

MODERN THERAPEUTIC APPROACHES FOR AFFECTIVE RESPIRATORY PAROXYSM IN CHILDREN

Abidova Munojat

Assistant Professor, Department of Pediatrics-2,
Fergana Public Health Medical Institute.

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Abstract. *Affective respiratory paroxysm is a psychosomatic disorder in children, marked by sudden breathing difficulties and emotional instability. Episodes are often triggered by stress, fear, or anxiety and can affect physical health, psychological development, and daily functioning.*

Early diagnosis and modern management strategies, including therapy and family education, are essential to reduce recurrence and improve quality of life.

Keywords: *Affective respiratory paroxysm; children; psychosomatic disorder; emotional instability; breathing difficulties; therapy.*

Introduction

Affective respiratory paroxysm is a psychosomatic disorder commonly observed in children, characterized by sudden episodes of breathing difficulties accompanied by emotional instability and stress-related reactions. These episodes often occur in response to emotional stimuli such as fear, anxiety, or excitement, reflecting the close interaction between the nervous system and the respiratory system. Affective respiratory paroxysm not only affects the child's physical health but can also impact psychological development, social interactions, and academic performance. Early identification and understanding of its clinical features, underlying pathophysiological mechanisms, and precipitating factors are crucial for effective management.

Research into affective respiratory paroxysm is essential to develop individualized treatment strategies and improve the overall quality of life for affected children.

Relevance

The incidence of affective respiratory paroxysm in children has been increasing in recent years, making it a significant clinical concern. Affective respiratory paroxysm can impair the function of the respiratory system and the nervous system, as well as social and academic performance. Modern treatment approaches, including pharmacological methods and non-pharmacological methods, aim not only to relieve symptoms but also to prevent recurrence. Studying affective respiratory paroxysm and implementing effective therapeutic strategies is therefore of high scientific and practical importance.

Main part

Affective respiratory paroxysm in children is a psychosomatic disorder that involves a complex interaction between the nervous system and the respiratory system. Emotional stimuli, including stress, fear, or anxiety, trigger autonomic nervous system responses that disrupt normal breathing patterns. The parasympathetic and sympathetic branches of the autonomic system are often imbalanced during episodes, leading to hyperventilation, dyspnea, or apnea-like events.

Neurotransmitters such as serotonin, gamma-aminobutyric acid, and catecholamines play a significant role in modulating both emotional and respiratory responses. Dysregulation in the limbic system, particularly in the amygdala and hippocampus, has been associated with

heightened emotional reactivity and abnormal respiratory patterns. Additionally, cortical structures responsible for voluntary and involuntary control of breathing, including the prefrontal cortex, may contribute to the manifestation of affective respiratory paroxysms. Hormonal influences, particularly the stress-related release of cortisol, further exacerbate these episodes by sensitizing the nervous system to emotional triggers. Genetic predisposition and individual temperament can also modulate the frequency and severity of attacks. Environmental factors, such as family stress, school pressures, and traumatic experiences, interact with these biological mechanisms. The result is a recurrent pattern of sudden respiratory dysfunction closely linked to emotional states.

Children with affective respiratory paroxysm typically present with sudden episodes of irregular breathing, shortness of breath, or rapid shallow breaths. These attacks are often accompanied by heightened emotional responses, such as crying, agitation, or fear. Some children may experience pallor, dizziness, or transient loss of consciousness during severe episodes. The onset is usually abrupt, and episodes may last from a few seconds to several minutes, with spontaneous resolution in most cases. Diagnosis relies on careful clinical observation, detailed patient history, and exclusion of other respiratory or cardiac disorders. Laboratory tests are generally normal but may be used to rule out metabolic or neurological causes. Risk factors include a family history of anxiety or psychosomatic disorders, high levels of stress, traumatic experiences, and certain personality traits such as heightened emotional sensitivity. Environmental influences, including school pressures, social stressors, and parental anxiety, can also increase the likelihood of episodes. Psychological assessments may reveal comorbid conditions, such as generalized anxiety, depression, or attention-deficit disorders. Understanding these risk factors is critical for preventive strategies and early interventions. Clinicians often use structured interviews and standardized questionnaires to identify children at risk. Comprehensive evaluation should also consider the child's social environment and coping mechanisms.

Modern management of affective respiratory paroxysm in children involves a combination of pharmacological and non-pharmacological strategies tailored to individual needs. Pharmacological treatment is considered when episodes are severe or significantly disrupt daily functioning. Medications may include anxiolytics, selective serotonin reuptake inhibitors, or beta-adrenergic agents, depending on the primary symptoms and comorbid conditions. Non-pharmacological approaches are central to therapy and often include cognitive-behavioral therapy, relaxation techniques, biofeedback, and controlled breathing exercises. Education for both children and parents regarding stress management, emotional regulation, and recognition of early symptoms is essential. School-based interventions and counseling may support children in managing social and academic pressures. Multidisciplinary teams, including pediatricians, psychologists, respiratory therapists, and educators, are critical for comprehensive care.

Individualized treatment plans consider the frequency, severity, and triggers of episodes, aiming to reduce both physiological and emotional responses. Emerging therapies also explore mindfulness, yoga, and structured physical activity as adjunctive strategies to improve resilience and reduce anxiety. Continuous monitoring and follow-up are important to assess therapeutic effectiveness and make necessary adjustments. Early intervention improves long-term outcomes and helps prevent chronic psychosomatic complications. Family involvement in therapy enhances adherence and ensures a supportive home environment.

Conclusion

Affective respiratory paroxysm in children is a psychosomatic disorder caused by interactions between the nervous system, respiratory system, and emotional factors. It leads to sudden breathing difficulties, emotional instability, and may affect social and academic performance. Early identification of risk factors and triggers is essential for effective management.

Modern treatment combines pharmacological methods, cognitive-behavioral therapy, relaxation techniques, and family education. Multidisciplinary and individualized approaches help reduce recurrence, improve quality of life, and support healthy physical and emotional development.

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