KLEINE - LEVIN SYNDROME

(A Case Report)

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ABSTRACT

A 30 year old male soldier suffered from five episodes of hypersomnia. Each episode was associated with megaphagia, mental confusion, irritability, coenesthopathic hallucinations and sexual disinhibition. The average duration of each episode was ten weeks with symptomfree intervals ranging from two weeks to one year. The patient responded well to treatment with carbamazepine and fenfluramine.

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KEY WORDS : Kleine - Levin syndrome; Periodic hypersomnolence;
Disorders of excessive somnolence (DOES)

Introduction

Kleine - Levin syndrome (KLS) is a rare sleep disorder characterised by periods of excessive sleep, voracious eating (megaphagia), sexual disinhibition and mental disturbances [1]. The duration of at-

tacks may range from several days to several weeks and their frequency varies from one to twelve in an year. Patient is rousable from sleep but tends to be intensely irritable and truculent. Mental abnormalities may antedate each episode and may also persist for

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weeks thereafter [2]. Irritability, mental confusion, unreality feelings, delusions and hallucinations are the usual psychiatric symptoms. Young males are usually affected. Attacks decrease in frequency and eventually cease in most cases [3]. Clinical variants without mental symptoms, megaphagia, and with atypical features [1,4] have been reported.

CASE REPORT

A 30 year old NCO was brought to his regimental centre, by his wife and was subsequently referred for psychiatric consultation with the history that he was unable to work properly for two years and that "his appetite and sleep has increased so much that he gained weight by 30 kg". AFMSF - 10 had the following remarks- "As per the individual's statement, he is a psychiatric case. He seems to be a case of obesity. As per the statement of his wife he sleeps always."

It all started in April 87 after a febrile illness of diarrhoea. He developed an excessive interest in sex and thought some ladies including an officer's wife had fallen in love with him. He visited prostitutes frequently and contracted chancroid in the process. He became a voyeur and derived great pleasure by just gazing at the exposed genitalia and breasts of call girls for hours at a stretch. After a few weeks of this morbid sexual indulgence, he started experiencing "puzzlements". For brief periods, things and people would appear indistinct to him as if enveloped in a haze. Sometimes he would perceive his upper limbs had assumed strange shapes. He became forgetful and would frequently become bewildered. A short while thereafter he started feeling sleepy throughout the day. The desire to assume recumbency and fall asleep was overpowering. The daily routine in the unit distressed him a great deal as he had to make considerable efforts to remain awake. His well meaning colleagues helped by prodding him repeatedly. These enforced interruptions were a source of constant irritation to him. His appetite for food meanwhile increased enormously and he felt like eating whatever was at hand. Unless he ate something or the other, he felt faint and "strengthless". The very sight of food was strong stimulus to eat. He thought he was going mad and rushed home on leave for a private psychiatric consultation. He was reportedly told that he was suffering from neurosis. Within two months he became asymptomatic.

In May 88, he became symptomatic again for a short period. He indulged in promiscuous sexual activity and contracted chancroid again. In Dec 88, he started feeling strange again. As he could not find adequate words to describe his problems, he complained of giddiness and hence was evaluated by a physician who noted- "he is obese, he feels letters become unclear and clutter sometime. Feels a moving object suddenly fails to accelerate. He also gets occasional weakness of such nature that he cannot lift even one kg of weight"- and asked for psychiatric opinion. Psychiatrist noted "He gets puzzled over minor issues. At times he feels people are changing their

appearances, their legs become longer or smaller. Sometimes he could not understand what he was talking about. He feels intensely anxious and perplexed. Unnecessary thoughts mostly about husband and wife relations come to his mind". In view of vague verbalisations, perplexity and hallucinations a provisional diagnosis of schizophrenia was entertained and treatment with neuroleptics instituted. However, as the response was poor a second opinion was asked for from a senior colleague. The episodes of excessive sexual activity, lack of confidence, forgetfulness and bewilderment were noted and it was thought that - "these episodes of divergent behaviour are probably indicative of depression". He was diagnosed as a case of affective personality disorder and placed under observation in April 89. But for momentary "puzzlements" he did well until March 90.

In March 90, he started feeling strange all over again and went home AWL (absent without leave) to consult a famous psychiatrist at Ranchi. He slept for prolonged periods at home and ate voraciously on waking up. After 3 weeks, he started feeling better and went back to unit. However, within a few weeks he developed the symptoms again. He felt helpless and "ashamed of living like this". He thought he was never going to be alright and contemplated suicide several times. With a touch of resignation he went home without leave again in Aug 90. At home he was content to sleep all the time and utilised waking hours in eating and observing through binoculars, village ladies disrobing themselves in privacy or while bathing at the village tank. The exasperated wife finally brought him to his regimental centre in Nov 90.

He complained of going mad and weighed 96 kg on admission. Physical examination revealed no abnormality except excessive sweating. Mental status evaluation revealed a distraught individual who dwelt at length on his travails. He had difficulty in recalling events of recent and remote past but could retrieve all the memories under persuasion and was correctly oriented. Several times he would interrupt his narration as he was unable to express his distress to his satisfaction. He thought he was suffering from schizophrenia and considered all the therapeutic attentions were futile. He preferred to lie down all the time on the bed and sleep. Forced interruptions of ward routines and physical activity irritated him much. He grabbed at whatever item of food that came into his sight and ate enormous quantities of food at meal time. Left to himself he slept for 18 hours a day on three consecutive days. But for several momentary periods of confusion he had no perceptual impairment.

Routine investigation, blood sugar, urea, creatinine, cholesterol, and liver function tests were within normal limits. STS was non-reactor. Fundus oculi examination, awake EEG, X-ray skull, and CT scan brain revealed no abnormality. Bender Gestalt and Paired Associate learning tests also ruled out organicity. Rorschach test indicated marked impulsivity but no features of psychosis or depression. IQ was 119.

Individual belongs to a family of obese people (all around 75 kg). His mother had a 'laughing spell' after an abdominal operation. Patient was a good student, keen sportsman and a leader at school. Relations with wife

were strained for some years. He was investigated for transient hypertension in 1985.

The nature of disability and its essentially self limiting character was highlighted repeatedly to the patient. He was encouraged to eat slowly. Control was reinforced by verbal appreciation. Negative ideation was countered by cognitive therapy. He was given carbamazepine 1000 mg/day and fenfluramine 20 mg/day. He responded well and reported feeling better for the first time after 3 years of suffering.

DISCUSSION

Kumbhakarna, brother of demon king Ravan was perhaps the first case of KLS cited in literature. Kliene [5] and Levin [6] however were the first to draw attention to this disorders. Singh *et al* [4] in a recent comprehensive review mention seven case reports from India including two of their atypical cases. To the best of the author's knowledge, this is the first case reported from Indian Armed Forces.

A functional dysregulation of mesencephalo-hypothalmo-lymbic system has been postulated as the underlying mechanism, the exact nature of which remains obscure. Paroxysmal theta bursts in EEG, increased turnover of brain serotonin and dopamine, and abnormal growth hormone secretion patterns are reported in some cases [1]. The usual onset with febrile illness, and the inflammatory lesions detected in hypothalamus and thalamus by Carpenter *et al* [7], suggest a possible viral etiology. In this case only the first episode was preceded by a brief febrile illness. It is difficult to subsume a satisfactory psychodynamic explanation for the syndrome in toto.

Lesions around third ventricle, major depression of recurrent type, bipolar disorders, seasonal affective disorder, hysteroid dysphoria, narcolepsy, Kluver-Bucy syndrome, bulimia nervosa, and menstrual associated hypersomnia are some of the conditions which should be considered in the differential diagnosis. When circumstances prevent the patient from taking to his bed disturbed behaviour may dominate the pic-

ture falsely suggesting the essential problem as a personality disorder or even schizophrenia [2]. In this case the structured military milieu precluded the indulgence in excessive sleep. Prominent confusion, coenesthopathic hallucinations and reactionary dysphoria confused the issue of diagnosis earlier on. A case somewhat of a similar nature in an officer cadet has been reported by Robinson and Mcquillan [8]. Significantly, this patient either took leave or become AWL to go home and sleep to his heart's content.

By and large lithium is considered to be preferred drug for treatment as well as prophylaxis [4]. This patient was given a closer psychotropic drug carbamazepine on practical considerations and was cautiously exposed to fenfluramine, a centrally acting anorectic drug. The outcome has been gratifying. However it will be imprudent to infer their efficacy on this one case report. It is possible that the disorder had run its natural course and had remitted spontaneously. A positive psychobiological therapeutic approach as has been highlighted in this case needs no over emphasis.

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