

## Case Report

# Anorexia Nervosa, Aids and Selective Mutism in a Male Adolescent: A Case History

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## Introduction

This article outlines the case of a patient diagnosed with AIDS at age 4, who developed Selective Mutism (SM) at age 8 and then purgative Anorexia Nervosa at age 12.

Antiretroviral drug treatment has enabled many children infected with HIV through vertical transmission to reach adolescence and adulthood, albeit with risk of impaired physical, emotional and cognitive development [1-4].

SM is a psychiatric disorder characterized by an inability to speak in specific situations, despite the ability to communicate normally in family environments [5].

Anorexia Nervosa (AN) is a serious Eating Disorder (ED) that causes significant weight loss due to self-imposed food restrictions, associated with the fear of getting fat and refusal to maintain an age-compatible body weight.

Nutrition is highly affected by eating disorders, especially AN, where malnutrition (often coupled with purging and excessive physical exercise) has grave and debilitating consequences. The treatment seeks to: restore a healthy weight; improve food structure, consumption and attitudes; normalize the perception of hunger and satiety; stop weight loss practices; correct the physical and psychological consequences resulting from malnutrition; reduce or eliminate body image disorders [6,7].

AN is less prevalent among males than females, ranging from

## Abstract

The increased prevalence of anorexia nervosa in adolescents and men has been observed, furthermore, the antiretroviral treatment has allowed many people infected with the human immunodeficiency virus by vertical transmission reach adolescence; however, the treatment of these diseases remains a challenge in clinical practice. This article describes the clinical and psychological nature and the management of the eating disorder over the course of the illness in a case of a male adolescent patient with Anorexia Nervosa, AIDS and Selective Mutism who underwent inpatient and outpatient programs for eating disorders, in a psychiatric unit of a university hospital.

**Keywords:** Eating disorders; Anorexia Nervosa; AIDS; adolescent; Treatment

1:10 to 1:20 [6]. However, an increased and probably underestimated incidence in males can be found in clinical practice and research [8-11]. Furthermore, the increasingly early onset of Eating Disorders (ED), especially AN, has been a source of concern for the scientific community [6].

This paper seeks to present the changes made in AN treatment due to specific characteristics resulting from diagnoses of AIDS and SM in an adolescent male. It notes the challenges in the nutritional approach of the case, when there is a combination of three severe diagnoses: two with major psychiatric and psychological repercussions (AN and SM), and two with serious clinical impacts (AN and AIDS).

## Case History

The patient was diagnosed with AIDS at age 4, when he developed a treatment-resistant case of pneumonia and experienced febrile seizures, followed by antiretroviral treatment. At the time, his parents were also diagnosed with HIV.

**Table 1:** Evolution of nutritional status.

Treatment Phase	Age	Weight (kg)	BMI percentile/ Age
Weight prior to ED	12 years and 7 months	37	25-50
Admission	12 years and 9 months	25	<1
1 <sup>st</sup> Admission (ED)	12 years and 9 months	26.6	<1
1 <sup>st</sup> Discharge (ED)	13 years	40.4	50
2 <sup>nd</sup> Admission (ED)	13 years and 8 months	34.9	<1
2 <sup>nd</sup> Discharge (ED)	13 years and 10 months	47.6	50-75

At age 8, he started showing signs of SM at school. The symptoms intensified and at the time of admission he only talked normally with his mother. At age 11, his father died from secondary lymphoma and AIDS. The first symptoms of AN were noted when he was 12 years and 7 months old, after the death of his paternal grandfather, to whom he was very close.

Even though his weight was normal (Table 1) [12], he started reducing his food intake and started purging in order to lose weight, claiming he was fat. He lost 12 kg in two months and was admitted to the pediatric ward, where he received oral and enteral nutrition [high calorie (1.5 kcal/ml), high protein and without fibers] due to his strong resistance to feed himself in order to supply the increased energy and protein demand of 2250 kcal and 1.6 g/kg of weight, respectively.

He was diagnosed with AN, then transferred to inpatient child psychiatry centre, and began treatment with a multidisciplinary team specialized in ED with its reference service in Brazil.

He remained hospitalized for three months and continued to resist eating and instructions to rest. He initially received oral and enteral feeding (high calorie (1.5 kcal/ml), high protein, without fibers) until he was able to maintain oral feeding with a high calorie (1.5 kcal/ml) and high protein supplement 2 times/day.

Depressive symptoms were detected and treated with sertraline (200mg/day), taking into account the risk of drug interactions (antiretroviral).

The psychological evaluation indicated high anxiety associated with social contact, from which the patient would seek to defend himself by isolation and strict control over his body, impulses and fantasies.

The neuropsychological evaluation revealed normal intelligence with good verbal comprehension, attention span, concentration, abstraction and critical sense, as well as a markedly perfectionist attitude and visuospatial difficulties that affected his performance in certain activities. The evaluation suggested that his communication difficulty arose from strong inhibitions due to being very self-demanding.

He received an individual cognitive behavioral psychotherapy treatment and psychoanalytic-based psychodynamic therapy weekly, to work on anxieties related to AIDS, AN and SM. Due to his communication difficulty, other means were used, such as drawings, video recordings and writing.

The weekly nutritional intervention during his hospitalization sought to building up his oral feeding intake, by increasing the variety and amount of food consumed, strengthening the habit to eating alone and decreasing the length of mealtimes.

After discharge, he continued receiving outpatient care attending weekly psychiatric treatment, individual nutritional care and psychodynamic group therapy with other adolescents. At home, he was instructed to keep a food diary, containing foods and quantities consumed, compensatory practices adopted and his thoughts and feelings when having to eat. Under his mother's supervision, compensatory practices decreased and food intake improved, but

since he lost weight easily, the high calorie (1.5 kcal/ml) and high protein supplement was maintained twice/day.

After 7 months of outpatient treatment, he was hit by a car during a walk with his mother and suffered an open fracture of the tibia and needed to be put in a plaster. The restricted movement exacerbated his AN symptoms, leading to a second psychiatric hospitalization, without depression, but with even more severe food refusal, where he was fed using the same method as the previous hospital stay.

During this period, he had lesions in the oropharynx and region where the fracture was immobilized, considered secondary opportunistic infections for AIDS, but he received treatment and responded well.

After discharge, he came back to the weekly outpatient treatment, where he communicated via writing in the therapy group and psychiatric and nutritional sessions. He was also urged to respond to the requests made by the psychiatrist and nutritionist while looking at his mother, with whom he could more easily talk even in the company of others.

## Discussion

This case was described due to the scarcity of studies addressing the association between AIDS and ED, and that involved adolescents with AIDS, AN and SM.

Papers on HIV and ED were found in the literature review, reporting that ED symptoms appeared after starting treatment for AIDS [13-15]. This patient began manifesting ED symptoms when he moved into adolescence, as is typical in cases not associated with HIV infection [16], but subsequent to starting treatment for AIDS.

SM symptoms usually start to occur at pre-school age, which is different in this case [17]. There was nothing found that triggered the mutism. From the psychoanalytic point of view, it is assumed that the communication difficulty is associated with the difficulty to talk about the AIDS diagnosis.

After the AN diagnosis, AIDS became a secondary issue, never spontaneously addressed by him or his mother. It is known that lack of communication about the diagnosis can complicate acceptance of the treatment and cause behavioral disorders, self-directed stigma and higher levels of psychological stress [18].

Individual and group psychotherapy proved to be an effective tool for reducing the patient's isolation, impossibility to talk about issues and anxieties intrinsic to adolescence.

Nutritional status is essential for ensuring the survival of such individuals [19] and the need to align the objectives of nutrition therapy for AIDS – prevent malnutrition; minimize symptoms and prevent opportunistic infections; improve tolerance to antiretroviral treatment; help maintain body composition; promote better quality of life [20-22] – and for AN, was the extreme importance for the success of this case.

The nutritional treatment was adjusted according to the peculiarities of AIDS, which causes increased basal energy expenditure, therefore requiring diet supplementation, usually through high calorie food and/or oral supplements [22]. In this case,

achieving the needed energy was an even greater challenge, due to food refusal. The adoption of a high calorie and high protein oral supplement (1.5 kcal/ml), initiated during hospitalization, along with snacks, to ensure complete caloric intake also proved to be an effective measure throughout the outpatient treatment.

The experience with this case reaffirms the importance of taking into account the physical and psychological peculiarities of each comorbidity associated with AN, so that adjustments can be made to the treatment to guarantee good progress.

This is only one case report, and the guidelines contained herein should not be generalized for use with all patients with the same conditions. However, to our knowledge, this is the first case report of a male adolescent with AIDS and ED.

It is recommended that nutritionists involved in treating individuals with AN and AIDS adopt high calorie food supplements in order to achieve energy needs without unduly increasing the volume ingested or negatively affecting the quality of the distribution of the macronutrients, as well as work together with the multidisciplinary team, especially the psychologist, since these patients share a strong resistance to treatment.

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