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Case Report Open Access

Severe Complication and Shoplifting Behavior in a Young Man with Atypical Anorexia Nervosa: A Case Report

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Abstract

Anorexia nervosa (AN) is an eating disorder characterized by excessive restriction on food intake and irrational fear of gaining weight, often accompanied by a distorted body self-perception. It is rare among men. We report a case of a 20-year-old man who presented with gradual loss of weight and recurrent episodes of vomiting. Several biochemical and hormonal alterations, multiple medical complications, and cortical atrophy were ascertained. During hospitalization, he was at high risk due to those life-threatening severe refeeding syndrome. Furosemide and human serum albumin were used to control the refeeding syndrome, which achieved a rapid and significant curative effect. Body weight significantly gained, and the patient was discharged with various stable parameters. One year later, he was caught for shoplifting. There was no evidence suggesting any misdeeds to support that the stealing was intentional. The aim of this report was to remind us pay more attention to the male AN. A greater awareness of this condition in the male may lead to an early diagnosis and therapy for reducing morbidity and mortality.

Keywords: Anorexia nervosa; Shoplifting; Refeeding syndrome; BMI

Abbreviations

AN: Anorexia Nervosa; BMI: Body Mass Index; WBC: White Blood Cell Count; RBC: Red Blood Cell Count; HGB: Hemoglobin; ALB: Albumin; TES: Testosterone; HAS: Human Serum Albumin; IBW: Ideal Body Weight

Introduction

Anorexia nervosa (AN) is an eating disorder characterized by excessive restriction on food intake and irrational fear of gaining weight, often accompanied by a distorted body self-perception [1]. It typically involves excessive weight loss which is usually found to occur more in females than in males. A growing body of literatures have demonstrated the association between decreased quality of life and heavy disease burden [2]. A variety of life-threatening physical abnormalities and medical complications among AN are common [3]. AN has the highest mortality rate of all psychiatric conditions in adolescence [4]. AN is thought to be an almost exclusively female eating disorder. In the past, ratios of 20:1 were quoted as the female to male prevalence [5,6]. We hereby present a case of severe AN in a man with unusual and significant medical complications of brain atrophy, severe edema, hypoproteinemia, pericardial effusion and refeeding syndrome. Few articles mentioned how to treat the refeeding syndrome in AN quickly and efficiently. Shoplifting is an overlooked and severe symptom of AN. Musa Ram et al. [7] reported a male case of anorexia nervosa, presented with an episode of dissociative state during which he was caught for shoplifting. They thought that the dissociative episode was secondary to hypoglycemic state. The male AN case we present was also caught for shoplifting, but not in hypoglycemic state. To the authors' knowledge, it is secondary to the personality changes or rooted the psychopathology of AN.

We believe the case is helpful for readers to study the symptoms, complications, and risk of male AN, how to handle the refeeding syndrome during the initial stage of treatment. At the same time, it is needed that further studies and debates on whether the shoplifting in AN physiological or psychological.

Case Presentation

Three years ago, Feng was a 17-year-old young male of 90 kg, 182 cm. He fell in love with a girl. But the girl complained his obesity. From then on, Feng lose weight by doing exercise excessively, avoiding high-calorie foods, and using slimming tea. Sometimes, he ate an apple one day. He felt unhappy because his poor attention and worse academic performance. Whenever unhappy, he ate a lot of puffed foods and then used his fingers to induce vomiting in order to alleviate bloating. His teacher advised him to drop out for medical assessment because of the severe angular. However, he just stayed at home, refused to go to hospital and never attended any psychiatric treatment. He took only about 2 spoons of rice and a few vegetables in his daily diet. He refused to take food cooked by his mother, neither ate together with his parents. Two years ago, his weight continued to drop to 48 kg (body mass index, BMI 14.49). He felt breathless after climbing the stairs. He began to realize the need to see a doctor, presented to our hospital with complaints of gradual loss of weight, recurrent episodes of vomiting.

Feng came from a wealthy family. He was the only child at home. There was no family history of psychiatric illnesses particularly eating disorders or deviant eating habits. Parents had inconsistent views on his upbringing. His father was an authoritarian and strict person. Since Feng is the only son, he wanted Feng to achieve the best academically. Feng felt stressed ever since his childhood. His mother was more

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gentle, receptive, and accommodating. But she was very spoiled on him. There were increasing conflicts in the family. He was an excellent student and used to score marks in his class. He was an introvert person, quiet, sensitive, and had a few friends.

Physical examination revealed an emaciated decent gentleman with low blood pressure (88/54 mmHg), bradycardia (56 beats/min), underweight (BMI 14.49 kg/m^2), marked edema, and extreme muscle wasting. Blood investigations revealed leucopenia (White blood cell count, WBC 3.5 × 10^9/L), anemia (red blood cell count, RBC 2.58 × 10^{12}/L), hemoglobin (HGB 83 g/l), hypoproteinemia (albumin ALB 29.3 g/L), hypokalemia (2.62 mmol/l), and lipid profiles were in lower values. His testosterone (TES) levels were also low (1.15 nmol/L). His live function and thyroid function tests were within normal limits. His electroencephalography and Cardiac B-Ultrasound were normal. Magnetic resonance imaging (head) showed the sulcus and crack widened on both sides of the brain, suggesting mild atrophic changes.

During psychiatric interview it was difficult to establish rapport and he was uncooperative and had poor insight. With persistent probing, he expressed low mood, easy fatigability, poor attention and concentration, bleak, and pessimistic ideas about future. Sometimes, he had suicidal thoughts, but no suicidal behavior.

He was diagnosed with extreme severe AN according to the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV), admitted for inpatient care. A multidisciplinary team approach was employed. Psycho education with regard to the disorder was given. Nutritional rehabilitation was planned. He was encouraged to eat food with high caloric value, self-vomiting was forbidden. His caloric intake was gradually increased by about 300 kcals every 2-4 days with the goal of gaining about 1-1.5 kilogram every week. Simultaneously, parenteral nutrition and oral low dose Mirtazapine was given.

During the first two weeks of hospitalization, his edema developed, his chest felt so pain that he cannot be supine even when he sleep. We reexamined the Cardiac B-Ultrasound and found pericardial effusion, serum ALB gradually decreased to 23.3 g/L. We thought those was refeeding syndrome related to his nutritional status, so we gradually reduced the intravenous fluid intake. Furosemide (20 mg/day) and human serum albumin (HAS, 10 g/day) were given. After 2 weeks, his edema and chest pain disappeared, Cardiac B-Ultrasound found no pericardial effusion, serum ALB gradually increased to 33.1 g/L. We added the dose of Mirtazapine to 30 mg/day.

After 10 weeks of treatment, Feng left the hospital, his BMI increased from14.49 to18.11 kg/m2, his laboratory values were normal. Overall he gained 12 kg during the 70-day admission. On discharge, he weighed 60 kg, was at 78% of his ideal body weight (IBW), his low mood backed to normal.

One year after discharge, there was a relapse according to the patient's mother reported of decreased intake of food and purging tendencies. His mother told the doctor his personality became eccentric, impulsive. One day, he went out for shopping. After making the selection, he kept some biscuits in his bag and left the store. The security guards caught him for leaving the store without paying the biscuits. At the time of the catch, he was found by the shopkeeper to have more than enough money to pay for his biscuits and there was a few credit cards in his wallet. He was sent to a police station before his mother bailed him out. At that time, he recalled, his consciousness was clear without palpitation, sweating, dizziness and so on.

Discussion

In the past, less male AN coming to medical attention partially because this disease has been traditionally thought of as occurring in females [8]. In fact, AN in males in the community is more common, transient and accompanied by more substantial comorbidity than previously thought [9]. In the general population, some recent epidemiological data suggest that as much as 25% of people with AN are male [8]. As the recent retrospective cohort study suggests, there may in fact be a higher short term (less than 3 year) post treatment mortality in males compared to females [10]. So it is a very important question that we should pay more attention to the male AN.

AN is a response to contradicting and confusing experiences, which the patients cannot find another effective ways to solve. If women turn to their bodies as the way to modulate and resolve these stressors and mixed messages, the men would also express some of their distress through their bodies and would be at greater risk to develop AN or other eating disorder [11]. Feng represented a case of severe AN in a man with a probable precipitating factor being girlfriend's critical comment on his weight.

Refeeding syndrome, as a reflection of the shift from a catabolic to an anabolic state, may occur during the management of AN patients. It can be asymptomatic and manifested solely by changes in serum electrolyte levels or have severe clinical consequences [12]. At the beginning of treatment the present case, serious refeeding syndrome appeared, which was life threatening. To our knowledge, this is the first report of using Furosemide and HAS to treat the refeeding syndrome in male AN, achieving rapid and significant curative effect.

Shoplifting is an overlooked and severe symptom of AN. Musa Ram et al. [7] reported a male case of AN, presented with an episode of dissociative state during which he was caught for shoplifting. They thought that the dissociative episode was secondary to hypoglycemic state. We hereby present a young male AN patient who was also caught for shoplifting, but not in hypoglycemic state. Before studies of the temporal relationship between the onset of eating disorder and the occurrence of impulsive behaviors maybe facilitate a better understanding of these issues [13]. A retrospective quasi-case-control study in a medical prison in Japan suggest that there were also significant relationships with low body weight, anorexia nervosa-restricting type, obsessive–compulsive behaviors, and obsessive-compulsive personality disorder in the shoplifting group [14]. This study found that the repeated shoplifting by these patients is unrelated to antisocial or impulsive characteristics but is deeply rooted in these patients' severe and undertreated eating disorder psychopathology. To the authors' knowledge, Feng's shoplifting was not in hypoglycemic state, but may be secondary to the obsessive–compulsive personality changes of AN.

Conclusion

AN in males is an overlooked disease. But, it is often severe and the risk of refeeding syndrome is not negligible. Shoplifting is an unusual symptom in AN, which always lead to serious consequences. A greater awareness and understanding of this condition in the male sex may lead to an early diagnosis and a tailored combined therapy thus reducing morbidity and mortality. It may be one the most effective therapeutic methods using HAS combined with Furosemide to treat the refeeding syndrome in AN. That have not been previously reported. We report this case to call for readers to pay more attention to male AN and give the closer follow-up after their discharge.

Ethical Considerations

The confidentiality of the identity of the patient has been ensured. The patient has been informed of the publication of the case. The case report is in the best interest of the community and to create awareness among mental and general health professionals. A copy of the article has been submitted to the ethical committee for clearance.

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References

1. Srinivasa P, Chandrashekar M, Harish N, Gowda RM, Duroji S (2015) Case report on anorexia nervosa. Indian J Psychol Med 37: 236-238.
2. Mond JM, Hay PJ, Rodgers B, Owen C, Beumont PJV (2005) Assessing quality of life in eating disorder patients. Qual Life Res 14: 171-178.
3. Derman O, Kilic EZ (2009) Edema can be a handicap in treatment of anorexia nervosa. Turk J Pediatr 51: 593-597.
4. Mitchell JE, Crow S (2006) Medical complications of anorexia nervosa and bulimia nervosa. Curr Opin Psychiatry 19: 438-443.
5. Hudson JI, Hiripi E, Pope HG, Kessler CR (2007) The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. Biol Psychiatry 61: 348-358.
6. Sabel AL, Rosen E, Mehler PS (2014) Severe anorexia nervosa in males: clinical presentations and medical treatment. Eat Disord 22: 209-220.
7. Ramli M, Hassan AS, Rosnani S (2009) Dissociative episode secondary to hypoglycemic state in anorexia nervosa: a case report. Int J Eat Disord 42: 290-292.
8. Wooldridge T, Lytle PP (2012) An overview of anorexia nervosa in males. Eat Disord 20: 368-378.
9. Raevuori A, Hoek HW, Susser E, Kaprio J, Rissanen A (2009) Epidemiology of anorexia nervosa in men: a nationwide study of Finnish twins. PLoS One 4: e4402.
10. Gueguen J, Godart N, Chambry J, Brun-Eberentz A, Foulon C et al. (2012) Severe anorexia nervosa in men: comparison with severe AN in women and analysis of mortality. Int J Eat Disord 45: 537-545.
11. Maine M, Bunnell D (2008) How do the principles of the feminist, relational model apply to treatment of men with eating disorders and related issues?. Eat Disord 16: 187-192.
12. Khan LU, Ahmed J, Khan S, Macfie J (2011) Refeeding syndrome: a literature review. Gastroenterol Res Pract 52: 593-600.
13. Nagata T, Kawarada Y, Kiriike N, Iketani T (2000) Multi-impulsivity of Japanese patients with eating disorders: primary and secondary impulsivity. Psychiatry Res 94: 239-250.
14. Asami T, Okubo Y, Sekine M, Nomura T (2014) Eating disorders among patients incarcerated only for repeated shoplifting: a retrospective quasi-case-control study in a medical prison in Japan. BMC Psychiatry 14: 169.