

Obstructive sleep apnoea with co existent Kleine-Levine syndrome in a middle-aged man

Gopal Chawla¹, Ram Niwas¹, Naveen Dutt¹, Mukesh Kumar Swamy²

¹Department of Pulmonary Medicine, All India Institute of Medical Sciences, Jodhpur; ²Department of Psychiatry, All India Institute of Medical Sciences, Jodhpur, India

Abstract

Hypersomnia is a symptom which is pathognomonic of patients with Kleine-Levin syndrome (KLS), but the cause of this finding remains undefined. Given the pervasive association between obstructive sleep apnoea (OSA) and excessive daytime sleepiness, there exists the possibility that OSA might contribute to the sleepiness exhibited by these patients. Here we report a middle age man who had excessive daytime sleepiness and diagnosed as OSA after polysomnography. Prescribing of continuous positive airway pressure (CPAP) lead to unmasking of episodes of increased sleepiness and other behavioural features of KLS.

Case Report

A 36-year-old chef with BMI of 36.4 presented with complaints of excessive day time sleepiness, snoring and anxiety episodes on and off for past 1 year. He also mentioned about

morning headache and feeling of tiredness even after sleep. Apart from this system he was involved in vehicular accident when he dozed off while driving and escaped with minor injuries. His Epworth sleepiness score was 20. Considering severity of the disease, he was planned for split night polysomnography. Apnoea and hypopnea index was equal to 34.8/h, with basal saturation of 98% and minimum of 82%. The positive pressure titration indicated an ideal pressure for apnoea and hypopnea control of 9 cm H₂O (Figure1).

At the next follow-up visit, the patient reported that his symptoms showed partial improvement with continuous positive airway pressure (CPAP). He followed CPAP up for 6 months, which compliance was ensured by verifying the data with memory card. Compliance was more than 85% but patient remain unsatisfied due to fact that his excessive sleepiness is gone for few days to return again with vengeance. Intrigued by kind of episodic nature of excessive sleepiness he was posted for detailed history session. On detailed history it was divulged that his symptoms are not continuous but episodic, which include excessive day time sleepiness and hypersomnia, along with excessive and compulsive eating with increase in sex drive, though all these three symptoms together were only present only in few episodes. He has these episodes for 3-4 days followed by symptom-free period for around 15 days. The history was confirmed with spouse and his brother. During this period, the patient sleeps for more than 12 hours and if woken up early gets irritated and sleeps again. Eating almost three times of what he takes usually. He continued to have heightened sexual urges. This hypersexual behaviour includes excessive masturbation along with forcing his partner which led to quarrels and abusive behaviour.

He underwent counselling session with psychologist and later Cognitive Behaviour Session with psychiatrist. MRI brain to rule out lesion was done, which came out to be normal. He underwent polysomnography during one of the episodes which showed increase in sleep time along with decrease in sleep and REM onset latency (Table 1). In view of persistence of episodes of hypersexuality, hypersomnolence and hyperphagia and contributory polysomnography, the patient was started on Lithium 300 mg BD (serum lithium 0.5mEq/L) along with CPAP of 9 cm H₂O, Patient showed symptomatic improvement with this treatment and is presently under follow-up for past 4 months.

Correspondence: Dr. Ram Niwas, Department of Pulmonary Medicine, All India Institute of Medical Sciences, Jodhpur, India. Mobile: +91.9999493179. E-mail: rniwasaiims@gmail.com

Conflict of interest: The Authors declare no conflict of interest.

Contributions: GC, ND, study concept; GC, RN, ND, study design, definition of intellectual contents; GC, RN, literature search; GC, RN data acquisition; GC, ND, MKS, manuscript drafting; GC, RN, ND, MKS, manuscript editing and review. All authors read and approved the final version to be published.

Key words: Sleep disordered breathing; Kleine-Levine syndrome; KLS; OSA.

Received for publication: 29 August 2019.
Accepted for publication: 30 October 2019.

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Licensee PAGEPress, Italy
Monaldi Archives for Chest Disease 2019; 89:1163
doi: 10.4081/monaldi.2019.1163

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Discussion

Eponym Kleine-Levin syndrome (KLS) was coined by Critchley and Hofmann when they described two young individual with these names in 1942. KLS is a rare disorder, world preva-

Conclusions

It is evident that the literature is inadequate to establish the presence of a close association between KLS and sleep apnoea. However, there are reports for which the PSG recordings in KLS do raise possibility of association. Importance of history taking cannot be undermined as diagnosis is limited to history. PSG and SPECT have nothing more to offer apart from being research tool. Possibility of KLS should be considered in cases of OSA with variable response to CPAP.

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