

## CASE REPORTS

### CHALLENGES OF ANOREXIA NERVOSA APPROACH IN AUTISTIC SPECTRUM DISORDER PATIENTS

#### DESAFIOS NA ABORDAGEM DA ANOREXIA NERVOSA EM PACIENTES COM PERTURBAÇÃO DO ESPETRO DO AUTISMO

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#### ABSTRACT

**Introduction:** Anorexia nervosa (AN) is an important cause of physical and psychosocial morbidity, typically develops in adolescence, and has a relatively common comorbidity with Autistic Spectrum Disorder (ASD). The clinical case of an adolescent with AN and ASD is presented, and its specific treatment challenges discussed.

**Case Report:** Female, 16 years old, with AN and a diagnosis of ASD since the age of two. Cognitive-behavioral therapy, motivational techniques, and family involvement were used, with some adaptations.

**Discussion/Conclusions:** Challenges were found which hampered treatment, such as rigid thinking patterns and routines, including very rigid rules around food. In clinical practice, it is important to be alert to this comorbidity with poor outcomes and no specific guidelines.

**Keywords:** anorexia nervosa; autistic spectrum disorders; challenges approach

#### RESUMO

**Introdução:** A anorexia nervosa é uma importante causa de morbilidade física e psicossocial, tipicamente desenvolvida na adolescência, sendo a Perturbação do Espectro do Autismo uma comorbilidade relativamente comum. Neste estudo, é apresentado o caso clínico de uma adolescente com ambas as patologias e discutidos os desafios específicos associados ao seu tratamento.

**Caso clínico:** Adolescente do género feminino, de 16 anos, com anorexia nervosa e diagnóstico de Perturbação do Espectro do Autismo desde os dois anos de idade. Foi realizada uma intervenção cognitivo-comportamental, juntamente com técnicas motivacionais e envolvimento familiar, com algumas adaptações.

**Discussão/Conclusões:** Foram encontrados alguns desafios que dificultaram o tratamento, como padrões rígidos de funcionamento cognitivo e adesão inflexível a rotinas, nomeadamente alimentares. Na prática clínica, é importante estar atento a esta comorbilidade associada a resultados desfavoráveis e desprovida de linhas de orientação clínica específicas.

**Palavras-Chave:** anorexia nervosa; desafios na abordagem; perturbação do espectro do autismo

#### INTRODUCTION

Anorexia nervosa (AN) is a severe eating disorder. It is an important cause of physical and psychosocial morbidity and has the highest mortality rate of any psychiatric disorder. AN typically develops in adolescence and is more prevalent in female. It is characterized by an

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excessive impact of shape and weight on self-evaluation and by an intense fear of gaining weight, which motivates dietary restriction and other weight loss behaviors (such as excessive physical activity or purging), resulting in low body-mass index.<sup>1</sup> Although pathogenesis remains unclear, it seems to involve genetic risk factors, psychosocial and interpersonal factors as triggers, and changes in neural networks that can sustain illness.<sup>2</sup>

Autistic Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by problems in social and communicative functioning, as well as restricted and repetitive behavior and interest patterns, with onset in the early developmental period. ASD is reported to be more prevalent in males.<sup>1</sup>

The prevalence of comorbid AN and ASD is relatively common and associated with poor treatment outcomes and absence of specific guidelines.

## CASE REPORT

MM is a 16-year-old girl who lives with her parents, with no siblings and no relevant familiar history, who attends high school with good performance and a reasonable integration with peers.

She was diagnosed with ASD at the age of two on the basis of poor social interaction, delayed development of verbal and non-verbal language, rigid adherence to routines, and averseness to soft food. At the time, she started psychiatric and psychological follow-up and speech therapy. MM attended a TEACCH® program in school and grew up as a verbal ASD child who, despite lacking some social competencies, reasonably interacted with others.<sup>3</sup> At the ages of 9 and 11, she underwent a short period of food refusal due to fear of poisoned food and vomiting after watching a classmate vomiting.

Besides school, she also attended extracurricular activities, including taekwondo, music, and theatre, although with difficulties in interpreting others' intentions and establishing solid relationships.

In August 2017, with 15 years of age, the girl initiated food restriction due to overweight self-perception. At that time, she weighed 53.7 Kg and was 1.65 m height (BMI = 19.7; P ≈ 50th). In March, someone commented that she looked like her overweight father and a classmate named her "whale". In August, she saw a picture of an obese girl in the internet and found resemblances. By this time, the girl experienced what she felt was an abusive physical contact with her taekwondo's teacher and stopped attending taekwondo. She also started missing music and theatre classes, claiming demotivation.

In September 2017, the girl attended the Child and Adolescent Psychiatric emergency department due to food restriction with accentuated weight loss, with a significant impact on family and interpersonal functioning. Weight on clinical examination was 48.3Kg. Simultaneously, she attended a private Pediatric appointment and initiated Sertraline 50mg (1id), with slight mood improvement.

In October 2017, the girl initiated weekly outpatient follow-up visits at our hospital, maintaining food restriction (weight 41.5 Kg). During

appointments, she evidenced an intense fear of gaining weight, body image distortion, and little motivation for changing eating behaviors. Her rigid attitude significantly hindered psychotherapeutic approach, which was mainly based on cognitive and behavioral techniques with motivational interviewing.<sup>4</sup>

In November 2017, the girl initiated regular outpatient follow-up in Pediatrics (Nutrition), showing poor engagement to stipulated food plans.

During outpatient follow-up, pharmacological treatment with Sertraline was kept and Quetiapine XR 50mg (1id) was added in November 2017 to reduce rumination and sleep problems.

In January 2018, as the girl persisted on calorie counting and food restriction and kept losing weight (weight 36.8 Kg; BMI 13.5; P <3rd), inpatient treatment was proposed by the multidisciplinary team. She evidenced a slow recovery within the first three weeks, due to fear of gaining weight. Motivation for recovery later emerged, driven by worries of failing school and changing class. Driven by patient adherence, a behavioral plan was implemented. However, the girl again displayed a rigid conduct, with obsessive and perfectionist personality traits but adequate behavior. Although with mild qualitative social interaction impairment, she easily established sustained eye contact and reasonable function with others. She did not display repetitive behaviors or restrict interests.

The girl went home nearly seven weeks after admission, weighting 43.7Kg, with no food refusal but a little anguished about feeding and excited about returning to school and daily routines.

She returned to school and felt uncomfortable with peer verbal reinforcements regarding her weight gain, which she interpreted as being fat. The girl also returned to theatre classes, but felt isolated in the group. In one clinical appointment, she referred difficulties in establishing relationships within this group, and that it made her feel sad and incompetent.

Some weeks after discharge, the girl presented depressive mood aggravation and started verbalizing willingness to restrict food, together with a small weight loss. Motivation for recovery was partially achieved by motivational interviewing.

During follow-up, she proactively decided to change the pharmacological plan (stopped Quetiapine and reduced Sertraline for half) stating she did not want "medication to control me".

After therapeutic discussion, she consent to keep taking Sertraline 50mg (1id).

The girl still evidenced some degree of body image distortion, fear of becoming "fat", fear of "watching numbers higher than 47 on weighing scale", and willingness to restrict food.

She is currently in regular biweekly outpatient follow-up and weighted 47Kg (BMI 17.3; P 3rd-15th) on July 2018.

## DISCUSSION

In the present clinical case, a psychological approach with

psychoeducation and motivational talk, based on motivational interviewing principles but using a literal, simple, and objective language and an assertive communication style, was employed. A decisional analysis was conducted with the positives and negatives of an eating disorder, and a work focused on identification of thoughts/emotions/behaviors associated with eating disorder and interpersonal relations using specific objectives was developed. Family engagement, as recommended by NICE guidelines, is a relevant component, as parents are supportive elements.<sup>5</sup> However, observations in the clinical practice suggest that presence of some ASD or AN traits in family members may influence family engagement.

Some challenges were found which hampered treatment, such as rigid thinking patterns and routines, including very rigid rules concerning food; difficulties with metacognition, emotional identification, or management; motivation to change; and communication style.

The fact that the patient was a girl, with previous social skill therapy and a good family support, represented favorable aspects.

According to the literature, a higher frequency of ASD diagnoses seem to exist in AN patients compared with the healthy population. The prevalence of this comorbidity has been estimated to range between 23% and 30%.<sup>6</sup>

The relationship between AN and ASD has been studied, and some authors suggest that AN may be considered a female variant of the autistic spectrum. It has been suggested that a shared underlying genetic vulnerability may interact with environmental factors to manifest AN in girls during adolescence and ASD in boys during infancy, highlighting the relevance of perinatal period in origin of both pathologies.<sup>7</sup>

The two conditions appear to have common neuropsychological and social problems. Cognitive flexibility, central coherence, and theory of mind impairments, typically present in individuals with ASD, are often recognised in clinical presentation of AN.<sup>8</sup> Individuals with AN also frequently display poor social and emotional functioning, including impaired facial emotion recognition, diminished facial emotion expression, and interpersonal problems.<sup>9</sup> However, starvation, depression, and anxiety symptoms present in AN can also contribute to cognitive and social issues, causing a “pseudo-ASD” which resolves with refeeding and weight restoration.<sup>10</sup>

In the current clinical case, the girl presenting with AN had ASD diagnosis since the age of two, which facilitated the diagnostic process.

Current limited evidence available for young people suggests that, despite high levels of ASD-characteristic symptoms displayed by AN subjects (clinical cut-off for ASD between 4–52.5% of participants), these are often not corroborated by developmental history retrieved from parents' reports.<sup>11,12</sup>

Regardless of its etiology, the presence of “ASD symptoms” in AN has been associated with poor treatment outcomes and need for more intensive treatment.<sup>11</sup> The presence of underlying ASD traits can be an important perpetuating factor in AN.<sup>9</sup>

Little research has been conducted on how typical therapeutic approaches may be adapted for ASD with AN, as opposed to other ASD comorbidities (as anxiety or depression) for which cognitive behavioral therapy has been adapted.<sup>9</sup>

However, research has shown that psychological intervention success is influenced by the relationship between therapist and patient.

Kinnaird, Norton, and Tchanturia (2017) conducted an exploratory qualitative study of clinician experiences while treating comorbid AN and ASD. In the study, presence of a minimum BMI threshold in ASD diagnostic process and the benefit of a pre-determined referral pathway to ASD specialist units to prevent misdiagnosis or absence of diagnosis was suggested.<sup>9</sup> Most clinicians interviewed in this study evidenced a lack of confidence or experience in the treatment of patients with AN and ASD. Clinicians more experienced in treating ASD patients reported a significant body of work focusing emotional and thought identification, increased family engagement, and communication style adaptations.

In conclusion, AN and ASD comorbidity is associated with specific diagnostic and treatment challenges. It is important for clinicians to be alert to this comorbidity in the clinical practice. Additional studies are required to establish an empirically validated therapeutic approach and specific guidelines for these patients.

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