

AN ADOLESCENT WITH ANOREXIA NERVOSA – A CASE REPORT

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ABSTRACT

This case report illustrates an adolescent with clinical presentation of moderate anorexia nervosa with no significant co-morbidities. It highlights the management of anorexia nervosa in the outpatient setting by a multi-disciplinary health care team which includes a family physician, a dietician, a psychologist and a child psychiatrist.

Keywords: Adolescent, anorexia nervosa, outpatient, management.

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INTRODUCTION

Anorexia nervosa is a chronic eating disorder which primarily affects adolescent girls and young women.¹ The prevalence of anorexia nervosa varies between 0.1-1%.¹ Although the prevalence is low, the morbidity is high and the mortality varies between 0.1-25%.² Relapse is common and chances of recovery are less than 50% in 10 years while 25% of the patients remain ill throughout their life.²

Anorexia nervosa is characterized by weight loss as a consequence of voluntary restricted caloric intake, intense fear for obesity, pre-occupied with body appearance and amenorrhoea.³ If left untreated, it can lead to serious physical and psychological complications, including osteoporosis, cardiac problems, infertility, malnutrition, depression and death.⁴

As the prevalence is expected to be increasing in our community, the primary care physicians ought to be able to identify patients with anorexia nervosa and perhaps co-ordinate the care if the cases are uncomplicated with no significant co-morbidities. This case report describes an adolescent patient presenting with anorexia nervosa and discusses its management using a multi-disciplinary approach at an outpatient setting.

CASE ILLUSTRATION

YL, a 14-year-old girl, was brought by her parents to the clinic for amenorrhoea for three months. She attained menarche at 12

years old. Her menstruation cycle had been regular, 28-30 days cycle with five to seven days duration. She denied having any boyfriend or involvement in sexual activity.

The parents also complained that she had been dieting since seven months prior to the clinic visit which had caused her to lose weight. She frequently missed breakfast and lunch. During dinner, she would secretly put the food in a plastic bag and threw it into the dustbin. She avoided food that was high in fat. However, she denied inducing vomiting, purging or doing excessive exercise. She perceived herself as 'fat'. Prior to this problem, her elder brother used to tease her that she was 'fat' and this had initiated her to diet. She also experienced low self-esteem as she believed that she was not pretty and was not happy with her self-image.

YL is the youngest of the two siblings. She described her father as a strict and over-protective parent. She felt that the father was over-controlling her life. She was not able to express herself well and often repressed her feelings, thus felt that she was not able to be her real self. She admitted that she had difficulty in communicating with her father and her elder brother. Her mother was more understanding towards her.

Her parents described her as someone who was rather perfectionist and obsessive in cleanliness and punctuality. She was an above average student academically but she aimed to achieve better results in future. She denied any symptoms of depression. There was no family history of eating disorder in the family.

Clinical examination revealed a thin girl with a body weight of 35.9 kg, height 1.52 m and body mass index (BMI) of 15.5 kg/m². During the clinic visits, her vital signs were normal and other systems were unremarkable.

Blood investigations which included full blood count, renal profile, liver function test, thyroid profile and serum calcium phosphate were within normal limits. Serum follicle stimulating hormone (FSH), luteinizing hormone (LH) and oestradiol values were low which were consistent with anorexia nervosa disorder. Urine pregnancy test was negative. Pelvic ultrasound and electrocardiogram (ECG) showed no abnormality.

YL was managed at the outpatient clinic. She was referred to the dietician for dietary advice and psychologist for further counselling. A child psychiatrist was also consulted regarding YL's problems and management. During the follow-up, YL progressed well and her weight increased gradually. She achieved a BMI of 18 and began menstruating again after two years. Her eating habits and negative thoughts also improved with the psychological intervention given.

DISCUSSION

YL was diagnosed as having anorexia nervosa. Based on ICD-10, the diagnosis is made if: i) the BMI is less than 17.5 kg/m² or the body weight is maintained at least 15% below expected weight, ii) weight loss is self-induced by avoidance of fattening foods, exercise, vomiting or purgation, iii) body image distortion manifested as a dread of fatness and iv) amenorrhoea.⁵ YL fulfilled the criteria above as she had significant weight loss (BMI of 15.5), avoided fattening food, had body image distortion and amenorrhoea.

The age of onset for anorexia nervosa is usually between 14-19 years old and the aetiology is multi-factorial.¹ There is a higher risk if eating disorder is present in the first degree relative. The affected adolescents are usually described as perfectionist, high achievers and often have low self-esteem.³ Some are described as angry and disappointed frustrated children who feel unable to challenge the parents, thus developing a coping, obliging self with repressed feelings.⁵ Over-protective parents, dysfunctional interactions and poor communication in the family are also known to have a role in the aetiology.⁵ Besides that media influence, peer pressure and comments from others are known to be causal factors.⁷ YL had all the features above except for family history of eating disorder.

YL was managed at the outpatient setting clinic with the help of other disciplines which included a dietician, a psychologist and a child psychiatrist. It is known that mild to moderate variants of anorexia nervosa with no significant co-morbidities can be treated as outpatient.⁸ Indications for admission include hypotension,

bradycardia, cardiac arrhythmia, electrolyte imbalance, BMI <13, severe depression with suicidal ideation and poor family support.⁸ As for YL, there was no indication for admission.

The principle of management for YL with anorexia nervosa includes: i) weight restoration, ii) psychological intervention, iii) medication if necessary and iv) long term follow-up to avoid relapse.^{5,7,8} Teaching patients how to eat is the primary importance in the treatment, thus she was referred to a dietician. She was advised to gain 0.5 to 1 kg of weight per week.⁹ She had to fill in a weight diary which required the physician to weigh her twice weekly and monitor her closely to ensure that she complies with the management.

Psychological intervention includes supportive therapy, behavioural intervention, initial assessment for patient's insight, motivation for recovery and resolving family conflicts.⁵ In addition, psychoeducation to patient and family as well as family involvement and support are crucial to help the patient to progress.⁶ Behavioural intervention is necessary to improve eating habits and negative thoughts towards her body image. It also helps her to be more flexible in thinking.⁸ Medication was not necessary for YL as she did not have depression or obsessive compulsive disorder.⁸

The role of the primary care physician is to assess medical complications, monitor weight and nutritional status, assist in the management strategies of other team members and serve as the care co-ordinator.⁸ Long term follow-up is necessary to ensure the patient achieves the target weight which is 95-100% of average body weight for height and age and to prevent relapse.^{5,7} The follow-up schedule depends on the patient's weight gain, initially weekly, then fortnightly, then monthly and finally three monthly for a year once the target weight is achieved. During the follow-up the physician should assess for complications such as hypotension, arrhythmia, electrolyte imbalance, kidney dysfunction, constipation, elevated liver enzymes, haematological abnormalities, seizures, peripheral neuropathies and endocrine abnormalities such as osteoporosis and amenorrhoea.⁸ If complications occur, appropriate management should be given and referral to other specialists is indicated.

CONCLUSION

Anorexia nervosa is a known healthcare problem among young people in the community. It is important for primary care physicians to be able to identify this disorder and provide prompt management. In mild to moderate cases with no significant co-morbidities, they can be managed by a multi-disciplinary health care team at the outpatient setting.^{8,10} However, if complications occur or there is continuing weight loss despite close monitoring of outpatient treatment, referral for inpatient care is indicated.

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