

## Treating Anorexia as Addiction: A Case Study with 2-Years of Follow-Up

Boris C. Rodríguez-Martín PhD<sup>1,\*</sup>, María Martín-García MD<sup>1</sup>, Inés Martínez-Infiesta<sup>1</sup>, Atef Souied-Espada MD<sup>1</sup>, Paz de La Cruz-Medina RN<sup>1,2</sup>

<sup>1</sup>Fundación Recal, Madrid, Spain

<sup>2</sup>Universidad Europea de Madrid, Madrid, Spain

\***Corresponding Author:** Dr. Boris C. Rodríguez-Martín, Fundación Recal, Calle Físicos, 4, Majadahonda, Madrid, 28222, Spain, Tel: (+34) 913 92 82 51-689 54 52 84; E-mail: [borisrod@gmail.com](mailto:borisrod@gmail.com)

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### Abstract

**Purpose:** The present study aims to report the clinical evolution of a patient with AN, without another substance use disorder, who followed 90-day residential treatment with the 12 Steps Minnesota Model and its subsequent two-year follow-up, during which she regularly attends Overeaters Anonymous (OA) groups.

**Methods:** This case report follows the treatment of a 20-year-old female with anorexia nervosa. After 3 months of multidisciplinary treatment, low-doses of venlafaxine and trazodone were initiated. She expressed her decrease in rigidity at mealtimes, increased her weight and had a resumption of menses. She was committed with treatment and maintained her weight gain despite a single binge/purge relapse episode in this 2-year of follow-up.

**Results:** The results obtained in this case suggest that, although purgative and self-injurious behaviours stopped during admission, weight gain was poor during admission and the first year of follow-up, as well as the reporting of improvements in concerns about her weight: it is not until the second year of follow-up that the patient manages to reach weight indicators that can be considered within the range of the norm. Regarding body shape, even though at the end of the second year she refers to greater acceptance, it continues to be a problem.

**Conclusion:** In the case of a patient with AN, without another substance use disorder, the main changes produced regarding to weight gain and body shape acceptance occurred in the second year of follow-up, during which the patient regularly attended OA groups.

## 1. Introduction

Comorbidity between eating disorders and addictions is common, especially those where binge eating and purging behaviours are combined, [1] so it is not uncommon for addiction treatment clinics to receive patients with an eating disorder as a dual pathology.

However, beyond the dual diagnosis, considering eating disorders as addictions can have significant implications for treatment. A recent study reported that 67% of patients with eating disorders involving binge eating behaviour and reporting self-harm without suicidal intent met the criteria for food addiction [2].

In inpatients with Bulimia Nervosa, for example, it has been reported that using addiction as a treatment metaphor can be helpful to motivate change [3]. However, we have not been able to find evidence of its use for the treatment of Anorexia Nervosa (AN) without substance use disorder present.

The similarities between the impulsivity and compulsive behaviours present in the AN and addictions, open the door to consider the AN as a behavioural addiction. The approach of AN as an addiction to starvation was first proposed in 1984 [4]. There are also mutual-help fellowships, where individuals with eating disorders perceive themselves as addicts, like Overeaters Anonymous (OA), a 12-Step Fellowship [5].

In this context, the aim of the study is to report the clinical evolution of a patient with AN, without another substance use disorder, who followed 90-day residential treatment with the Minnesota Model and its subsequent two-year follow-up, during which she regularly attends OA groups.

## 2. Case Presentation

Erica (a pseudonym) is a 20-year-old woman who joins Fundación Recal in November 2017. She is the second of three siblings, split parents since she was 14 years old. Diagnosed at age 13 with restrictive AN, therapeutic follow-up was suspended at age 17 due to remission of symptoms. She had been attending the months prior to individual sessions with psychology, since April 2017, initially for poor management of academic anxiety (at that time she was studying medicine), but denying patterns of restrictive eating behaviour. She was referred to psychiatric consultation in July for episodes of increased anxiety and decreased appetite, occasional insomnia and some mood swings. All this matches the moment when the patient admits she had been sexually abused by her father during her childhood.

A few days earlier she went to the hospital emergency department because of anxiety episodes, where lorazepam 1mg/8h was prescribed. In the presence of significant daytime sleepiness, lorazepam was reduced to 1mg/day before bedtime. The symptoms remit in the second week, so it is recommended to retake individual therapy sessions, in order to continue the therapeutic work. During the summer, the patient decides to change the university degree from medicine to psychology.

In August, she acknowledges that she has started restricting her food intake and in September she starts attending a therapeutic group that the clinic provides to dual patients with eating disorders. Although Erica does not have a dual diagnosis, it is considered that the therapeutic work done in this group can be positive, since it focuses on the treatment of eating disorders. The identification with her peers, is the reason she applies for admission to the clinic. The therapeutic objectives of the individual and group sessions had been met, she recognised her problem and asked for help.

At the time of admission, November 2017, she describes a progressive worsening of the mood in the recent months, especially in the last 3 weeks, with unquantified weight loss and amenorrhea. The patient's measurements at the time of admission are as follows: Height = 169cm, Weight = 44.9Kg, BMI =15.75Kg/m<sup>2</sup>.

In the initial psychopathological exploration low mood, apathy, hypohedonia; increased basal anxiety stand out. Denies autolytic or self-injurious ideation. Mixed insomnia. Loss of appetite with intake restriction and weight loss. No distortion of body image. Denies binge-eating or purgative behaviours. Reality judgment preserved. The patient is diagnosed with severe restrictive AN (BMI 15-15.99Kg/m<sup>2</sup>) and moderate depressive episode. Initially clonazepam 0.5mg is given at night to alleviate insomnia. Residential admission is approved.

### 3. Treatment Regimen

The Minnesota Model was used for 90 days. This residential addiction treatment model employs 12-step facilitation, cognitive-behavioural, and motivational enhancement therapies in individual and group formats, and provides adjunctive psychiatric care when clinically indicated, as in this case.

The process includes a Family Support Group and a Family and Patient Therapy Group. It has been observed that the attendance of family members to these therapeutic groups has a positive influence on the patients' completion of their treatment [6].

The clinic also has a therapeutic group to address the needs of dual patients with eating disorders, and a differentiated area in the dining room for them, where they can have their daily meals in a supervised way. In addition, peer supervision is established to foster the basis for mutual support.

#### 4. Treatment Course

During the first weeks of admission, mood swings, anxiety, tendency to eat restriction, low mood and refers impulse phobias and self-injurious gestures in the form of scratching and superficial erosions persist. During this time Erica refers to feeling the desire to purge after each therapy and meal, "I feel like a stuffed pig, all I do is eat and eat". From the above statement, she acknowledges that she is concerned about gaining weight and that she does not like the shape of her body.

She admits her purgative behaviour, which she did not recognize at the time of admission, "I thought I was getting sick and that's why I threw up," she says. Erica explains that the episodes of bingeing and purging in the months prior to admission occurred a couple of times a week and lasted between 1h and 6h. At this time, she is asked to seek the help of her female peers to avoid being left alone in the bathroom. With these new data, the patient's diagnosis changed from restrictive AN to binge-eating/purging AN.

Initially, Erica was reluctant to take the antidepressant treatment regimen but finally in January 2018 she took the Retard 75mg/day venlafaxine regimen, with good tolerance and no noticeable side effects. On the other hand, she reported having abused lorazepam in the month prior to admission, so clonazepam 0.5mg/day was replaced by trazodone 100mg/day, to maintain sleep and avoid the risk of subsequent abuse of benzodiazepines. The pharmacological treatment, together with the continuous assistance to the therapies of the clinic, contributes to a progressive psychopathological stabilization of the patient, Erica is discharged in February 2018: Weight = 46.2Kg, BMI = 16.21Kg/m<sup>2</sup>. Her evolution has been very positive, she has stopped purging and she makes her five meals a day, although she must increase the amount of calories she takes in. She has developed tools for the management of her restriction wishes, purging behaviours and the maintenance of her meal plan.

Regular attendance at OA groups is recommended and a referral is made to an outpatient psychology clinic to continue the therapeutic work of child abuse. Fear of gaining weight remains and feeling ashamed of her body is still a major concern after treatment.

She refers to a single episode of relapse with purging behaviours in July when she goes for a psychiatric check-up in August 2018. It occurred during her stay on a cruise ship and that, being out of coverage, she ate more than she planned and was unable to contact her OA colleagues for help. Psychopathological stability is maintained in the rest of the areas. Refers regular menstruation from the month of May. Treatment is maintained with venlafaxine delay 75mg/day and trazodone 50mg/day. Weight = 47,8Kg, BMI = 16,77Kg/m<sup>2</sup>. Considering the data of the weight, it is pointed out that she should increase the intake of calories in her five meals.

Erica maintains daily attendance at OA meetings and a weekly session in a psychology consultation. She is also doing the written work of the 12 Steps with her sponsor, doing service, reading fellowship literature, and sharing her thoughts and feelings with other group members.

She's going to the last psychiatric review in October 2019. She reports that she has maintained overall psychopathological stability throughout the year, with no relapses, no more binges, vomiting or restrictive behaviour and that her menstrual periods have remained stable throughout the year. She maintains good night's rest with medication and her BMI is in the range of the norm: Weight = 54,3Kg, BMI =19,05Kg/m<sup>2</sup>.

She considers that the antidepressant treatment pattern helps her maintain a stable mood and this makes it easier for her to manage emotions and control her eating, so an agreement is made with the patient to keep the treatment unchanged. She says that although she still does not like her image, she accepts her body and weight and understands that any other thought about it is "illness".

Erica has finished the first year of psychology with a good performance. She is attending individual psychotherapy and keeps going to OA groups, about twice a week. She reports that she also plays the role of sponsor in the fellowship, helping newcomers work the 12 steps, while continuing to work hers with her sponsor.

## 5. Discussion

The study describes a patient with binge-eating/purging AN disorder who received three months of health care in a clinic that uses the Minnesota Model for Addiction Treatment and was subsequently followed until her second year of recovery.

During her time as an inpatient, she managed to stick to her meal plan, stop purging and self-harming behaviors, and gain weight. The cessation of purging behaviors is consistent with the experience reported for patients with Bulimia Nervosa who were treated using this approach [7].

Another result to be analyzed is related to the concept of abstinence itself. Since restraint to starvation is considered consumption, the patient remains abstinent by carrying out her daily meal plan. The obstacle that "forbidden foods" can represent was also overcome [3], since abstinence is fulfilled when the patient eats as planned and none is excluded. It is also important to emphasize the concept of abstinence from purgative and self-injurious behaviors.

Concerns about weight and body shape, as well as the embarrassment she feels about some parts of her body, proved to be an area of little change. Even though at the end of the second year she refers to greater acceptance, they continue to be a problem. Other interventions have shown better results on these issues over a period of 6-12 months [8].

Of note is the report of a single binge/purge relapse episode during the entire follow-up time. The way in which this occurred reinforces the patient's perception of the usefulness of working with her mutual-help group. The role of regular group attendance and the importance of the telephone call for help have been highlighted as useful resources by OA members [5].

The role of medication in this case is initiated to treat the symptoms that accompany the case of AN: clonazepam and trazodone to treat insomnia, and venlafaxine to treat depressive symptoms. The improvement of depressive and anxiety symptoms and the stabilization of the mood, as described by the patient herself, contributes in part to the improvement of eating symptoms and their evolution.

This is consistent with what has been reported in previous studies, [9] but there is no clear evidence of its efficacy in the treatment of AN or effect on weight gain. The results obtained in Erica's case suggest that, although purgative and self-injurious behaviors stopped during admission, weight gain was poor during admission and the first year of follow-up. It does not reach 17 Kg/m<sup>2</sup>. The patient only manages to stabilize her weight in a range considered normal (>18 Kg/m<sup>2</sup>) during the second year of follow-up.

It is not until the second year of follow-up that the patient manages to reach weight indicators that can be considered within the range of the norm. Other approaches have proven to be more effective in achieving these goals. Future studies should examine the role of OA groups, which provide support to people with eating disorders. As noted above, they could be a long-term support resource for standardized clinical treatments.

## **6. What is already known on this subject?**

The approach of AN as an addiction to starvation was first proposed in 1984. There are also mutual-help fellowships, where individuals with eating disorders perceive themselves as addicts. However, we have not been able to find evidence of this approach for the treatment of AN without substance use disorder present.

## **7. What does this study add?**

The study reports the clinical evolution of a patient with AN, without another substance use disorder, who followed 90-day residential treatment with the Minnesota Model and its subsequent two-year follow-up, during which she regularly attends OA groups.

## **Compliance with Ethical Standards**

### **Conflict of Interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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None.

## Informed Consent

Written informed consent was obtained from the patient.

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