ANOREXIA NERVOSA : A CAUCASIAN SYNDROME RARE IN ASIA

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Introduction

Anorexia Nervosa (AN) is an eating disorder characterised by deliberate weight loss that is induced and sustained by the patient. The disorder usually occurs in females. The patient has body image distortion and experiences herself as fat despite being grossly underweight. AN is virtually restricted to Western Caucasians. There were no cases detected in a recent Indian study group at risk, though some atypical case were reported earlier [1]. The occurrence of a typical case satisfying all the diagnostic criteria in an Indian girl is rare, and may be the fall out of Western acculturation of our population.

Case Report

The patient, a 14 year old school girl, was brought by her parents with a 6 month history of weight loss, excessive dieting and exercising, and undue preoccupation with food. She lost weight gradually, from 52 kg six months previously, to 40 kg at presentation. Her exercise schedule included one hour of jogging, about 1000 skips, 20 min on the exercise bicycle, a 30 min walk and a game like badminton every day. On presentation, her dieting was at a peak and she consumed a maximum of 500 Cal/day. She wasted time checking that no oil was used in the roti, and took hours to eat as she kept inspecting her food for fats.

Her preoccupations and rigidity ruined the family holiday and precipitated seeking of psychiatric help. Menarche was at 10 year age, and regular monthly cycles began at the age of 12 years. Since 3 months menstruation had stopped completely. The family hailed from Punjab, and is settled in Delhi. Her father is an Army officer and mother is a housewife. She is the younger of two sisters. Her family background is stable. She enjoyed her school life and did well at academics.

On general examination she was poorly nourished. Pulse was 48/min, BP 90/58 mm Hg, weight 39 kg and height 156 cm. There was pallor and her hair was brittle. She appeared depressed and tearful. Subjectively her mood was euthymic. Her thinking revealed body image distortion with a fixed idea that she looked fat even though she was emaciated, an intense fear of gaining weight, denial that she was ill, and the feeling that she could be attractive only if she did not put on weight. She was preoccupied with dieting and maintaining her low body weight. Her sleep was disturbed with frequent wakening. She had constipation. Her energy levels were increased. Investigations revealed haemoglobin 9.5 gm%, and serum calcium 8.4 mEq/l. ECG showed sinus bradycardia with a heart rate of 45/min.

The patient was placed on cognitive behavioural psychotherapy. This included a baseline assessment and monitoring of eating and exercising behaviours, graded homework tasks aimed at encouraging healthy eating habits and reducing excessive exercising, exploring of illogical fears and assumptions regarding eating, and using Problem Solving Techniques to deal with conflict. With this well being improved and exercising reduced. However her preoccupation with dieting, and body weight persisted. Weight declined to 37 kg after a month of treatment. Though the patient was not hospitalised, she and her parents were informed that further treatment as an outpatient would be contingent on weight gain. Fluoxetine was added to the treatment regime in a dose of 20 mg/day. Behaviour continued to improve gradually. By the sixth week her body image distortions subsided, eating had increased, and her weight was 40 kg. She developed hairfall, and drug compliance deteriorated. Fluoxetine was stopped while psychotherapy continued. Eight weeks later her weight was 43 kg, heart rate 76/min, BP 112/70 mm Hg, and haemoglobin 12.5 gm%. She was still amenorrhic.

Discussion

AN is virtually restricted to industrialised countries. It is rare in Asian patients where there is little societal emphasis on thinness [2]. The first Indian report was in 1987 [3].

The disorder usually starts with innocuous attempts to reduce weight, as in this case. Our patient displayed all the features required for a definite diagnosis. She also had "weight phobia", which was not manifest in other Asian populations [4]. Amenorrhea is an essential feature of the disorder in post menarcheal females. In most cases it is secondary to weight loss. Depending on the final weight achieved, 55% of patients regain normal menstruation with treatment [5].

AN is one of the few psychiatric disorders with medical complications. These are the same as in uncomplicated starvation. Severe bradycardia leading to cardiac arrest is a common cause of death in the disorder. A third of cases have anaemia, and 90% have a BP of less than 90/60 mmHg. Constipation and hair changes are also common. Hypocalcaemia and osteoporosis coupled with intense exercising increase

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the risk of pathological fractures in the long term.

Depression coexists with AN in 52-98% of patients, and suicide accounts for a significant fraction of mortality [6]. Though this patient had some symptoms of depression (depressed appearance, tearfulness, and insomania), there was no prolonged mood syndrome. Sleep disturbance was due to frequent checking of her alarm to start her exercise schedule. The mood symptoms were situational and related to the patient being made to undergo psychiatric evaluation at her parents behest.

Weight gain is the primary aim of treatment, and is directly related to the outcome [7]. No single treatment technique is universally superior in AN. Empirically cognitive behavioural psychotherapy is found most useful. Fluoxetine, a selective serotonin reuptake inhibitor (SSRI), was effective in a recent study. It may act by regulating serotonin at hypothalamic feeding centres. Hairfall noted during treatment is known to occur when healthy hair is regenerated in the re-feeding phase, and is not a side effect of fluoxetine [8]. A major problem in treatment of these cases is the stormy course and difficulties of psychotherapy characteristic of the adolescent age group. Adolescents are sensitive even to minor side effects, hence other drugs like cyprohepetadine, chlorpromazine, amitryptiline and lithium that have been tried in AN, were considered but decided against. Fluoxetine was stopped after about eight weeks as the issue of drug compliance in the face of continuing hairfall threatened to obscure the focus of treatment.

Sociocultural factors are cited as influential in causation of the disorder [9]. They may be responsible for the changing risk and prevalence rates of the disorder. The recent success by Indian women at international beauty contests and the presence of a strong model for slimness in the form of the Barbie doll introduced during the formative years of generation-X, may be a factor for the emergence of the disorder in our population.

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