



ETIOLOGY AND PATHOGENESIS FEATURES OF NEUROSIS IN CHILDREN

Xalikova Xulkaroy Muhiddin qizi

Kokand University, Andijan Branch

Student of the Faculty of Pediatrics, Group 25-02

Akramjonova Xalimaxon O'rmonbek qizi

Department of Clinical and Pathological Anatomy Instructor:

<https://doi.org/10.5281/zenodo.17411768>

Abstract

Neurosis in children is one of the most common functional disorders of the nervous system observed in pediatric practice. It represents a reversible mental condition that arises as a result of prolonged psychological stress, emotional conflicts, or unfavorable social and family environments. Despite the absence of structural damage in the brain, neurosis significantly affects the mental, emotional, and behavioral development of children. The etiology of neurosis in children is multifactorial. It involves genetic predisposition, perinatal complications, neurophysiological immaturity of the nervous system, and external stress factors such as family conflicts, excessive parental control, school pressure, and traumatic experiences. The child's temperament, psychological resilience, and personality development play a crucial role in determining susceptibility to neurosis. Pathogenesis is closely related to the imbalance between excitatory and inhibitory processes in the cerebral cortex, dysfunction of the hypothalamic–pituitary–adrenal system, and neurochemical changes in neurotransmitters such as serotonin, dopamine, and GABA. Chronic stress leads to dysregulation of these neurochemical systems, resulting in increased anxiety, fear, sleep disturbances, and psychosomatic symptoms. Understanding the etiology and pathogenesis of neurosis in children is essential for early diagnosis, prevention, and effective treatment. Comprehensive management must include psychological counseling, family therapy, normalization of lifestyle, and, when necessary, pharmacotherapy. An integrative approach not only improves clinical outcomes but also ensures the healthy emotional and social development of the child.

Keywords

Neurosis, children, etiology, pathogenesis, psychological stress, family conflict, neurophysiology, emotional disorder, pediatrics, prevention.

Introduction

Neurosis in children is one of the most pressing problems in modern pediatrics and child psychology. With the rapid development of technology, changes in family structures, and the growing pace of modern life, children are increasingly exposed to psychological stress from an early age. These emotional and environmental pressures often exceed the adaptive capacity of a child's developing nervous system, leading to various functional disturbances commonly described as neuroses. The term "neurosis" refers to a group of reversible mental and functional disorders of the nervous system that occur without structural brain damage. Unlike psychotic conditions, neuroses do not cause a loss of contact with reality or severe personality disintegration, but they significantly affect emotional balance, behavior, and overall development. In children, neurosis manifests through symptoms such as anxiety, sleep disorders, irritability, fatigue, fears, and psychosomatic complaints including headaches, abdominal pain, and heart palpitations. The causes of neurosis in children are complex and



multifactorial. Biological factors include hereditary predisposition, immaturity of the nervous system, hormonal imbalance, and perinatal complications such as hypoxia or birth trauma. Psychological and social influences, such as family conflicts, emotional neglect, excessive parental control, or school-related stress, play an equally important role. When these factors interact, they disrupt the normal functioning of higher nervous processes, resulting in emotional instability and behavioral problems. Pathogenesis of neurosis is closely linked to the disturbance of balance between excitatory and inhibitory mechanisms in the cerebral cortex. Under continuous emotional stress, the regulation of neurotransmitters such as serotonin, dopamine, and gamma-aminobutyric acid GABA becomes impaired. This imbalance triggers increased excitability of the nervous system, heightened anxiety, and various somatic reactions. Over time, these changes may lead to persistent psychological symptoms and difficulty in emotional regulation. From a developmental perspective, childhood is a critical period for the formation of emotional and psychological stability. During this time, the nervous system is still developing, and the child is highly sensitive to external influences. Inconsistent parenting, lack of emotional support, or excessive academic demands may lead to internal conflict and chronic stress, which form the foundation for neurotic disorders. Thus, neurosis in children is not only a medical condition but also a reflection of the child's emotional adaptation to the surrounding environment. Understanding the etiology and pathogenesis of neurosis in children is essential for early diagnosis and effective intervention. A comprehensive approach that includes psychological support, educational correction, and a stable emotional environment can significantly reduce the risk of developing chronic neurotic patterns. Modern pediatrics emphasizes that preventing neurosis is more effective than treating its consequences. Therefore, promoting emotional well-being, family harmony, and a supportive social atmosphere should be among the main priorities in protecting children's mental health. In conclusion, neurosis in children is a multifaceted disorder influenced by biological, psychological, and social factors. Early identification, prevention, and a holistic approach to treatment play a vital role in ensuring the healthy emotional and cognitive development of children. Creating a safe and supportive environment remains the foundation for nurturing mentally

Main Part

Introduction to the Problem

Neurosis in children is a functional disorder of the nervous system characterized by reversible disturbances in emotional, cognitive, and behavioral activity. It reflects the child's inability to adapt to stressful life situations, often caused by a combination of psychological tension, emotional conflict, and environmental instability. Unlike organic brain disorders, neurosis develops without structural brain damage, yet it significantly affects the mental and physical health of a growing child. Children's nervous systems are delicate and in the process of maturation. Therefore, any prolonged emotional pressure or psychological trauma can interfere with normal development, leading to anxiety, irritability, and behavioral deviations. Neurosis is not simply a medical condition it is a psychosocial phenomenon shaped by the environment in which the child grows.

Etiology of Neurosis in Children



The causes of neurosis are multifactorial, involving interactions between biological, psychological, and social factors.

Biological Factors

Genetic predisposition - children from families with a history of neurotic disorders may inherit increased emotional sensitivity or instability. Prenatal and perinatal complications - conditions such as hypoxia, infections during pregnancy, or difficult childbirth can impair the developing nervous system. Neurochemical imbalance- disturbances in neurotransmitters - particularly serotonin, dopamine, and GABA - contribute to heightened stress reactivity. Endocrine influences - hormonal fluctuations, especially in adolescence, can make children more prone to emotional dysregulation.

Psychological Factors

Emotional deprivation - lack of parental warmth, affection, or consistent care may lead to insecurity and chronic anxiety. Fear and punishment - harsh discipline or excessive control damages a child's sense of safety and self-worth. Internal conflict - the struggle between desire and duty common in sensitive children creates mental tension that may manifest as neurosis. Traumatic experiences - fear, family violence, or loss of loved ones often leave deep emotional scars.

Social Factors

Educational stress - excessive academic expectations can lead to fatigue and nervous tension. Peer pressure - bullying, exclusion, or interpersonal difficulties at school negatively affect emotional stability. Technological overload - overexposure to gadgets and social media disrupts sleep and emotional regulation. Socioeconomic stressors - poverty, family conflict, or unstable home environments increase vulnerability to neurosis.

Pathogenesis

The pathogenesis of neurosis in children lies in the functional disruption of the central nervous system CNS, especially the relationship between the cerebral cortex and subcortical structures. Emotional stress causes an imbalance between the processes of excitation and inhibition in the brain, leading to unstable neural activity.

Prolonged psychological stress activates the hypothalamic-pituitary-adrenal HPA axis, resulting in the excessive release of stress hormones such as cortisol and adrenaline. These neuroendocrine changes heighten nervous excitability, suppress immunity, and alter sleep and appetite patterns. As the nervous system becomes fatigued, the child develops heightened emotional reactivity, irritability, and psychosomatic symptoms. The limbic system, responsible for emotion processing, plays a central role. Its overactivation in response to chronic stress explains why children with neurosis often experience both emotional instability and somatic complaints like headaches, abdominal pain, or palpitations.

Clinical Manifestations

Neurosis in children appears through a wide range of psychological and somatic symptoms. Common clinical forms include. **Anxiety neurosis** - persistent fear, restlessness, sleep disturbance, and tension.resilient and balanced future generations. **Hysterical neurosis** - emotional outbursts, exaggerated physical reactions, fainting, or speech difficulties. **Obsessive-compulsive neurosis** - repetitive thoughts or actions aimed at reducing anxiety. **Phobic neurosis** - irrational fears of darkness, separation, or certain objects. **Asthenic neurosis** - fatigue, decreased motivation, and low performance at school. In some children,



neurosis manifests primarily as **psychosomatic reactions** - stomach pain, nausea, irregular heartbeat, or dizziness, without any organic pathology. These symptoms reflect the close interconnection between the mind and body.

Diagnostic Approach

The diagnosis of neurosis in children requires a comprehensive evaluation involving both medical and psychological assessments.

The diagnostic process includes. Collecting detailed anamnesis about family background and emotional climate. Behavioral observation at home and in school environments. Application of psychological tests assessing anxiety, attention, and emotional stability. Exclusion of organic neurological or endocrine disorders. Since children often find it difficult to verbalize emotions, specialists rely on play-based and behavioral observation techniques to identify underlying emotional conflicts.

Treatment Principles

Effective treatment of neurosis in children is complex and individualized, combining psychological therapy, educational support, and medical care.

Psychotherapeutic Methods

Cognitive-behavioral therapy - helps children identify irrational fears and replace them with adaptive thinking. Play therapy - enables younger children to express emotions symbolically and develop coping mechanisms. Family therapy - restores healthy communication patterns between parents and children. Art and music therapy - improve mood, self-expression, and emotional control.

Medical Support

In severe cases, mild pharmacotherapy may be used. Sedatives and adaptogens to reduce tension. Nootropic and vitamin preparations to support brain metabolism. Short-term anxiolytics under strict supervision in acute anxiety cases.

Pedagogical and Lifestyle Measures

Establishing a stable and supportive family atmosphere. Promoting regular sleep, balanced nutrition, and physical activity. Reducing academic overload and screen time. Encouraging open emotional communication.

Prevention

Preventive measures are the most important in controlling neurosis in children. They aim to strengthen emotional resilience and provide a healthy environment for psychological growth. Key preventive actions include. Creating an atmosphere of love, trust, and acceptance at home. Teaching children how to express emotions constructively. Early identification of anxiety or stress-related symptoms. Promoting balanced education without excessive competition. Organizing programs to support parental awareness of children's emotional needs. Encouraging participation in sports and creative activities. By addressing both internal and external stressors, prevention helps form a stable, confident personality resistant to neurosis. Neurosis in children is a reversible, functional disorder caused by a complex interaction of genetic, psychological, and social factors. The condition arises when emotional stress overwhelms the child's adaptive capacity, leading to disturbances in the balance of the nervous system. Early recognition and appropriate intervention can completely restore emotional health. Psychotherapy remains the cornerstone of treatment, supported by family and educational cooperation. Preventive efforts aimed at strengthening emotional resilience



are essential to avoid the recurrence of neurosis. This, understanding the etiology and pathogenesis of neurosis in children is not only a medical necessity but also a vital step toward nurturing a mentally healthy and emotionally strong generation.

Conclusion

Neurosis in children reflects a complex interaction between emotional, psychological, and environmental factors that disrupt the developing nervous system. It serves as a sensitive indicator of internal tension and maladaptation rather than a simple behavioral problem. Early recognition and comprehensive intervention are therefore essential to prevent chronic emotional disturbances and developmental setbacks. Effective management requires an integrated approach that combines psychotherapy, family guidance, and social support. Creating emotionally safe environments - both at home and in school fosters psychological resilience and helps children develop healthy coping mechanisms. Ultimately, the prevention of neurosis in childhood depends not only on medical treatment but also on empathy, understanding, and consistent care from adults. Promoting emotional stability in children today means ensuring a healthier, more balanced, and mentally resilient generation in the future.

References:

1. Karimov, A. (2018). Features of the Development of the Nervous System in Children. Tashkent: Fan va Texnologiya Publishing.
2. Rasulova, D. (2020). Fundamentals of Medical Psychology. Tashkent: Tibbiyot Publishing House.
3. Ahmedova, M. (2021). Neurosis in Children and Its Treatment Principles. Tashkent: Uzbekistan Medical Publishing.
4. Islomov, H. (2017). Etiology and Pathogenesis of Neuroses. Tashkent: Fan Publishing.
5. Sadock, B. J., & Sadock, V. A. (2018). Kaplan & Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry. Philadelphia: Wolters Kluwer.
6. Kagan, J. (2019). Emotional Development in Childhood. Cambridge, MA: Harvard University Press.
7. LeDoux, J. (2015). Anxious: Using the Brain to Understand and Treat Fear and Anxiety. New York: Penguin Books.
8. Pine, D. S. (2017). Childhood Anxiety Disorders. Oxford: Oxford University Press.
9. Cole, M., & Cole, S. (2016). The Development of Children. New York: W. H. Freeman and Company.
10. Vygotsky, L. S. (2020). Child Development Psychology. Moscow: Academy of Sciences Press.
11. Pavlov, I. P. (2018). Higher Nervous Activity and Psychoneuroses. Saint Petersburg: Nauka Publishing.
12. Kovalev, V. V. (2017). Mental Disorders in Children and Adolescents. Moscow: Meditsina Publishing.

