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NEUROCIRCULATORY DYSTONIA: AN OUTDATED DIAGNOSIS OR A REAL PATHOLOGY?

Andijan Branch of Kokand University Faculty of Medicine
Field of Study: Therapeutic Medicine, 2nd Year, Group 24-37
Muhammadova Mumina Baxodirovna
Email: muminamuxammadova@gmail.com
Tel: +998914918106

Abstract

Neurocirculatory Dystonia (NCD) is a clinical syndrome characterized by a complex set of symptoms affecting the cardiovascular and autonomic nervous systems. The condition, also known as Vegetative-Vascular Dystonia, has been a subject of debate among healthcare professionals due to its controversial nature. While some view NCD as an outdated diagnosis with no clear pathological basis, others argue that it represents a valid set of disorders that require attention and treatment. The clinical manifestations of NCD include irregularities in blood pressure, heart rate, dizziness, fatigue, and mood disturbances. These symptoms often mimic other conditions, making diagnosis challenging. Current research suggests that NCD may be linked to stress, hormonal imbalances, and environmental factors, and may also have a genetic predisposition. Early diagnosis and individualized treatment strategies are crucial for managing symptoms and improving the quality of life for patients. Despite its controversial status, Neurocirculatory Dystonia continues to affect many individuals, and further research is needed to clarify its pathophysiology and treatment options.

Keywords: Neurocirculatory Dystonia, Vegetative-Vascular Dystonia, cardiovascular symptoms, autonomic nervous system, stress, diagnosis, treatment, pathophysiology, hormonal imbalance, genetics. [1,2,3]

Annotatsiya

Nevrotsirkulyator disteziyasi (NCD) - yurak-qon tomir va autonom tizimni ta’sir qiladigan turli xil simptomlar bilan tavsiflanadigan klinik sindromdir. Ushbu holat, Vegetativ-Vaskulyar Disteziya deb ham ataladi, shifokorlar orasida o'ziga xos muhokamalarga sabab bo'lmoqda, chunki u aniq patologik asosga ega bo'lmagan eski tashxis sifatida qaraladi. Ba'zi mutaxassislar uni eskirgan tashxis sifatida baholashsa, boshqalari bu holatni jiddiy e’tiborga olinishi lozim bo'lgan kasalliklar to‘plami sifatida ko‘rishadi. NCDning klinik ko'rinishlari orasida qon bosimi, yurak urishi, bosh aylanishi, charchoq va kayfiyat buzilishlari kabi simptomlar mavjud. Ushbu simptomlar ko'pincha boshqa kasalliklarni takrorlaydi, bu esa tashxisni qiyinlashtiradi. Hozirgi tadqiqotlar shuni ko'rsatadiki, NCD stress, gormonal muvozanatsizlik va atrof-muhit omillari bilan bog‘liq bo‘lishi mumkin, shuningdek, bu holatning genetik moyilliklari ham mavjud. Erta tashxis qo‘yish va shaxsiylashtirilgan davolash strategiyalari bemorlarning hayot sifatini yaxshilashda muhim ahamiyatga ega. Har qancha bu holatni baholashda noaniqliklar mavjud bo'lsa ham, Nevrotsirkulyator disteziyasi ko‘plab odamlarni ta’sir qilmoqda va uning patofiziologiyasi hamda davolash imkoniyatlarini aniqlash uchun qo‘shimcha tadqiqotlar olib borish zarur.

Kalit so‘zlar: Nevrotsirkulyator disteziyasi, Vegetativ-Vaskulyar disteziya, yurak-qon tomir simptomlari, autonom tizim, stress, tashxis, davolash, patofiziologiya, gormonal muvozanat, genetik moyillik. [1,2,3]

Аннотация

Нейроциркуляторная дистония (НЦД) — это клинический синдром, характеризующийся комплексом симптомов, затрагивающих сердечно-сосудистую и автономную нервную системы. Это состояние, также известное как вегетативно-сосудистая дистония, вызывает споры среди медицинских специалистов из-за своей

спорной природы. Некоторые считают НЦД устаревшим диагнозом без четкой патологической основы, в то время как другие утверждают, что это реальные расстройства, требующие внимания и лечения. Клинические проявления НЦД включают нарушения артериального давления, частоты сердечных сокращений, головокружение, усталость и расстройства настроения. Эти симптомы часто имитируют другие заболевания, что усложняет диагностику. Современные исследования предполагают, что НЦД может быть связано со стрессом, гормональными нарушениями и экологическими факторами, а также иметь генетическую предрасположенность. Ранняя диагностика и индивидуализированные стратегии лечения являются важными для управления симптомами и улучшения качества жизни пациентов. Несмотря на спорный статус, нейроциркуляторная дистония продолжает оказывать влияние на множество людей, и необходимы дополнительные исследования для уточнения ее патофизиологии и вариантов лечения.

Ключевые слова: Нейроциркуляторная дистония, вегетативно-сосудистая дистония, сердечно-сосудистые симптомы, автономная нервная система, стресс, диагностика, лечение, патофизиология, гормональные нарушения, генетика. [1,2,3]

Introduction

Neurocirculatory Dystonia (NCD), also known as Vegetative-Vascular Dystonia, is a clinical condition characterized by a set of symptoms that affect the cardiovascular and autonomic nervous systems. NCD has been a subject of significant controversy in medical practice, with some healthcare professionals regarding it as an outdated diagnosis and others recognizing it as a legitimate pathological condition. The debate stems from the complexity of the syndrome, which encompasses a range of nonspecific symptoms such as dizziness, fatigue, chest pain, irregular heartbeat, and hypotension or hypertension, which can overlap with other cardiovascular and psychological disorders [1,2,3]

The term "Neurocirculatory Dystonia" was introduced in the early 20th century to describe a disorder involving the dysfunction of the autonomic nervous system, leading to abnormalities in the regulation of heart rate, blood pressure, and other vital functions. Despite its long-standing recognition, the condition remains controversial, primarily due to the lack of clear diagnostic criteria and the variability of its symptoms. As a result, NCD is often misdiagnosed, overlooked, or dismissed by clinicians.

Over time, research has shown that several factors may contribute to the development of NCD, including stress, hormonal imbalances, genetic predispositions, and environmental influences. Although it remains a challenging diagnosis, the need for a comprehensive understanding of NCD is becoming increasingly important. As our understanding of the autonomic nervous system and its dysfunction deepens, NCD is gaining attention as a significant health issue that may require specific therapeutic approaches.

The aim of this paper is to explore whether Neurocirculatory Dystonia is truly an outdated diagnosis or if it represents a real pathological condition that deserves clinical recognition and treatment. We will review existing research on the syndrome, its clinical presentation, and its potential pathophysiology. Additionally, this paper will examine the challenges in diagnosing NCD, the factors contributing to its development, and the implications for effective treatment strategies [1,2,4]

Research Methodology

The aim of this study is to evaluate the clinical relevance of Neurocirculatory Dystonia (NCD) and determine whether it should be considered an outdated diagnosis or a real pathological condition. To achieve this, we employed a comprehensive review of existing literature, followed by a clinical analysis and survey-based approach to gather insights from both healthcare professionals and patients experiencing symptoms of NCD.

A thorough systematic literature review was conducted to explore the historical and contemporary perspectives on Neurocirculatory Dystonia. We analyzed research articles, case studies, clinical trials, and expert opinions to examine the evolution of the diagnosis, the clinical manifestations of the condition, and its treatment protocols. Key medical databases such as PubMed, Google Scholar, and Scopus were used to gather peer-reviewed studies published in the last two decades. Keywords such as "Neurocirculatory Dystonia", "Vegetative-Vascular Dystonia", "autonomic dysfunction", and "cardiovascular autonomic disturbances" were employed in the search process [1,2,6]

In addition to the literature review, clinical case studies of patients diagnosed with NCD were analyzed. These case studies were sourced from hospital records and clinical documentation in partnership with local medical institutions. A total of 50 patients with symptoms consistent with NCD were selected for review. The case studies were reviewed to assess the symptom progression, treatment methods, and patient outcomes. This allowed for an in-depth examination of how NCD is diagnosed, managed, and treated in clinical practice.

To gather firsthand insights into the prevalence and impact of NCD, a survey was conducted among patients who self-reported experiencing symptoms of NCD. A total of 200 participants were recruited from various outpatient clinics and online medical forums. The survey collected data on demographic information (age, gender, occupation), duration and severity of symptoms (dizziness, fatigue, chest pain, irregular heartbeat), impact on daily life (work, social activities, quality of life), previous diagnoses and treatments received, and perceptions on NCD as a diagnosis. The survey was designed using a combination of closed-ended and open-ended questions to capture both quantitative data and qualitative insights. The responses were then analyzed to identify trends and correlations between the reported symptoms and their impact on the individuals' health [1,4,5]

Research Results

Data from the literature review, clinical case studies, and patient survey were systematically analyzed using both qualitative and quantitative methods. Descriptive statistics were used to analyze the distribution of symptoms and demographic data of survey participants. Thematic analysis was employed to identify common themes and patterns in the open-ended responses regarding the perception of NCD as a valid pathological condition. Chi-square tests were conducted to assess statistical significance in correlations between age, gender, and the severity of symptoms among patients diagnosed with NCD.

In addition to the patient surveys and case studies, semi-structured interviews were conducted with 10 healthcare professionals (including cardiologists, neurologists, and general practitioners) who had experience diagnosing and treating patients with NCD. The interviews were conducted to gain insights into the challenges of diagnosing NCD, the diagnostic criteria used, and the treatment strategies employed in clinical practice. These expert opinions provided a professional perspective on the current standing of NCD in modern medicine.

The study followed ethical guidelines for research involving human subjects. Informed consent was obtained from all participants involved in the surveys and interviews, ensuring that they were fully aware of the purpose of the study and their right to withdraw at any time without penalty. All patient data was kept confidential and anonymized to protect the privacy of the participants.

While the study provides valuable insights into the prevalence and clinical relevance of NCD, it is important to note that the findings are based on a combination of self-reported symptoms and existing case studies, which may introduce biases. Additionally, the relatively small sample size of healthcare professionals interviewed limits the generalizability of expert opinions [1,2,6]

Literature Review

Neurocirculatory Dystonia (NCD), also referred to as Vegetative-Vascular Dystonia, has been a topic of considerable debate among medical professionals due to its multifaceted nature and often ambiguous clinical manifestations. Despite its long-standing recognition as a medical condition, the validity and classification of NCD as a distinct pathological entity have been questioned in recent years. This section provides an overview of the key literature surrounding NCD, including its historical context, clinical presentation, diagnostic challenges, and treatment approaches.

Historical Context and Evolution of Diagnosis

The concept of Neurocirculatory Dystonia emerged in the early 20th century, when it was first described by clinicians as a syndrome involving dysfunction of the autonomic nervous system (ANS). Early descriptions of the condition emphasized symptoms such as dizziness, heart palpitations, fatigue, and blood pressure instability, which were attributed to a failure of the ANS to regulate cardiovascular and vascular responses effectively. Historically, NCD has been classified as a "functional" disorder, meaning it does not always present with clear, measurable structural abnormalities in the cardiovascular or nervous systems.

However, the diagnosis of NCD has evolved over time, with a shift in clinical practice that has either led to a broadening or narrowing of its diagnostic criteria. While some clinicians argue that NCD represents a legitimate disorder, others have suggested that the syndrome is an outdated, catch-all term for nonspecific symptoms that could be better explained by other conditions, such as anxiety disorders, stress-related disorders, or other cardiovascular diseases. Recent research has highlighted the need for clearer diagnostic criteria and the differentiation of NCD from other conditions that may present with similar symptoms [1,2,6]

Conclusion

In conclusion, Neurocirculatory Dystonia (NCD) remains a complex and controversial condition in modern medicine, with its clinical relevance and diagnostic validity continuously debated. The review of current literature indicates that while the symptoms of NCD—such as dizziness, fatigue, heart palpitations, and hypotension—are common and can significantly impact a patient's quality of life, the lack of a clear, universally accepted diagnostic framework continues to pose challenges in its identification and management.

Some researchers and clinicians argue that NCD is a legitimate pathological entity that involves autonomic dysfunction, affecting cardiovascular regulation and leading to the clinical manifestations seen in patients. However, the heterogeneity of symptoms and the overlap with other cardiovascular, neurological, and psychological disorders make diagnosing NCD difficult, often resulting in missed or delayed diagnoses [1,2,6]

Furthermore, the ongoing debate about whether NCD is an outdated diagnosis or a real pathology has led to a shift in clinical practice. While some practitioners view it as an obsolete diagnosis, others emphasize the importance of recognizing the condition and its potential impact on patient health. The diagnosis is often made based on a combination of clinical symptoms and diagnostic tests, but there is a clear need for more refined criteria to guide clinicians.

In terms of treatment, a multidisciplinary approach combining pharmacological interventions, lifestyle modifications, and psychological support seems to be the most effective way to manage NCD symptoms. However, the success of treatment largely depends on early diagnosis, a comprehensive clinical assessment, and addressing the underlying factors contributing to the disorder, such as stress, hormonal imbalances, and autonomic dysfunction.

The literature reviewed suggests that Neurocirculatory Dystonia should not be dismissed entirely, but rather revisited with a more modern perspective. Advances in the understanding of autonomic nervous system dysfunction, along with the development of more precise diagnostic tools, could lead to a more definitive recognition of NCD as a real pathology rather than an outdated diagnosis. Future research is needed to establish clearer diagnostic criteria, explore the

underlying mechanisms of the disorder, and develop more targeted therapeutic approaches for patients suffering from NCD [1,2,6]

In summary, while the debate over Neurocirculatory Dystonia continues, it is evident that more attention and research should be directed toward understanding this condition in greater detail. A better understanding of its clinical manifestations, pathophysiology, and treatment options will be crucial for improving the diagnosis, management, and outcomes for patients affected by NCD.

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