**CASE REPORT** 

## ISOLATED SLEEP PARALYSIS AND GENERALIZED ANXIETY DISORDER: A CASE REPORT AND REVIEW

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#### Abstract

*Objective:* This case report highlights a case of isolated sleep paralysis, a transient, generalized inability to move or speak that usually seen during the patient's transitions between sleeping and wakefulness. *Method:* We report the case of a 44-year-old man with long standing recurrent isolated sleep paralysis and generalized anxiety disorder who sought help almost 20 years after the first onset of symptoms. The presenting manifestations of this disorder and its management are also discussed. *Results:* Isolated sleep paralysis is reported to occur with co-morbid anxiety disorders especially panic disorder. Its presentation may confuse the psychiatrist with other psychiatric disorders. *Conclusion:* It is important for psychiatrists to be aware of the presentation of a patient with isolated sleep paralysis and simultaneously understand the cultural undertones in such cases. *ASEAN Journal of Psychiatry, Vol. 14 (1), January – June 2013: XX XX.* 

Keywords: Isolated Sleep Paralysis, Recurrent Isolated Sleep Paralysis, Narcolepsy, Generalized Anxiety Disorder

### Introduction

Sleep paralysis is a transient, generalized inability to move or speak that usually seen during the patient's transitions between sleeping and wakefulness. It forms one of the important components of narcolepsy tetrad that in addition excessive davtime comprises sleepiness. cataplexy and hypnagogic hallucinations. The earliest detailed account of sleep paralysis associated with hypnagogic illusions was given by the Dutch physician Isbrand van Diemerbroeck in 1664 [1]. Isolated sleep paralysis (ISP) is a rapid eve movement (REM) sleep parasomnia and is diagnosed if there is absence of other clinical features of narcolepsy. Isolated events of ISP and experiences of individual symptoms seen in ISP are a common reported phenomenon [2], with a prevalence of anywhere between 20-60% but recurrent isolated sleep paralysis (RISP) or chronic ISP is a relatively less known and uncommon disorder [3-5]. We report the case of a patient with recurrent isolated sleep paralysis that gradually progressed in severity over 20 years and also had co-morbid generalized anxiety disorder. To our knowledge this is the first case report of RISP with GAD from India.

### **Case Report**

A 44-year-old unmarried man working as a gardener came to the psychiatry outpatient department with chief complaints of episodes of

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inability to move limbs at night while asleep since the past 20 years. The patient described all these episodes occurred during his sleep and lasting about 5-15 minutes whereby he was unable to move his limbs or turn in bed or even call for help, all of which he would desperately wanted to do each time he had these episodes. During the episodes he felt as if someone was sitting on his chest and making it difficult for him to move or breathe. On further probing, he accepted an occasionally feeling that a shaitaan (Hindi for ghost) was sitting on his chest. These episodes had left him feeling powerless and extremely frightened. He explicitly described that during these episodes, he could very clearly hear other family members talking in the room, but he could not respond to any of them. Each time he would feel that a simple pat or touch by any family member would terminate this episode, which actually did happen on a few occasions, while on others they subsided on their own. The episodes would usually occur when he was about to get up from sleep. He reported the earliest episodes in his early 20s, most distinctly around 22 years of age, but said that the episodes then were occasional (around 1-2 times in three months) and did not distress him. However since the past 2 months (without any apparent stressor) their frequency had increased to almost daily episodes resulting in subsequent insomnia and distress. He estimated his total nocturnal sleep time to be about 2-4 hours but at the same time did not complain of excessive daytime sleepiness; his Epworth Sleepiness Scale score was only 6 suggestive of normal range. He described his sleep quality as poor, with anxiety and excessive worry and denied of any visual or auditory hallucinations during daytime. Although the patient denied of having any fatigue, he did complain specifically of having memory difficulties; he also appeared distressed about his condition but did not seem depressed. He denied symptoms suggestive of restless leg syndrome or cataplexy.

Initially he had gone to certain faith healers but when nothing helped, he consulted a psychiatry clinic. On further history, he also showed anxiety symptoms and fulfilled criteria of generalized anxiety disorder, but none of any other psychiatric disorder. There were no reported panic attacks by him. There was no current use of alcohol although he had a past history of occasional drinking 5 years back followed by complete abstinence since then. He was not on any regular medications either for sleep complaints or any other problems and had no family history of sleep disorders.

His general and systemic examination were within normal limits and on mental state examination he was alert and fully oriented. Affect was anxious but showed full range and was appropriate to mood. His routine blood investigations, thyroid function tests and electroencephalogram were normal.

Using International Criteria of Sleep Disorders criteria (2001) [6] he was diagnosed to have chronic isolated sleep paralysis, severe type and comorbid generalized anxiety disorder (GAD) as per Diagnostic and Statistical Manual IV edition, Text Revision.

We educated him about the importance of sleep hygiene and advised him to avoid any sort of sleep deprivation. He was taught relaxation exercise to be practiced regularly at home. He was started on amitriptyline 25mg night dose. but he returned complaining of heaviness of head and giddiness and in spite of advising him to continue the medications as the side effects may subside with time, he refused to take it. He was then started on paroxetine 25 mg night dose. He was followed regularly when he reported that he has not experienced further episodes of sleep paralysis; he also reported that his anxiety problem was fully resolved; improvement in both the disorders was sustained at 6 months follow up. When an attempt to reduce paroxetine was made, he redeveloped both the sleep and anxiety problems and hence it was planned to continue him on long term medication.

### Discussion

This patient had symptoms of recurrent isolated sleep paralysis that occurs in the absence of any other symptoms of narcolepsy and also had comorbid GAD. Sleep paralysis is not present in all patients of narcolepsy and tends to be more transitory as compared to other symptoms [7,8]. We did consider narcolepsy as a differential diagnosis for our patient but since there was no history suggestive of cataplexy, it was ruled out, as only cataplexy exhibits a high specificity for diagnosis of narcolepsy [9].

The episodes in ISP are more likely to occur during awakening from sleep (hypnopompic) while episodes of narcolepsy associated sleepparalysis tend to occur commonly during sleep onset (hypnagogic) [5]. An explanation given for sleep paralysis which seen especially in narcolepsy is the spillover of REM sleep atonia into wakefulness [9]. Majority of the cases reported point towards the episodes occurring more commonly in supine sleeping position, although the mechanism for this is not clear [1]. Although our patient did not specifically complain of having these episodes more in the supine position, but he did give a history of sleeping in a supine position most of the times.

Hallucinatory experiences both in visual and auditory modalities are common in ISP. Patients may complain of feeling as if someone is touching or stroking their bodies or someone is standing by their side or at their head. Their hallucinations may include people, animals, intruders, demons, spirits, or even vampires in their bedrooms. They hear footsteps getting closer to them and fear they would be killed [1]. Most patients report reported that they are aware of other people present in the room and can hear their voices and other noises around, but usually complain of complete inability to move any part of their bodies including an inability to speak out or scream [10,11]. Patients may commonly complain of breathlessness and classically describe it as a choking sensation or as if someone is sitting on their chest, which frightens them in darkness of the night.

Appropriately diagnosing a case of ISP is important for psychiatrists as the frightening features and associated anxiety reported by patients may mislead the clinician into diagnosing such patients with a psychotic spectrum or anxiety spectrum disorder, especially in the absence of a history of snoring [12]. One should probe into reported symptoms such as a ghost sitting on the chest in sleep (as in our patient) and associated features such as

suspiciousness, since it could easily mislead the diagnosis. In view of this symptom and the belief in shaitaan (ghost), our patient had initially gone to certain faith healers who confirmed his belief of the presence of a shaitaan but nothing suggested by them helped, because of which he consulted a psychiatry clinic. These beliefs of our patient were mere cultural and not delusional; they were easily targeted by psycho-educating him about the disorder. Various cross cultural case reports and studies have reported of similar phrases being used by patients to describe the choking or breathlessness in ISP [13]. In this context, one also needs to know that ISP is a part of the mythology of certain cultures and has been attributed to supernatural forces such as ghost oppression phenomenon in Hong Kong Chinese witchcraft [5,14,15]. Gangdev (2004) pointed this in a case report of a woman who developed paranoid beliefs and sadness of mood during her experience of sleep paralysis and hypnic hallucinations [16]. Ohaeri (1992) highlights the clinical presentation and treatment approaches to sleep paralysis and points out its importance especially in developing countries where a belief in supernatural causation of illness is prevalent [17].

Hsieh *et al* (2010) [18] demonstrated that ISP was independently associated with excessive daytime sleepiness, worse sleep quality, and impaired mental health-related quality of life in their Chinese-Taiwanese subjects. In addition, ISP has been reported in association with other psychiatric disorders such as panic disorder [18], PTSD [20,21] and other anxiety disorders [22]. When dealing with a case of ISP/RISP, clinicians need to rule out nocturnal panic attacks which are non-REM-related events and occur without an obvious trigger in 18-45% of panic disorder patients [23].

Different patients cope differently with this disorder; some may resort to prayers or a faith healer for their complaints while others may do nothing to prevent their paralytic attacks [24]. Demystification of parasonnias and reassurance is an important aspect of clinical intervention [25] as it is avoiding sleep deprivation and use of serotonergic antidepressants that help reduce

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the frequency of ISP episodes [5,26]. Other drugs like amitriptyline (75-100 mg) in association with l-tryptophan (2-4g) at bedtime have also been recommended [27]. However, since our patient refused to take amitriptyline owing to its side effects, he was started on paroxetine, keeping in mind that he also had comorbid GAD; both of these disorders responded to paroxetine.

### Conclusion

Recurrent isolated sleep paralysis is a rare disorder that may present either to sleep specialists or to psychiatrists and can be easily misdiagnosed as some other sleep or psychiatric disorder. It is important for psychiatrists to be aware of ISP as a diagnostic entity and also any accompanying co-morbidities. Cross cultural awareness of patient reports of different symptoms of ISP is also important for clinicians to help further the patient management. RISP is precipitated by sleep deprivation and stress which makes addressing these two issues all the more important in the management of RISP.

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