CASE REPORT

Kleine Levin Syndrome

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Abstract

A case of Kleine Levin Syndrome is presented. Episodic course with spontaneous remission of each episode and characteristic features of hypersomnia, hyperphagia, disinhibited behavior, affective features like irritability and cognitive disturbance made the diagnosis of Kleine Levin syndrome in our patient.

Key Words

Kleine Levin Syndrome.

Introduction

First described by Kleine in 1925, Kleine Levin disorder is a rare disorder of unknown etiology with onset typically in adolescence and a tendency to spontaneous remission over years (1,2). Hypersomnia, compulsive eating, sexual disinhibition, personality change, and psychosis characterize the disorder. Hypersomnia is marked with increase in total sleeping time upto 18-20 hours and is the most consistent feature. Compulsive eating and sexual disinhibition completes the syndrome. Irritability is frequent, and hallucinations or affective symptoms may be present. Symptoms last hours to weeks and are cyclical, with full return to baseline on many occasions. Symptoms recur in a varying frequency of one to several months. The syndrome can be preceded by flu like symptoms or head trauma, although the precise etiology and pathophysiology are unknown. There is a male predominance in the ratio of 3:1(3). Very few cases of Kleine Levin syndrome have been reported from India (4-7). No case has been so far reported from our state. Here, we present a case of Kleine Levin syndrome, which presented to a psychiatry clinic in Srinagar.

Case

This 10-year-old child started with episodic behavioral change, which comprised of increased sleeping time through day and night of about 18 hours. When aroused, the boy would be confused, disoriented and exhibited irrelevancy in speech. During waking periods, he would eat excessively, eating his own meals as well as whatever was in sight, e.g., somebody else's meals. In particular he would demand carbohydrate rich items like chocolates and sweets. In addition, he would be seen rubbing his penis against the pillow, ignoring the presence of others. He frequently got angry and lost temper when his parents prohibited him from doing so. Otherwise also, he would be irritable when aroused from sleep and cried frequently without apparent reason.

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The mentioned behavioral changes were episodic, with each episode lasting for 8-10 days. Till the time of presentation with us there were 3 such episodes and at the variable intervals of 2-3 weeks.

The child had unremarkable general physical and systemic examination. Psychiatric examination during wakeful states revealed a confused boy with difficulty in carrying out interview due to irritable state and crying behavior. He was disoriented in time and place, with orientation for family members intact. The only activity of preference was eating, eating usual meals and asking for more. He was also witnessed lying prone and rubbing his penis against the pillow. He was also seen indulging in haphazard and apparently aimless activities like moving here and there, picking up things and dropping them back. After an hour or so of such behavior the boy went to sleep, only to repeat the behaviors over and again when wakeful. Investigations done to rule out organic cause included haemogram, thyroid functions, EEG and CT scan of the brain. All were within normal range. The diagnosis was Kleine Levin Syndrome.

Discussion

The diagnosis of Kleine Levin Syndrome rests on the clinical features alone as there are no specific abnormalities in various laboratory tests (8). In our case, the diagnosis is established by the episodic nature of behavioral changes, most marked by hypersomnia, hyperphagia and sexual disinhibition. There is little difficulty in establishing the diagnosis, though we did consider few differential diagnoses like bulimia nervosa. Bulimia nervosa however is ruled out by the absence of maneuvers to prevent weight gain like self-induced vomiting, use of laxatives or excessive exercise, and the abnormalities of cognitive functions. Likewise, Kluver Bucy syndrome is ruled out by the absence of hyperorality and visual agnosia.

Kleine Levin syndrome is classified as a sleep disorder. In DSM-IV (9) the condition is covered by Dyssomnia NOS while as the ICD-10 (10) classifies this condition in the chapter VI in Diseases of the Nervous system. There is as yet no clue to the etiopathogenesis. Malhotra *et al* (7) have documented evidence for hypothalamic pituitary dysfunction while Sagar *et al* (6) have studied inter episodic morbidity and have found significant maladjustment.

However, it is clear that the diagnosis rests on clinical grounds alone, and there are no specific laboratory tests that can help in the diagnosis (8).

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