

**INTEGRATED CLINICAL, NUTRITIONAL, AND PSYCHOTHERAPEUTIC
STRATEGIES FOR THE DIAGNOSIS, MANAGEMENT, AND
REHABILITATION OF CHILDREN AND ADOLESCENTS WITH SEVERE
ANOREXIA NERVOSA SYNDROME**

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Annotation: *Anorexia nervosa predominantly affects adolescents and older children and is characterized by severe disturbances in eating behavior, including restrictive diets, voluntary refusal of food, intentional weight loss (body mass index <18), and the development of secondary somatoendocrine complications. The disorder is often accompanied by distorted body image, dysmorphic beliefs, and in females, secondary amenorrhea. This paper explores modern diagnostic, therapeutic, and rehabilitation strategies aimed at improving treatment outcomes for pediatric and adolescent patients.*

Keywords: *anorexia nervosa, adolescence, nutritional status, body mass index, psychotherapy, dietary therapy.*

Introduction

Anorexia nervosa represents a pressing mental health concern in children and adolescents due to the increasing prevalence of eating disorders over the past decade. The disorder is often underdiagnosed because patients demonstrate low treatment-seeking behavior, dissimulation of symptoms, and lack insight into their condition [1-8]. These challenges contribute to delayed intervention and complicate therapeutic management. Current research emphasizes the importance of interdisciplinary approaches that integrate psychiatry, pediatrics, nutrition, and psychotherapy to enhance early detection, preventive strategies, and rehabilitation efforts [9-13].



The psychopathology of anorexia nervosa during the active phase of weight loss remains insufficiently explored, particularly with respect to ideational and cognitive disturbances, which form the core of the disorder [14-19]. Some studies suggest that obsessive-compulsive mechanisms underpin disease onset, whereas others point to delusional beliefs regarding body image and weight [20-23]. Dismorphomania has been identified as a distinct feature in adolescents with anorexia, reflecting a stable but modifiable distortion of body perception [24-35].

Accurate classification of eating disorders is a persistent challenge in child and adolescent psychiatry. While the ICD-10 provides a framework for standardizing diagnoses, practical application often reveals discrepancies in clinical interpretation and inter-rater reliability [36-44]. Despite these limitations, classification remains essential for predicting treatment outcomes, guiding clinical decisions, and shaping preventive interventions.

Purpose of the Study

The primary aim of this study was to evaluate eating behaviors, nutritional status, and psychopathology in children and adolescents diagnosed with anorexia nervosa. Secondary objectives included developing a comprehensive therapeutic and preventive program integrating pharmacotherapy, psychotherapy, dietary therapy, and psychosocial interventions to optimize patient outcomes.

Materials and Methods

This study was conducted at the Specialized Psychiatric Hospital for Children and Adolescents (SOPB) between 2022 and 2025. A total of 56 female patients aged 12-17 years, diagnosed with anorexia nervosa according to ICD-10 criteria (F50.0), were included. Clinical evaluation involved:

Psychiatric and psychopathological assessment: Analysis of ideational disturbances, obsessive-compulsive and delusional symptoms, mood, anxiety, and dysmorphic concerns.

Anthropometric evaluation: Assessment of body mass index (BMI), weight loss magnitude, and body composition.

Somatic and neurological examination: Detection of secondary complications from protein-energy deficiency and endocrine disturbances.

Nutritional history analysis: Frequency of meals, portion size, dietary composition, and behaviors such as self-induced vomiting, laxative use, or excessive physical activity.

Laboratory studies: Assessment of metabolic and endocrine status.



During hospitalization, patients received interdisciplinary treatment, including:

1. Dietary therapy: Gradual reintroduction of calories (starting from 1200-1500 kcal/day, advancing to 2500 kcal/day) with structured meal plans to restore nutritional balance and normalize eating behavior.
2. Psychotherapy: Cognitive-behavioral interventions targeting distorted body image, rational eating habits, and emotional regulation.
3. Pharmacotherapy: Correction of somatoendocrine disorders with adjunctive psychotropic medications (antidepressants, antipsychotics, and anxiolytics) as clinically indicated.
4. Psychosocial therapy: Family counseling, psychoeducation, and reinforcement of adaptive social behaviors.

Results

The study cohort presented with severe and prolonged weight loss:

- 29% had mild weight deficit (BMI 16–18)
- 71% exhibited marked deficiency (BMI <16)
- Weight loss distribution: <10 kg in 7%, 10–20 kg in 57%, >20 kg in 36%

Psychopathology: All patients demonstrated combined features of dysmorphophobia and delusional ideation regarding body image, often accompanied by anxiety, depression, obsessive-compulsive tendencies, hypochondriacal traits, and psychopathic-like behaviors.

Nutritional status: Protein-energy deficiency of alimentary origin was identified in 71% of cases, accompanied by gastrointestinal, cardiovascular, and neuroendocrine abnormalities. Secondary somatoendocrine complications were aggravated by frequent self-induced vomiting (27%), laxative/diuretic use (11%), and excessive physical activity (87%).

Dietary intervention outcomes: Weight gain during hospitalization was observed as follows:

- 1-3 kg in 22%
- 3-5 kg in 20%
- 5 kg in 58%

Psychotherapeutic outcomes: Patients exhibited improved perception of hunger and satiety, corrected distorted body image, and developed sustainable eating behaviors.



Pharmacotherapy: Somatoendocrine complications were mitigated, and psychotropic interventions facilitated emotional stabilization and reduction of obsessive-compulsive and delusional ideation. Duration of treatment varied: 2 months in 42%, 1 month in 21%, and >2 months in 37%.

Clinical observation: Delusional features were predominant over obsessive components, highlighting the severity and psychotic-level manifestation of anorexia nervosa in adolescence. Somatogenic and organic factors-such as prolonged caloric restriction and constitutional CNS vulnerability-contributed significantly to symptom formation.

The results underscore the necessity of early interdisciplinary intervention in adolescents with anorexia nervosa. The combination of delusional ideation and obsessive-compulsive traits dictates both the severity of the disorder and its resistance to treatment. Somatogenic, organic, and constitutional factors interact synergistically, emphasizing the need for comprehensive care that addresses not only psychiatric but also somatic, nutritional, and psychosocial aspects.

Dietary therapy, in conjunction with psychotherapeutic support, plays a central role in restoring energy balance and reversing protein-energy deficiencies. Pharmacological management, though secondary to behavioral and dietary interventions, is critical for addressing comorbid mood, anxiety, and endocrine disturbances. Family involvement and psychoeducation enhance treatment adherence and improve long-term outcomes.

Conclusions

Adolescents with anorexia nervosa often present for treatment late in the disease course, frequently exhibiting severe weight deficit (BMI <16) and protein-energy malnutrition. Comprehensive assessment of nutritional history, somatic health, and psychopathology is essential to guide individualized treatment planning. Effective management requires interdisciplinary strategies integrating dietary therapy, psychotherapy, pharmacotherapy, and psychosocial interventions. Delusional ideation concerning body image is the dominant factor determining the severity of anorexia nervosa in adolescents, with obsessive-compulsive traits playing a secondary but contributory role. Early intervention and structured rehabilitation programs significantly improve outcomes, reduce complications, and promote recovery of healthy eating behaviors.

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