bruxism-associated-with-restless-limbs-syndrome-rls-a-dopamine-responsive-movement-disorder/. Accessed June 17, 2025.
7. Garcia-Borreguero D, Kohnen R, Silber MH, Winkelman JW, Earley CJ, Högl B, Manconi M, Montplaisir J, Inoue Y, Allen RP. The long-term treatment of restless legs syndrome/Willis-Ekbom disease: evidence-based guidelines and clinical consensus best practice guidance: a report from the International Restless Legs Syndrome Study Group. Sleep Med. 2013 Jul;14(7):675-84. doi: 10.1016/j.sleep.2013.05.016. PMID: 23859128.
8. Hening WA. Restless Legs Syndrome. Curr Treat Options Neurol. 1999 Sep;1(4):309-319. doi: 10.1007/s11940-999-0021-9. PMID: 11096718.