



Severe Anorexia Nervosa with Trauma and Psychiatric Comorbidity: A Case Report

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ABSTRACT :

Anorexia nervosa (AN) is a severe psychiatric disorder associated with the highest mortality among mental illnesses, particularly in cases of extreme emaciation and prolonged illness duration. Childhood trauma and family dysfunction are increasingly recognized as significant contributors to its onset, severity, and chronic course. We present the case of a 24-year-old female pharmacy student with a six-year history of eating disorder, whose clinical evolution was marked by repeated childhood sexual assaults, persistent weight-related bullying, and a humiliating forced head shaving during adolescence. Family history included paternal alcohol use disorder and maternal emotional neglect. The illness began at age 17 with restrictive eating behaviors (BMI 19.5 kg/m²) and progressively deteriorated to extreme cachexia (BMI 7.9 kg/m²), resulting in wheelchair dependence and multiple life-threatening complications, including hypokalemia, dehydration, pressure ulcers, visual disturbances, and recurrent loss of consciousness requiring intensive care. Psychiatric assessment revealed recurrent depressive disorder with a suicide attempt, symptoms consistent with complex post-traumatic stress disorder, and borderline personality traits. Despite medical stabilization and weight restoration, the patient remained ambivalent toward recovery, mourning her emaciated state while fearing further weight gain. This case underscores the convergence of trauma, dysfunctional family dynamics, and psychiatric comorbidity in the development of severe AN, and highlights the necessity of early recognition, trauma-focused psychotherapy, and multidisciplinary interventions to improve outcomes and prevent relapse.

Keywords: anorexia nervosa, cachexia, childhood trauma, family dysfunction, comorbidity, case report

INTRODUCTION

Anorexia nervosa (AN) is a severe psychiatric disorder characterized by restrictive eating behaviors, fear of weight gain, and disturbances in body image [1]. Beyond its psychological manifestations, AN has profound medical consequences, including electrolyte imbalances, osteoporosis, and cardiac complications, making it one of the deadliest mental illnesses [2]. Large meta-analyses have consistently shown that AN has the highest standardized mortality ratio of all psychiatric disorders, largely due to medical complications and suicide [2], [3], [4].

Despite advances in detection and treatment, long-term outcomes remain poor, with frequent relapses, chronic courses, and high rates of psychiatric comorbidity [1], [5]. Traumatic experiences such as sexual abuse, emotional neglect, or exposure to family violence have been identified as important risk factors, often linked to earlier onset, more severe illness, and resistance to treatment [6], [7]. Psychiatric comorbidities, including major depressive disorder, anxiety disorders, post-traumatic stress disorder, and personality disorders, further complicate care and worsen prognosis [8], [9].

Severe presentations of AN, characterized by extreme emaciation, medical instability, and multiple psychiatric comorbidities, pose unique clinical challenges and require intensive, multidisciplinary management [1], [2]. The present case report describes a young patient with severe anorexia nervosa, extreme emaciation, and multiple psychiatric comorbidities in the context of significant trauma history. By situating this case within the framework of recent epidemiological and clinical evidence, we aim to highlight the ongoing challenges of treating severe AN, the prognostic significance of trauma and comorbidity, and the urgent need for trauma-informed, multidisciplinary interventions to reduce premature mortality.

Clinical Case

We report the case of a 24-year-old female, a pharmacy student, with a six-year history of anorexia nervosa, admitted for the management of eating disorder.

Background and Family History:

The patient grew up in a dysfunctional family context. Her father presented with alcohol use disorder, while her mother was described as emotionally neglectful. Her developmental trajectory was marked by repeated exposure to domestic violence and a lack of affective validation. In addition, she

reported recurrent inappropriate sexual touching during both childhood and adolescence, experiences consistent with sexual abuse. These early adverse events contributed to enduring feelings of shame, disgust toward her own body, and impaired self-esteem.

Illness Onset and Course:

The eating disorder began at the age of 17, following a humiliating episode of forced head shaving, which precipitated psychological fragility, suicidal ideation, progressive dietary restriction, and secondary amenorrhea. During her undergraduate years, she developed binge–purge behaviors characterized by loss of control, guilt, and self-induced vomiting.

The subsequent course was characterized by severe and progressive undernutrition, associated with multiple medical complications. At age 21, she weighed 35 kg (BMI 14.5). By age 23, her weight had declined further to 27 kg (BMI 11.2), accompanied by persistent amenorrhea, electrolyte imbalance, and marked asthenia. At 24, her condition reached a critical stage, with a weight of 18 kg (BMI 7.2), profound cachexia, motor impairment requiring wheelchair use, pressure ulcers, and recurrent syncopal episodes. She required admission to the intensive care unit for two months for hydro-electrolyte correction and nasogastric refeeding, followed by a 50-day psychiatric hospitalization during which fluoxetine and olanzapine were initiated.

Recent Clinical Course:

Following hospitalization, the patient achieved substantial weight restoration (61 kg; BMI 24.4). Nevertheless, this somatic improvement was accompanied by significant psychological distress regarding weight gain, severe body image distortion, and persistent low self-esteem. In February 2025, she attempted suicide by intentional ingestion of fluoxetine, olanzapine, and probiotics, in the context of acute family conflict and maternal rejection.

Psychiatric Profile (Psychometric Assessment)

The patient's clinical evaluation was supplemented by standardized psychometric instruments, which confirmed the severity and complexity of her psychiatric profile:

- *Eating Attitude Test – 26 (EAT-26)*: Score of 43 (>20 cut-off), highly suggestive of a pathological eating attitude and consistent with anorexia nervosa.
- *Rosenberg Self-Esteem Scale*: Score of 15 (<25), indicating very low self-esteem, concordant with her persistent self-depreciation and body dissatisfaction.
- *UPPS Impulsive Behavior Scale*:
 - *Urgency*: markedly elevated, reflecting strong impulsivity under intense emotional states (e.g., binge eating crises, suicide attempt).
 - *Sensation seeking*: very high, suggesting use of food intake as an “emotional outlet.”
 - *Lack of premeditation*: average, indicating partially preserved anticipation abilities.
 - *Lack of perseverance*: low, demonstrating good persistence, coherent with her sustained academic performance.
- *International Trauma Questionnaire (ITQ, ICD-11)*: Scores met criteria for Complex PTSD, with endorsement of symptoms across re-experiencing, avoidance, and hyperarousal clusters, in addition to disturbances in self-organization (emotional dysregulation, negative self-concept, interpersonal difficulties).
- *Borderline Symptom List (BSL-23)*: Very high score, consistent with severe affective instability, impulsivity, identity disturbance, interpersonal instability, profound shame/guilt, and dissociative symptoms.

Current Status:

At present, the patient continues to present with a depressive syndrome, characterized by sadness, feelings of worthlessness, and pervasive guilt. She maintains a partial denial of her eating disorder and remains preoccupied with an intense fear of weight gain. No psychotic symptoms or active suicidal ideation are currently present. She is engaged in multidisciplinary follow-up, including psychiatric care, nutritional rehabilitation, and trauma-focused psychotherapy targeting body image disturbance and emotional regulation.

Discussion

Severe anorexia nervosa (AN) remains one of the most challenging conditions in psychiatry, given its combination of high medical risk, frequent psychiatric comorbidity, and chronic course. Meta-analyses consistently show that AN has the highest standardized mortality ratio (SMR) of all psychiatric disorders, estimated at 5–6 times greater than that of the general population [3], [4]. A recent nationwide study also demonstrated that younger age at first hospitalization, multiple admissions, and prolonged illness duration further increase premature mortality risk, with both natural and unnatural

causes contributing [10]. Despite advances in early detection and specialized treatment, long-term prognosis remains guarded, with persistent relapse, chronicity, and diagnostic crossover [1], [5].

Role of Childhood Trauma

One of the most consistent predictors of illness severity and poor prognosis in AN is childhood trauma, including sexual abuse, emotional neglect, bullying, and exposure to family violence [6], [7]. Trauma contributes not only statistically but also mechanistically to the development and maintenance of the disorder [7], [8], [11]. Early adverse experiences foster maladaptive coping strategies, such as restrictive eating or purging, which function as attempts to regulate overwhelming emotions and regain a sense of control [11], [12]. At the same time, trauma increases vulnerability to psychiatric comorbidities—notably depression, post-traumatic stress disorder, and personality pathology—which reinforce illness persistence [11], [13]. In our patient, repeated childhood trauma generated enduring shame, self-disgust, and rejection of her body, which likely intensified body image disturbance and perpetuated disordered eating behaviors. This clinical profile mirrors evidence from a meta-analysis of more than 4,000 individuals confirming a dose–response relationship between childhood maltreatment and eating disorder severity [7].

Family dysfunction

Family dysfunction is likewise recognized as both a predisposing and perpetuating factor in AN. Adverse family environments characterized by parental substance use, emotional unavailability, and exposure to domestic violence have been consistently associated with higher rates of eating disorders and poorer treatment outcomes [14], [15]. Parental alcohol misuse is frequently linked to increased family conflict, instability, and impaired caregiving, which may foster insecure attachment and maladaptive coping strategies in offspring [16]. Likewise, maternal emotional neglect deprives the child of affective validation and containment, reinforcing feelings of worthlessness, shame, and low self-esteem, all of which are central mechanisms in eating disorder pathology [12], [17]. In our patient, paternal alcohol use disorder and maternal emotional distance created a context of chronic invalidation and conflict, which contributed not only to the emergence of the eating disorder but also to its persistence and resistance to treatment. These findings highlight the importance of family-inclusive and systemic approaches, particularly in severe and trauma-related AN, to improve treatment adherence and long-term prognosis [13], [18], [19].

Psychiatric Comorbidities

Psychiatric comorbidities are highly prevalent in anorexia nervosa, affecting 50–70% of patients [20], [21]. Major depressive disorder, post-traumatic stress disorder, anxiety disorders, and personality disorders are particularly frequent, and each has been associated with greater treatment resistance, suicidality, and poor long-term outcomes [1], [22]. Comorbidity thus substantially increases the risk of relapse, chronicity, and premature mortality, underscoring the need for comprehensive assessment and integrated management in severe AN [23]. In our patient, complex PTSD and borderline traits amplified affective instability, impulsivity, and self-destructive behaviors, worsening illness persistence.

Severe Presentations and Therapeutic Challenges

Severe anorexia nervosa, typically defined by extreme emaciation ($\text{BMI} < 14 \text{ kg/m}^2$) with medical instability and multiple comorbidities, poses profound therapeutic challenges. Patients in this subgroup frequently demonstrate poor response to standard therapies and interventions, including cognitive-behavioral and family-based therapies, and often require prolonged inpatient or intensive care settings. Mortality risk is particularly elevated, with both suicide and medical complications accounting for the majority of deaths in this population [1]. These outcomes reinforce the consensus that management must be multidisciplinary, combining psychiatric care, nutritional rehabilitation, psychotherapeutic approaches, and medical monitoring [15].

Trauma-Informed and Integrative Approaches

In recent years, trauma-informed frameworks have gained increasing attention in the management of severe AN. These approaches acknowledge the enduring psychological and neurobiological effects of adverse childhood experiences (ACEs), including sexual abuse, emotional neglect, and family violence, which are strongly associated with illness onset and poorer outcomes [12]. Rather than focusing exclusively on weight restoration or behavioral control, trauma-informed care emphasizes the creation of a therapeutic environment that prioritizes safety, trust, and empowerment [24].

Mechanistically, trauma-informed models directly target processes such as shame, emotion dysregulation, and insecure attachment, which frequently underpin restrictive and purging behaviors and contribute to treatment resistance [13]. By validating traumatic experiences and addressing their sequelae, these approaches strengthen the therapeutic alliance and reduce the risk of disengagement or premature dropout. Clinical strategies may integrate evidence-based modalities such as trauma-focused cognitive behavioral therapy (TF-CBT), eye movement desensitization and reprocessing (EMDR), or schema therapy, in parallel with standard eating disorder interventions [12], [13].

An integrative care model, combining medical stabilization, nutritional rehabilitation, psychopharmacology, and trauma-focused psychotherapy, is increasingly advocated for patients with severe AN who present with complex trauma histories and psychiatric comorbidities [15]. These integrative strategies represent a promising avenue for reducing relapse and improving both psychiatric and functional outcomes.

Conclusion

This case underscores the life-threatening trajectory of severe anorexia nervosa when compounded by childhood trauma, dysfunctional family dynamics, and psychiatric comorbidity. Despite intensive medical and psychiatric interventions, the patient's course was marked by extreme cachexia, medical instability, and persistent psychological distress, illustrating the complexity and chronicity of the disorder. Current evidence highlights that trauma and family dysfunction are not only risk factors for onset but also powerful maintaining mechanisms, shaping both clinical presentation and treatment resistance. Psychiatric comorbidities further complicate care, amplifying risks of relapse, suicidality, and premature death. These findings reinforce the urgent need for trauma-informed, family-inclusive, and multidisciplinary interventions that integrate medical stabilization, nutritional rehabilitation, and targeted psychotherapies. Only through such comprehensive approaches can prognosis be improved and the cycle of relapse and chronicity interrupted in this highly vulnerable population.

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