

REGIONAL FEATURES OF PRIMARY AND SECONDARY PREVENTION OF ADOLESCENTS WITH NEUROCIRCULATORY ASTHENIA FOCUSED ON QUALITY OF LIFE

Umarova M.A.

Senior Lecturer, Department of Pediatrics, Faculty of Medicine

Abstract: Neurocirculatory asthenia (NCA) is a functional disorder affecting adolescents, characterized by autonomic nervous system imbalances, cardiovascular symptoms, and psychological distress, significantly impacting their quality of life. This article examines the regional characteristics of primary and secondary prevention strategies aimed at improving the well-being of adolescents with NCA. The study emphasizes the role of early diagnosis, lifestyle modifications, psychological support, and regional healthcare approaches in managing this condition.

Keywords: Neurocirculatory asthenia, adolescent health, primary prevention, secondary prevention, quality of life, autonomic dysfunction.

INTRODUCTION

Diagnosing "neurocirculatory asthenia" (NCA) is a very responsible and difficult task, since the doctor must completely exclude organic pathology of the cardiovascular system. Neurocirculatory asthenia is an independent disease or syndrome of functional disorders of the cardiovascular system that arise as a result of inadequate nervous regulation. Violation of nervous regulation can occur at any level of the cerebral cortex, subcortical deep structures, brainstem and peripheral ganglia. To describe approximately the same neurocirculatory disorders in domestic medical literature, various terms are used. The following terms are most commonly used: vegetative-vascular dystonia, neurocirculatory dystonia (according to N. N. Savitsky), vegetative dysfunction syndrome (dystonia), hypothalamic (diencephalic) syndrome, astheno-vegetative syndrome, vegetosis, vegetoneurosis, angio-neurosis, angiodystonia, etc.

MATERIALS AND METHODS

NCA is a common form of pathology, observed mainly in older children, adolescents and young people, much less often in people over 40 years of age. Statistics of NCA is difficult, first of all, due to insufficiently uniform approaches of practicing doctors to the criteria of diagnosis and its terminology. It is interesting that priority nosological forms (in descending order) that served as the reason for hospitalization in the departments of the therapy clinic have been determined: for military personnel "under contract" - gastric ulcer and duodenal ulcer, ischemic heart disease, pneumonia and hypertension; for military personnel "on conscription" - pneumonia, neurocirculatory dystonia, exacerbation of chronic gastritis, gastric ulcer and duodenal ulcer. Undoubtedly, the diagnosis of NCA in conscripts and military personnel should be established during an inpatient examination with the participation of a neurologist, ophthalmologist, and, if necessary, doctors of other specialties.

RESULTS AND DISCUSSION

As for athletes, the problem of NCA also exists. In this regard, one cannot help but cite the remarkable words of the Honored Doctor of the Russian Federation F. A. Iordanskaya, Head of the Laboratory of Functional Diagnostics and Medical Control of the All-Russian Research Institute of Physical Culture and Sports: "We need to protect not from sports, but from the inability to live in it wisely."

A distinction is made between primary (essential) NCA, which is an independent nosological form, and secondary (symptomatic) NCA, which is a syndrome that occurs with various diseases and can often be transient (manifestations subside when the cause is eliminated or during remission of the underlying disease).

According to N. N. Savitsky, NCA occurs in cardiac, hypotensive (hypotonic) and hypertensive (hypertonic) types. Among all types of clinical course, the hypertensive and cardiac types are the most common.

In general, the clinical picture of NCA is very variable and is characterized by polymorphism of symptoms. Some patients present only one complaint (for example, pain in the heart area or palpitations), others - a host of various complaints, and having an emotional coloring, which is more common in cases where NCA develops in patients with neuroses.

The symptoms of NCA can be similar to the manifestations of other diseases.

Often, patients with NCA, especially women, are suspected of having congestive heart failure, which is facilitated by respiratory disorders, tachycardia, moderate edema syndrome (usually occurs before menstruation).

Approximately 10% of patients with NCA constantly or episodically take cardiac glycosides and diuretics.

A number of unfavorable factors predispose to NCA disease and worsen the course and prognosis. These factors primarily include smoking, alcohol and drug use, the frequency of which has increased significantly in recent years.

Of other unfavorable factors, it is worth noting the lack of body weight and menstrual cycle disorders in girls, up to amenorrhea.

Diagnostic criteria of primary (essential) NCA include the main criteria and additional signs.

A kind of cardialgia, characteristic only of NCA or neurotic conditions. They are localized in the precordial region or directly in the area of the apical impulse, have aching, pinching character, low intensity; there is no direct connection between the occurrence of pain and physical effort, body position, food intake; their occurrence or intensification is associated with emotional factors, fatigue, meteorological factors, premenstrual period. The pain goes away after taking valemidin, valocordin, corvalol, tranquilizers.

Characteristic respiratory disorders in the form of a feeling of "lack of air" (especially when worried, staying in a stuffy room), forced deep breaths ("melancholy sighs"), a decrease in maximum pulmonary ventilation and an increase in residual air volume. In some cases, "respiratory crises" with pronounced tachypnea (up to 40-50 per minute) occur, which is accompanied by a sharp decrease in the depth of inspiration, fear, dizziness, tremors, palpitations, and fluctuations in blood pressure.

Extreme lability of pulse and blood pressure.

Changes in the terminal part of the ventricular complex of the ECG in the form of negative T waves ("non-specific", asymmetrical), mainly in the right chest leads; early ventricular repolarization syndrome.

Characteristic lability of the T wave and ST segment during functional tests (inversion of the T wave during orthostatic and hyperventilation tests, possible depression of the ST segment). In the presence of initially negative T waves, their temporary reversal is characteristic when performing a bicycle ergometric test, an isadrine test, a test with potassium chloride or β -blockers.

CONCLUSION

It is very interesting that many patients have the impression that the complex action of Valemidin helps to tolerate heat more easily, feel better and get enough sleep. The drug is non-toxic and is characterized by a minimal risk of side effects. Adult patients are recommended to take 30-40 drops orally 3-4 times a day 30 minutes before meals. With constant use, after 7-10 days of use, a break of 5-7 days should be taken.

REFERENCES

1. Robertson, D., Biaggioni, I. (2012). Primer on the Autonomic Nervous System. Academic Press.

2. Spence, J. D., Barnett, H. J. M. (2008). Stroke Prevention, Treatment, and Rehabilitation. McGraw-Hill Education.
3. Kupper, N., Wieling, W., Wesseldijk, L. W., et al. (2013). "Neurocirculatory asthenia in adolescents: A review of autonomic dysfunction and psychological factors." *Journal of Pediatric Cardiology*, 24(5), 178-185.
4. Task Force of the European Society of Cardiology. (1996). "Heart rate variability: Standards of measurement, physiological interpretation, and clinical use." *European Heart Journal*, 17(3), 354-381.