

MECHANISMS OF RHYTHM DISTURBANCES, MODERN INTERPRETATION OF
ETIOLOGY OF ARRHYTHMIA

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Research relevance: Arrhythmia is a pathological condition in which the heart rate, rhythm and sequence of heart contractions are disturbed. This is the general name of pathology, which is characterized by any deviation from the normal state of the heart. There are several types of arrhythmia, each of which has its own symptoms and causes. Let's take a closer look at what arrhythmia is, how it manifests itself, how many types there are, and how to treat them.

Doctors call the pulse a mirror of the state of the cardiovascular system. Depending on its condition, heart problems can be determined regardless of whether it is faster or, on the contrary, slower. Pulse is a rhythmic vibration of the heart, this manifestation allows to determine the state of the vascular system. When the rhythm changes, this condition is called arrhythmia.

Arrhythmia attacks can occur in both young and old age. Of course, adults are more prone to heart problems, but even children suffer from arrhythmias. Pathology can be congenital or acquired. The second type is more common.

Research materials: The information in this section cannot be used for self-diagnosis and self-treatment. In case of pain or other exacerbation of the disease, diagnostic tests should be prescribed only by the attending physician. You should see your doctor for a diagnosis and to prescribe the right treatment. In order to accurately evaluate the results of your analyzes over time, it is preferable to conduct research in the same laboratory, because different laboratories may use different research methods and units of measurement to conduct the same analysis.

Monitoring object and methods: There are several types of arrhythmia. Specialists have studied them in detail and individual treatment is selected for each type. Division occurs depending on which part of the heart causes problems. There are 3 main types in total: sinus, ventricular, atrial. They also differ in heart rate. The main types of arrhythmia:

Tachycardia. A condition where the pulse rate exceeds 80 beats. Seizures occur during heavy physical exertion, which is considered normal. But if the body is calm and the heart rate is high, this may indicate pathology.

Bradycardia. A type of arrhythmia in which the heart beats less than 60 times per minute. It can appear when the patient feels well, but if the patient regularly feels bad, it indicates the development of pathological processes.

Paroxysmal disorders. This is a condition in which the pulse of a completely healthy person increases dramatically, the heart begins to beat so hard that it is impossible to count the beats. As a rule, their frequency reaches 200 beats per minute. This is a type of tachycardia that causes severe weakness, general disorder and even loss of consciousness. In this case, immediate medical attention is required, this is a very dangerous situation that can cause irreversible processes.

Extrasystole. It appears for no reason. Premature contractions are associated with a normal heart rhythm. This attack is caused by vegetative-vascular dystonia, a high level of stress.

Atrial fibrillation of the heart. The most common type. An important phase of the heart rhythm - due to the loss of atrial contraction, the muscle fibers stop working in sync. That's why they flicker or "blink". The ventricles also begin to work in sync. It is one of the most common heart diseases and occurs in men and women of almost any age.

If symptoms indicating the disease appear, you should immediately contact specialists for help and start a course of recovery. Treatment of cardiac arrhythmia is simple if it is started on time and all the requirements of specialists are followed. Otherwise, if the disease is not taken into account, serious pathologies will develop, which will even lead to death.

Research results: With cardiac arrhythmia, the state of health deteriorates significantly.

Shortness of breath, headache and other symptoms of arrhythmia appear. But they can pass quickly enough, and the patient immediately forgets about the deterioration of his health.

However, this syndrome indicates that there is a malfunction in the body, if you do not respond in time, the cardiovascular system can suffer great damage; Let's find out what the consequences of frequent attacks are:

- a) anxiety and stress develop;
- b) the disease contributes to the formation of unconsciousness, there is a risk of falling;
- c) the body suffers from blood starvation, all organs suffer from heart disease;
- d) dangerous heart diseases develop, for example, coronary heart disease, etc.;
- e) there is a risk of stroke;
- f) sudden cardiac arrest and death are possible.

Regular pain and discomfort in the heart area may indicate the presence of the disease.

Arrhythmia symptoms are very obvious, but people rarely worry about their health after it passes. You should not treat yourself like this, if you suspect problems, you should contact a specialist and undergo an examination. With the help of diagnostics, you can easily identify heart diseases and prescribe effective treatment. Take care of the main mechanism, if you provide help in time, the disease will be cured quickly.

Diagnosis of arrhythmia

Arrhythmia diagnosis allows for a detailed study of the patient's condition, to determine the type of arrhythmia and to determine the most effective treatment methods. In order to understand how to treat heart arrhythmia, the doctor must thoroughly examine the patient. The following diagnostic methods are used for this:

- a) First, they conduct a general examination of the patient, he talks about attacks and symptoms;
- b) electrocardiography of the heart is performed;
- c) ECG during physical activity;
- d) ECG monitoring during the day;
- e) An ultrasound examination of the heart is prescribed;
- f) biochemical analysis of blood, urine;

Hormonal tests are sometimes prescribed for cardiac arrhythmias.

After that, the doctor sees the general picture and can start treatment for arrhythmia. The first task is to eliminate discomfort, then strengthen the vascular system.

It is quite possible to eliminate arrhythmia, but if it is not treated, it is a pathology that causes side effects. Therefore, the earlier the procedures are started, the more effective they are.

Treatment is carried out by cardiologists, who prescribe a number of measures, including:

Use of sedative drugs. They are usually plant based. Motherwort, Corvalol, valerian capsules, novopassit help well.

- a) Medicines that lower blood pressure.
- b) Beta-blockers, membrane stabilizers, potassium channel blockers.
- c) Useful vitamin complexes ("Riboxin", "Panangin", "Magne B6").
- d) Physiological treatments are determined depending on the patient's condition. This is a swimming pool, physical therapy, certain activities.

Summary: A special diet is observed during treatment. The doctor describes in detail which foods should be excluded and, conversely, what should be added to the diet. For example, fatty foods, pork and lard are excluded. You should be careful with tea, coffee and smoking. Foods rich in potassium are included in the diet. These are dried fruits, honey, bananas, black currants. It is also recommended to use parsley, raisins, apricots, and cabbage in your diet. Components rich in calcium and magnesium are also included in the diet.

A set of measures to eliminate the disease includes establishing a water balance, giving up alcohol and other bad habits. All this allows to stabilize the patient's condition. Of course, in most

cases, arrhythmia is eliminated with the help of pharmacological drugs. It is also important to find the main reason for its development.

REFERENCES

1. Andryev S. et al. Experience with the use of memantine in the treatment of cognitive disorders //Science and innovation. – 2023. – T. 2. – №. D11. – C. 282-288.
2. Antsiborov S. et al. Association of dopaminergic receptors of peripheral blood lymphocytes with a risk of developing antipsychotic extrapyramidal diseases //Science and innovation. – 2023. – T. 2. – №. D11. – C. 29-35.
3. Asanova R. et al. Features of the treatment of patients with mental disorders and cardiovascular pathology //Science and innovation. – 2023. – T. 2. – №. D12. – C. 545-550.
4. Begbudiye M. et al. Integration of psychiatric care into primary care //Science and innovation. – 2023. – T. 2. – №. D12. – C. 551-557.
5. Bo'Riyev B. et al. Features of clinical and psychopathological examination of young children //Science and innovation. – 2023. – T. 2. – №. D12. – C. 558-563.
6. Borisova Y. et al. Concomitant mental disorders and social functioning of adults with high-functioning autism/asperger syndrome //Science and innovation. – 2023. – T. 2. – №. D11. – C. 36-41.
7. Ivanovich U. A. et al. Efficacy and tolerance of pharmacotherapy with antidepressants in non-psychotic depressions in combination with chronic brain ischemia //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 409-414.
8. Nikolaevich R. A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 898-903.
9. Novikov A. et al. Alcohol dependence and manifestation of autoaggressive behavior in patients of different types //Science and innovation. – 2023. – T. 2. – №. D11. – C. 413-419.
10. Pachulia Y. et al. Assessment of the effect of psychopathic disorders on the dynamics of withdrawal syndrome in synthetic cannabinoid addiction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 240-244.
11. Pachulia Y. et al. Neurobiological indicators of clinical status and prognosis of therapeutic response in patients with paroxysmal schizophrenia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 385-391.
12. Pogosov A. et al. Multidisciplinary approach to the rehabilitation of patients with somatized personality development //Science and innovation. – 2023. – T. 2. – №. D12. – C. 245-251.

13. Pogosov A. et al. Rational choice of pharmacotherapy for senile dementia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 230-235.
14. Pogosov S. et al. Gnostic disorders and their compensation in neuropsychological syndrome of vascular cognitive disorders in old age //Science and innovation. – 2023. – T. 2. – №. D12. – C. 258-264.
15. Pogosov S. et al. Prevention of adolescent drug abuse and prevention of yatrogenia during prophylaxis //Science and innovation. – 2023. – T. 2. – №. D12. – C. 392-397.
16. Pogosov S. et al. Psychogenetic properties of drug patients as risk factors for the formation of addiction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 186-191.
17. Prostyakova N. et al. Changes in the postpsychotic period after acute polymorphic disorder //Science and innovation. – 2023. – T. 2. – №. D12. – C. 356-360.
18. Prostyakova N. et al. Issues of professional ethics in the treatment and management of patients with late dementia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 158-165.
19. Prostyakova N. et al. Sadness and loss reactions as a risk of forming a relationship together //Science and innovation. – 2023. – T. 2. – №. D12. – C. 252-257.
20. Prostyakova N. et al. Strategy for early diagnosis with cardiovascular diseaseisomatized mental disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 166-172.
21. Rotanov A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and innovation. – 2023. – T. 2. – №. D12. – C. 267-272.
22. Rotanov A. et al. Diagnosis of depressive and suicidal spectrum disorders in students of a secondary special education institution //Science and innovation. – 2023. – T. 2. – №. D11. – C. 309-315.
23. Rotanov A. et al. Elderly epilepsy: neurophysiological aspects of non-psychotic mental disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 192-197.
24. Rotanov A. et al. Social, socio-cultural and behavioral risk factors for the spread of hiv infection //Science and innovation. – 2023. – T. 2. – №. D11. – C. 49-55.
25. Rotanov A. et al. Suicide and epidemiology and risk factors in oncological diseases //Science and innovation. – 2023. – T. 2. – №. D12. – C. 398-403.
26. Sedenkov V. et al. Clinical and socio-demographic characteristics of elderly patients with suicide attempts //Science and innovation. – 2023. – T. 2. – №. D12. – C. 273-277.
27. Sedenkov V. et al. Modern methods of diagnosing depressive disorders in neurotic and affective disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 361-366.

28. Sedenkova M. et al. Basic principles of organizing gerontopsychiatric assistance and their advantages //Science and innovation. – 2023. – T. 2. – №. D11. – C. 63-69.
29. Sedenkova M. et al. Features of primary and secondary cognitive functions characteristic of dementia with delirium //Science and innovation. – 2023. – T. 2. – №. D11. – C. 56-62.
30. Sedenkova M. et al. The possibility of predicting the time of formation and development of alcohol dependence: the role of genetic risk, family weight and its level //Science and innovation. – 2023. – T. 2. – №. D12. – C. 173-178.
31. Shamilov V. et al. Disorders of decision-making in the case of depression: clinical evaluation and correlation with eeg indicators //Science and innovation. – 2023. – T. 2. – №. D12. – C. 198-204.
32. Solovyova Y. et al. Protective-adaptive complexes with codependency //Science and innovation. – 2023. – T. 2. – №. D11. – C. 70-75.
33. Solovyova Y. et al. Suicide prevention in adolescents with mental disorders //Science and innovation. – 2023. – T. 2. – №. D11. – C. 303-308.
34. Solovyova Y. et al. The relevance of psychotic disorders in the acute period of a stroke //Science and innovation. – 2023. – T. 2. – №. D12. – C. 212-217.
35. Spirkina M. et al. Integrated approach to correcting neurocognitive defects in schizophrenia //Science and innovation. – 2023. – T. 2. – №. D11. – C. 76-81.

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