Brit. J. Psychiat. (1970), 117, 521–23

A Case of the Kleine-Levin Syndrome of Long Duration

By H. R. GEORGE

There have been few cases of this syndrome published since the original papers by Kleine in 1925 and Levin in 1929. Critchley (1962) described 26 cases in his paper, in which he reviewed the condition fully. Earles (1965) mentioned 44 cases in the literature: a female case was recently discussed by Duffy and Davison (1968). According to Critchley the characteristic symptoms of this syndrome are 'recurring episodes of undue sleepiness lasting some days, associated with an inordinate intake of food and often with abnormal behaviour'. Invariably male adolescents are affected; they are normal in between attacks and the condition tends to disappear in later life.

The reasons for presenting this case are that the syndrome is rare; the attacks in this case have persisted for a considerable length of time, and while lessening in severity over the years occur with a similar frequency and last for the same length of time; also there is a family feature of obesity. Very few cases present long after adolescence, although Gallinek (1954) has described a case of a man of 34 who had experienced recurring episodes from the age of 17.

The patient was a single man aged 34, and was first seen at a psychiatric out-patient department in August, 1968, being referred by a Mental Welfare Officer for an opinion on his suitability for Industrial Rehabilitation Unit placement. He had been unemployed for about a year and previously had an unsettled working life; this he attributed to the periodic illness which, in turn, caused him to lack confidence and prevented him from making mature adjustments. He lived alone in a rooming house, was solitary and had a very limited social life, but kept contact with his parents whom he visited regularly. Financially he was dependent on social security benefits.

He described the symptoms as a periodic lack of stamina with compulsive eating and drowsiness; the attacks would take some hours to come on, last from five days to a week, and clear spontaneously over two or three days. They occurred every few months, but were not precisely regular.

His childhood was uneventful: he attended a preparatory school and then a Catholic school where he became a convert at the age of 15 years. The onset of his illness was dated to 16, while at school; he described the symptoms, which lasted about six weeks, as lethargy, nausea and loss of interest, but no eating to excess at that time. Subsequently he had attacks every few months with lassitude, excessive appetite, and on occasions, behaviour disturbance. Nevertheless he managed to pass six O levels in the G.C.E., and later one A level in French. He was undecided what work to do, but this was solved temporarily by his being called up for National Service at the age of 18. He was never seriously disciplined for faulty behaviour, although he missed parades because of his lassitude and sometimes took food from the kitchens during attacks; his position as a sergeant in the Education Corps may have given him more latitude. When he left the army he decided to become a Catholic priest and entered a seminary for training. His homosexual orientation was at this time clear to him; this, in addition to his attacks, could not escape notice in such a close community, and he was advised to leave. At this time, 1957, when he was 21, he was admitted to a psychiatric hospital; the diagnosis was of a neurotic condition bound up with his homosexuality. The following year he was admitted to a second psychiatric hospital where the condition was thought to be schizophrenic; and in 1959 he was admitted to yet another psy-

https://doi.org/10.1192/bjp.117.540.521 Published online by Cambridge University Press

chiatric hospital where the diagnosis was of psychopathy. At this last hospital a nitrogen balance test was done to exclude periodic catatonia, and EEG recordings as well as routine serological tests were found to be normal.

He is still homosexually orientated, but not, according to his own statement active except, in the past, during attacks. During normal periods he felt that homosexual behaviour was 'sordid and ridiculous', and preferred to remain sexually continent. Over recent years there has been no gross behaviour disturbance, but he has searched dustbins to find food when short of money to buy food during an attack. On a number of occasions in an attack he has stolen from supermarkets, and on one occasion he was caught and fined. Feeling that his behaviour could and should be controlled during his unwell periods, he has tried religious help, but over recent years he has ceased to be a practising Catholic and has adopted morning Yoga exercises. In normal phases he spends a solitary ordered day, reading or walking alone.

At the first interview the diagnosis was not clear, particularly as he was well at the time, and therefore no medication was prescribed. He attended two weeks later reporting a few days of excessive appetite, lethargy and a 'detached feeling', and he described his sleep as 'disturbed (by discomfort due to overeating) or a complete stupor'. At this stage he was given imipramine 25 mgm. t.d.s. trifluoperazine 2 mgm. t.d.s. and benzhexol 2 mgs. t.d.s. This attack subsided in a few days without hospital admission.

When a subsequent attack developed in January, 1969, a tentative diagnosis of Kleine-Levin syndrome was made, and it was decided to admit him and to try intravenous methylamphetamine and amphetamines orally. He was at this time indecisive and very slowed up mentally and physically. Although hungry (he had eaten all the food in his room), he was too lethargic to go in search of more. He was given intravenous methylamphetamine 30 mgm., and responded well within minutes, becoming alert, co-operative and amiable. Subsequently he was given daily oral amphetamine spansule 15 mgm., and was discharged to attend the Day Hospital. There have been three subsequent attacks and in these he has been much less drowsy, his appetite has been little affected and there has been no abnormal behaviour. He was discharged from the Day Hospital in June, 1969, and is working full time as a sales assistant.

His father was an intelligent, warm and interested parent; he was inclined to obesity and admitted he had to be careful with his diet. The relationship with both his parents had always been good and they never pressed him in any sphere. The mother was of normal build. There were two brothers, one a year older and the other seven years younger. The latter was said to be normal, but the older brother had been obese since childhood. Indeed this brother was so overweight in adolescence that employment was not immediately possible on leaving school; at one time he weighed 35 stone (227·5 kg.) and was eating far in excess of his needs, ingesting a food value of 8,000 calories a day, but after treatment by hospitalization and careful dieting, he now weighs a more respectable 15 stone (95·5 kg.). The patient described his brother's eating as totally different from his own, there being no periodicity and the over-eating being steady and not gluttonous; further, there never has been evidence of psychiatric illness. There is a female cousin on the father's side who is said to have been irresponsible when younger (she is now thirty) and is inclined to obesity, but further details or interview were unfortunately not possible.

Investigations

E.S.R. = 4;

Urine = N.A.D.; Blood Urea = 40 mgm./100 ml.;

Haemoglobin = 15·3 gm. per cent. W.B.C. = 6,500 per cu. mm. with normal differential;

Fasting Blood Sugar = 68 mgm./100 ml.

Serological tests for syphilis = negative;

EEG = Recordings normal; Urinary cortisol = 60 micrograms/24 hours;

Skull X-rays = normal.

W.A.I.S. Full Scale 122 with normal scatter.

Rorschach The impression was of an overcontrolled personality, who when threatened by unacceptable feelings escaped into phantasy which bordered on loss of touch with reality. There was evidence of lack of drive and intellectual underfunctioning.

https://doi.org/10.1192/bjp.117.540.521 Published online by Cambridge University Press

M.M.P.I. Code *285* 07′ *143* 6 2 : 14 : 7. The impression was of depression and self-devaluation in an introverted schizoid personality having difficulties with interpersonal relationships and homosexual tendencies. There was no evidence of delusions, conversion symptoms or behaviour disorder.

Discussion

This patient fits into the diagnostic category delineated by Critchley in regard to sex, age of onset, and periodicity of the sleepiness and overeating with the occasional behaviour disturbance in the past; very few cases have been reported as persisting as long as 18 years, albeit in a modified form, as usually it is assumed that the illness improves spontaneously after a few years.

When in hospital he was lethargic and indecisive and ate considerably, but not in an uncontrolled manner. There have not been any noteworthy abnormalities of behaviour whilst under care. In between attacks he has eaten sparingly, slept normally and tried by various means (for example Yoga exercises) to exert a greater self control which he feels would help to prevent or abort an attack. The attacks did not seem to be precipitated by external stresses, and neither did the symptoms seem to be of a hysterical type as suggested in similar cases by Pai (1950). It would seem reasonable to assume that his social difficulties and lack of confidence could be a result of the attacks rather than the cause. Some (Raymond and Robertson (1967)) consider the Kleine-Levin syndrome to be within the general classification of the psychopathies. In this case, as previously stated, there was no evidence of abnormal behaviour over the period of observation; the patient described episodes of irresponsible behaviour in the past, only during attacks, which he vaguely remembered and felt ashamed of, and which he attempted, in vain, to regulate.

There was never any significant clinical evidence of depression, and he showed no response to imipramine, which is as Earles (1965) found in his case. He showed an immediate satisfactory response to methylamphetamine and has continued to show a reasonable response to oral amphetamines in that he has had only very modified attacks and is working for the first time in two years. Critchley (1962), Earle (1965) Gallinek (1954) and others have reported a satisfactory response to amphetamines.

The extremely obese brother, without any demonstrable psychiatric illness, suggests a familial factor; Roth (1962) found abnormalities commonly in families of patients with hypersomnia and narcolepsy.

Summary

A case of Kleine-Levin syndrome in a male, of 18 years' duration, present at the age of 34 years with a periodicity of attacks unimpaired, but of less intensity than in earlier years. He has responded reasonably to oral amphetamines for nearly a year as far as the attacks are concerned, but his considerable personality difficulties remain.

References

Critchley, M. (1962). 'Periodic hypersomnia and megaphagia in adolescent males.' *Brain*, **85**, 627–56.

Duffy, J. P., and Davison, K. (1968). 'A female case of the Kleine-Levin syndrome.' *Brit. J. Psychiat.*, **114**, 77–84.

Earles, B. V. (1965). 'Periodic hypersomnia and megaphagia (Kleine-Levin syndrome).' *Psychiat. Quart.*, **39**, 79–83.

Gallinek, A. (1954). 'Syndromes of episodes or hypersomnia, bulimia and abnormal mental states.' *J. Amer. med. Ass.*, **154**, 1081–3.

Pai, M. N. (1950). 'Hypersomnia syndrome.' *Brit. med. J.*, *i*, 522–4.

Raymond, M. J., and Robertson, J. P. S. (1967). *Geigy Professional Service Series in Programmed Learning*. Vol. 7. *Psychopathy*.

Roth, B. (1962). *Narkolepsie und Hypersomnie*. Berlin: VEB Verl. Volk und Gesundheit. Quoted by Bonkalo, A. (1968). 'Hypersomnia: a discussion on the psychiatric implications.' *Brit. J. Psychiat.*, **114**, 69–74.

H. R. George, M.B., B.S., D.P.M., *Consultant Psychiatrist, Banstead Hospital, Sutton, and St. Mary Abbots Hospital, London, W.8*

(*Received 29 October 1969*)

https://doi.org/10.1192/bjp.117.540.521 Published online by Cambridge University Press