

# on the Results of Clinical Trials of Multicomponent Peptide Bioregulators MyRealWay

These studies were performed in 2015 – 2016 on the basis of the St. Petersburg State Budgetary Healthcare Institution "Municipal Hospital No. 8"

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### on results of the clinical use of the multicomponent peptide bioregulator BreathTIDE PLUS

Diseases of the respiratory system are currently among the most common diseases. Chronic obstructive pulmonary disease (COPD), chronic bronchitis and bronchial asthma are characterized by a steady increase in the incidence, prevalence, disability and mortality. According to the forecast of the WHO experts, by 2020, chronic obstructive pulmonary disease will be the third leading cause of morbidity and mortality in the world.

The modern science-based development – the multicomponent peptide bioregulator BreathTIDE PLUS with a well-thought-out mechanism of target-oriented specific impact – contributes to the restoration of the respiratory function, secretion and transport of mucus in the bronchi.

The multicomponent peptide bioregulator BreathTIDE PLUS (bronchopulmonary apparatus) contain: peptide complex NQ, Liquorice (root of Glycyrrhiza glabra, known as Radix Liquiritiae), N-acetyl-L-cysteine, selenomethionine, vitamin E, vitamin A, vitamin C, calcium hydrophosphate.

Clinical studies of multicomponent peptide bioregulator BreathTIDE PLUS were performed on the basis of the Nursing Department No. 2 of the St. Petersburg State Budgetary Healthcare Institution "Municipal Hospital No. 8" in patients with chronic bronchitis in acute stage between October 2015 and December 2015.

The medication therapy included prescription of the antibacterial drugs, drugs improving bronchial patency and bronchoalveolar lavage, increasing nonspecific stimulation, symptomatic therapy according to the branch «Standard of care» for this patients category.

The multicomponent peptide bioregulator BreathTIDE PLUS was prescribed peroral one capsule 2 times per day 20-30 minutes after meal with a sufficient amount of water, for 30-45 days. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

#### Clinical characteristics of patients

Treatment with the multicomponent peptide bioregulator BreathTIDE PLUS was performed in 8 patients (2 women and 6 men) with chronic bronchitis in acute stage. The average age of patients was 49.6±3.4 (between 39 and 65 years). The duration of the disease progression ranged from 12 to 34 years, progressive dynamics of the pathological process development was reported.

The Control group included 10 patients with a similar diagnosis, gender and age. All patients enrolled in the groups signed the Informed Consent before any information for the study was collected.

Patients complained of general malaise, periodic increase in body temperature to subfebrile values, increased fatigue, and cough with hard-to-recover sputum, expiratory dyspnoea at exercise and at rest. All patients were smokers with a smoking history from 10 to 45 years (average 19.7±6.2 years) and the average number of cigarettes smoked per day - 20 pieces.

The Control group patients were treated with medicines in common use. To the Main group Patients, in addition to standard medicines, the multicomponent peptide bioregulator BreathTIDE PLUS was prescribed: orally one capsule 2 times per day 20-30 minutes after meal with a sufficient amount of water, for 30-45 days, depending on the severity of the pathological process. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

### Methods of the study

To evaluate the efficacy of the multicomponent peptide bioregulator BreathTIDE PLUS, we analyzed the dynamics of patients' complaints, as well as objective indicators: general blood, urine, sputum tests, biochemical blood test.

### Results of the study

It was found that in all patients with chronic bronchitis in the acute stage, the use of the multicomponent peptide bioregulator BreathTIDE PLUS contributed to a decrease in the clinical manifestations of the inflammatory process: temperature normalized, manifestations of general malaise diminished, sputum discharge significantly facilitated, cough decreased. Especially important was the relief of expiratory dyspnoea. Normalization of the white blood cell count and leukogram were noted in the Main group on the days 8-10 of the study compared to the days 12-14 in the Control group. In 3 patients of the Control group, the course of the disease required the second antibacterial course, while in the Main group the antibiotics were not re-prescribed. A more rapid regression of clinical symptoms in patients of the Main group as compared to the Control group was found out (on average by  $2.3\pm0.8$  days).

It should be mentioned that a more stable and pronounced effect was noted with a longer duration of the multicomponent peptide bioregulator BreathTIDE PLUS administration – for 40-45 days, allowing to draw conclusions about dependence of clinical effect on the duration of this complex administration.

Monitoring patients, who received in complex therapy multicomponent peptide bioregulator BreathTIDE PLUS, we have not found out any side effects, complications or drug dependence. In no

case withdrawal of this medicine was required.

Thus, these results of the study performed are indicative of the clinical effectiveness of multicomponent peptide bioregulator BreathTIDE PLUS and advisability of its appointment and application in complex therapy and prevention of the bronchopulmonary apparatus diseases in combination with other pathogenetic and symptomatic therapy used to treat this category of patients.



### on results of the clinical use of the multicomponent peptide bioregulator **UrinaTIDE PLUS**

In recent years, a significant increase in the number of infections of the genitourinary system, determined by several factors, such as human lifestyle, steady growth of the average life expectancy, unfavourable ecological situation, organization of nutrition, drinking regime, etc., is been noted. Inflammatory diseases of the urinary system rank next to acute diseases of the upper respiratory tract among all infections, and are among the top ten in the overall sick rate. Chronic pyelonephritis is recorded in about a third of patients with urinary infections and it is the main cause of the chronic renal insufficiency progression, it accounts for almost 80% of cases of so-called "nephritic death".

Innovative development result - multicomponent peptide bioregulator UrinaTIDE PLUS with a well-thought-out mechanism of target-oriented specific impact – is aimed at normalizing the process of urination. It includes: peptide complex NW/1, doorweed or sparrow-tongue (Polýgonum aviculáre) herb extract, calcium hydrophosphate, vitamin B1 (thiamine hydrochloride), vitamin E (tocopherol acetate), vitamin PP (nicotinic acid, vitamin B3).

Clinical studies of multicomponent peptide bioregulator UrinaTIDE PLUS were performed on the basis of the Nursing Department No. 2 of the St. Petersburg State Budgetary Healthcare Institution "Municipal Hospital No. 8" in patients with chronic cystitises, pyelonephritises in the period from October to December 2015.

Medication therapy included prescription of antibacterial drugs, medicines that improve microcirculation in the kidneys and increase nonspecific stimulation, antihypertensive drugs (according to indications), symptomatic therapy according to the branch «Standard of care» for this patients category. An important factor in this category of patients is compliance with the recommended water consumption schedule.

The multicomponent peptide bioregulator UrinaTIDE PLUS was prescribed orally one capsule 2 times per day 20-30 minutes after meal with a sufficient amount of water, for 30-45 days. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

#### Clinical characteristics of patients

Treatment with the multicomponent peptide bioregulator Urina TIDE PLUS was performed in 18 patients (12 women, 6 men). 4 female patients had chronic cystitis; in other cases, delitescent chronic pyelonephritis was diagnosed. The average age of patients was 72.6+2.3 years (among 64 and 89 yers).

The duration of the disease progression ranged from 12 to 25 years, progressive dynamics of the pathological process development was noted: in 7 patients, chronic renal insufficiency, stage 2, was found out.

In the Control group, 14 patients were enrolled with a similar diagnosis, gender and age. All patients enrolled in the groups signed the Informed Consent before any information for the study was collected.

Patients complained of general malaise, periodic increase in body temperature to subfebrile values, increased fatigue. Pain syndrome in the lumbar region and dysuric disorders were not clearly expressed and were reported only in 8 patients of the Main group and in 5 patients – in the Control group. More than half of the patients had headaches, dizziness, were seeing spots due to increased blood pressure (in 12 and 10 patients of the Main and Control groups, respectively) and the development of anemic syndrome in 2 patients.

The Control group patients were treated with medicines in common use. To the Main group patients, in addition to standard medicines, the multicomponent peptide bioregulator Urina TIDE PLUS was prescribed: orally one capsule 2 times per day 20-30 minutes after meal with a sufficient amount of water, for 30-45 days, depending on the severity of the pathological process. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

### Methods of the study

To assess effectiveness of the multicomponent peptide bioregulator UrinaTIDE PLUS application, we analyzed the dynamics of patients' complaints, as well as objective indicators: general blood and urine test, including urinary sediment, biochemical blood test, ultrasound examination of the kidneys and bladder.

#### Results of the study

It was found that in all patients with chronic cystitis and chronic pyelonephritis, the use of the multicomponent peptide bioregulator UrinaTIDE PLUS contributed to a decrease in the clinical manifestations of the inflammatory process: body temperature normalized, manifestations of general malaise diminished, the pain and dysuric syndromes completely stopped. Especially important was the relief of urinary syndrome: normalization of erythrocyturia and leukocyturia were reported in the Main group on days 14-16 of the study, to compare with days 20-21 in the Control group. In 5 patients of the Control Group, the course of the disease required the second antibacterial course, while in the Main group the antibiotics were re-prescribed out of necessity to only two patients. A more rapid regression of clinical symptoms in patients of the Main group as compared to the Control group was found out (on average by  $3.6\pm1.1$  days). There was also a slight decrease in the parameters characterizing the presence of chronic renal insufficiency: a decrease in the level of creatinine in blood and urea.

According to the results of ultrasound examination of the kidneys and bladder, there was no significant dynamics in the state of the urinary system, namely, echogenicity, structural uniformity, size and deformation of the calyx-pelvis system. Therefore, in all patients remained ultrasound signs of chronic pyelonephritis. In patients with chronic cystitis, repeated examinations showed a decrease in the thickness of bladder walls due to a decrease in their oedema.

It should be mentioned that a more stable and pronounced effect of improving kidney function and absence of inflammatory process recurrences was noted with a longer duration of the multicomponent peptide bioregulator UrinaTIDE PLUS administration – for 40-45 days, allowing to draw conclusions about dependence of clinical effect on the duration of this complex administration.

Monitoring patients, who received in complex therapy multicomponent peptide bioregulator UrinaTIDE PLUS, we have not found out any side effects, complications or drug dependence. In no case withdrawal of this medicine was required.

Thus, these results of the study performed are indicative of the clinical effectiveness of multicomponent peptide bioregulator UrinaTIDE PLUS and advisability of its appointment and application in complex therapy and prevention of the kidney and bladder diseases in combination with other pathogenetic and symptomatic therapy used to treat this category of patients.



### on results of the clinical use of the multicomponent peptide bioregulator **MemoryTIDE PLUS**

#### Clinical characteristics of patients

The Control group included 13 patients with a similar diagnosis, gender and age.

All patients complained of headaches, increased blood pressure, dizziness, undue fatigue. Besides this, patients of senile age were disturbed by memory loss, inability to concentrate, to keep attention, sleep disturbances.

In all patients with consequences of acute circulatory disturbances, focal neurological symptoms were found out as a mild or moderately expressed hemiparesis and/or atactic syndrome of mild or moderate severity.

Duration of the course of the disease was from 3 to 8 months. All patients had previously undergone a course of therapy (including intensive therapy) in a specialized vascular center for the treatment of patients with cerebral strokes.

The patients of the Control group received therapy with application of medicines according to the branch "Standard" of care for this patients category. The Main group patients in addition to standard medicines were prescribed multicomponent peptide bioregulator MemoryTIDE PLUS orally one capsule 3 times per day, for 30-60 days, depending on the severity of the pathological process.

The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

#### Methods of the study

To evaluate the efficacy of the multicomponent peptide bioregulator MemoryTIDE PLUS application, we analyzed the dynamics of patients' complaints, as well as objective indicators: general blood and urine tests, biochemical blood test, test for assessing attention, short-term memory.

### Results of the study

It was found that application of the multicomponent peptide bioregulator MemoryTIDE PLUS improved the overall well-being of patients: in 10 of 14 patients (71.4%) with diagnosis "consequences of the acute cerebrovascular accident" and in 3 of 5 patients with the diagnosis "transient ischemic attack in the anamnesis" the regression of the main complaints was reported on average 4-6 days faster compared to the Control group. Such dynamics was most characteristic for people of younger age (58-70 years). The older age group had a similar but less pronounced dynamics of subjective indicators. However, since for the elderly, the absence of any changes is more common, such subjective feelings were characterized as very favourable.

The analysis of tests for the short-term memory evaluation showed an increase in the number of words kept in mind from 4-5 at the beginning of treatment to 6-7 at the end of the course, exceeding on average by 1.2 words similar indicators in the Control group. Similar in the parameters results were obtained in the tests for the assessment of attention.

It should be mentioned that a more stable and pronounced effect of improvement of cognitive functions was noted with a longer duration of the multicomponent peptide bioregulator MemoryTIDE PLUS administration for 45-60 days, allowing to draw conclusions about dependence of this clinical effect on the duration of the medication administration.

In 1/3 of patients of the Main group with focal neurologic symptoms severity of hemiparesis decreased by 1-2 points, also a decrease of ataxia manifestations was reported. In the Control group, there were no similar changes.

In all patients, there was a significant alleviation of main symptoms of the course of this group of diseases characterized by significant torpidity.

Monitoring patients, who received in complex therapy multicomponent peptide bioregulator MemoryTIDE PLUS, we have not found out any side effects, complications or drug dependence. In no case withdrawal of this medicine was required.

Thus, these results of the study performed are indicative of clinical effectiveness of the multicomponent peptide bioregulator MemoryTIDE PLUS and advisability of its appointment and application in complex therapy and prevention of the cerebrovascular diseases of the brain in combination with other pathogenetic and symptomatic therapy used to treat this category of patients.



### on results of the clinical use of the multicomponent peptide bioregulator JointsTIDE PLUS

### Clinical characteristics of patients

The Control group included 10 patients with a similar diagnosis, gender and age. Patients with osteoarthritis of the knee joints complained of pain and limited flexion and extension in the joints while walking. In the older age group, the characteristic features were joints deformation, atrophy of the femoral muscles, and weakening of the ligamentous apparatus of the joints.

Patients with osteochondrosis of the spine often reported the appearance of pain in the lower back with irradiation along the sciatic nerve, greatly increasing when changing position of the body, walking, on exertion.

The duration of the disease progression ranged from 5 to 20 years, progressive dynamics of the pathological process development was reported.

All patients had received for along time analysics and anti-inflammatory medicines, which application used to give a short-term therapeutic effect requiring an increase of the medicines dose for the course of treatment and an increase of their administration duration.

The Control group patients were treated with medicines in common use. The Main group patients in addition to standard medicines were prescribed multicomponent peptide bioregulator JointsTIDE PLUS: orally one capsule 2 times per day 20-30 minutes after meal with a sufficient amount of water, for 30-45 days, depending on the severity of the pathological process. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

### Methods of the study

To assess the effectiveness of the application multicomponent peptide bioregulator JointsTIDE PLUS we analyzed the dynamics of patients' complaints, as well as objective indicators: general blood, urine tests, biochemical blood test, X-rays of joints.

#### Results of the study

It should be mentioned that X-ray symptoms of degenerative-dystrophic diseases of the joints and spine are not only objective diagnostic criteria for the stages of the pathological process development, but also have great prognostic significance for the drug therapy.

It was found that application of the multicomponent peptide bioregulator JointsTIDE PLUS in patients with osteoarthrosis of knee joints contributed to a decrease in pain syndrome and increased joints mobility, as well as in patients with osteoporosis of knee joints in 66.7% of cases. Herewith, the most complete pain symptomatology disappeared with the radiologically determined initial stages of the disease, narrowing of the joint gap between the patella and the thigh, lateral patellar osteophytes and the femoral condyle. No significant changes in radiological symptoms were observed.

In patients in the advanced stage of arthrosis, a similar but less pronounced dynamics of subjective indicators was observed. Since this stage of the disease was diagnosed in the older age group, such subjective feelings were characterized as very favourable.

In patients with osteochondrosis of the lumbar spine, multicomponent peptide bioregulator JointsTIDE PLUS application against a background of complex therapy, contributed to the reduction of pain syndrome in 60% of cases. Such dynamics was most common in middle-aged persons. Progressing with age, the course of the disease, accompanied by characteristic radiographic symptoms (luminal narrowing between adjacent vertebral bodies due to flattening of degenerate intervertebral discs, formation of anterior and posterior osteophytes of vertebral bodies, presence of arthrosis changes in the posterior and lateral intervertebral joints in the form of narrowing of the cracks, uneven contours, development of osteophytes along the ends of the articular ends, changes in the configuration of the intervertebral apertures), luminal narrowing between adjacent vertebral bodies due to flattening of degenerate intervertebral discs, formation of anterior and posterior osteophytes of vertebral bodies, presence of arthrosis changes in the posterior and lateral intervertebral joints in the form of narrowing of the cracks, uneven contours, development of osteophytes along the ends of the articular ends, changes in the configuration of the intervertebral apertures. In these cases, the long-term (not less than 45-60 days) application of the multicomponent peptide bioregulator JointsTIDE PLUS against a background of complex therapy smoothed the pain symptoms arising from the load on the spine and lower limbs and promoted increasing mobility of the spine. In all patients, a significant alleviation of the main symptoms of the course of this group of diseases characterized by significant torpidity was reported.

Monitoring patients, who received in complex therapy multicomponent peptide bioregulator JointsTIDE PLUS, we have not found out any side effects, complications or drug dependence. In no case withdrawal of this medicine was required.

Thus, these results of the study performed are indicative of clinical effectiveness of multicomponent peptide bioregulator JointsTIDE PLUS and advisability of its appointment and application in complex therapy and prevention of degenerative-dystrophic diseases of the joints and spine in combination with other symptomatic and pathogenetic therapy used to treat this group of diseases.



### on results of the clinical use of the multicomponent peptide bioregulator LiverTIDE PLUS

#### Clinical characteristics of patients

The Control group included 3 patients with a similar diagnosis, gender and age. The course of chronic liver disease is characterized by a long absence of symptoms of the disease: For a long time a person can feel healthy, noting only increased fatigue. Pain in the right upper quadrant, where the liver is located, is rare during chronic hepatitis and cirrhosis; and may be due to an associated gallbladder or, located close, the duodenal ulcer, colon lesion. Another cause of the asymptomatic course of chronic liver lesion is its significant compensatory and regenerative mechanisms. Long-term absence of liver symptoms is the main reason for late detection of liver diseases.

The main complaints presented by patients are typical for toxic polyneuropathy (concomitant pathology in patients enrolled in the study) and consisted of general weakness, increased fatigue, weakness and paresthesia in the lower limbs, difficulty walking.

All patients had not received any medicinal treatment before, because the detection of chronic toxic hepatitis was essentially accidental (due to the absence of characteristic complaints and clinical symptoms). The Control group patients were treated with medicines in common use. To the Main group Patients, in addition to standard medicines, the multicomponent peptide bioregulator LiverTIDE PLUS was prescribed: orally one capsule 2 times per day for 30-45 days, depending on the severity of the pathological process. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

### Methods of the study

To assess the effectiveness of the multicomponent peptide bioregulator LiverTIDE PLUS application, we analyzed the dynamics of patients' complaints, as well as objective indicators: general blood, urine tests, biochemical blood test, results of ultrasonic examination.

### Results of the study

It was found that in all patients with chronic toxic hepatitis, the use of the multicomponent peptide bioregulator LiverTIDE PLUS contributed to a decrease in the clinical manifestations of the hepatic decompensation, Decrease and stabilization of biochemical parameters of hepatic transaminases (ALT, ACT), alkaline phosphatase, blood amylase.

After a long administration of the complex (more than 30 days), the above biochemical parameters were normalized in half of the patients of the Main group. A more rapid regression of clinical symptoms in patients of the Main group as compared to the Control group was found out (on average by  $4\pm1.4$  days). Also a regression of symptomatic toxic polyneuropathy in the form of an increase and / or restoration of sensitivity in the lower extremities, improvement of gait and stability during walking was reported.

It should be mentioned that the data of echogepatografy (ultrasonic examination of the liver) are not only objective diagnostic criteria for the pathological process development stages, but also have a great prognostic significance in the ongoing medicinal therapy.

The results of the liver ultrasound examination showed a decrease in the dynamics of its size on average by  $17.8\pm2.3$  mm in patients of the Main group, and by  $12.4\pm2.2$  mm in patients of the Control group. Significant dynamics of hepatic sonographic indicators, namely ehogennosti, structural homogeneity was not observed. Thus, all patients retained ultrasound signs of fatty liver hepatosis.

It should be mentioned that a more stable and pronounced effect of liver functions improving was noted with a longer duration of multicomponent peptide bioregulator LiverTIDE PLUS administration for 40-45 days, allowing to draw conclusions about dependence of this clinical effect on the duration of this complex administration.

Monitoring patients, who received in complex therapy multicomponent peptide bioregulator LiverTIDE PLUS, we have not found out any side effects, complications or drug dependence. In no case withdrawal of this medicine was required.

Thus, these results of the study performed are indicative of clinical effectiveness of the multicomponent peptide bioregulator LiverTIDE PLUS and advisability of its appointment and application in complex therapy and prevention of the liver diseases in combination with other pathogenetic and symptomatic therapy used to treat this category of patients.



on results of the clinical use of the multicomponent peptide bioregulator **Bone-marrowTIDE PLUS** 

### Clinical characteristics of patients

The Control group included 13 patients with a similar diagnosis, gender and age. The main typical for IDA complaints, presented by patients, are nonspecific and consisted of general weakness, increased fatigue, sweating, dizziness, noise in the ears and head, dry skin, layering and fragility of nails. Twelve patients received periodically iron medications or some other medicinal therapy. However, this was uncontrolled and it is impossible to estimate its effectiveness.

The Control group patients were treated with medicines in common use. The Main group patients in addition to standard medicines were prescribed the multicomponent peptide bioregulator BonemarrowTIDE PLUS orally one capsule 1 - 2 times per day for 30-45 days, depending on the severity of the pathological process. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

### Methods of the study

To assess the effectiveness of the multicomponent peptide bioregulator Bone-marrowTIDE PLUS administration, we analyzed the dynamics of patients' complaints, as well as objective indicators: general blood and urine test, biochemical blood test, oesophagogastroduodenoscopy (EGDS), faecal occult blood test.

### Results of the study

It was found that the use of the Bone-marrowTIDE PLUS in all patients with IDA contributed to a decrease in the clinical manifestations of the disease, improvement and stabilization of general clinical and biochemical parameters of blood. The hemoglobin level increased by an average of  $24.3 \pm 6.7$  g/L, such indicators as microcytosis, aniso- and poikilocytosis, improved. Significantly increased the index of non-hemoglobin iron, ferritin. After a long-term administration of the complex (more than 30 days), in the main group, the above biochemical parameters were normalized in a half of the patients. A more rapid regression of clinical symptoms in patients of the Main group as compared to the Control group was found out (on average by  $3.1\pm1.4$  days)

Based on the results of EGDS, in 2 patients of the Main group and in 2 patients of the Control group, erosive processes in the stomach were found. At repeated examination on days 20-24 after the performed therapy, erosions were not revealed.

It should be mentioned that a more stable and pronounced effect of the blood parameters improvement was noted with a longer administration of the multicomponent peptide bioregulator Bone-marrowTIDE PLUS for 40-45 days, allowing to draw conclusions about dependence of this clinical effect on the duration of the complex administration.

Monitoring patients, who received in complex therapy multicomponent peptide bioregulator Bone-marrowTIDE PLUS, we have not found out any side effects, complications or drug dependence). In no case withdrawal of this medicine was required.

Thus, these results of the study performed are indicative of clinical effectiveness of the multicomponent peptide bioregulator Bone-marrowTIDE PLUS and advisability of its appointment and application in complex therapy and prevention of the IDA in combination with other pathogenetic and symptomatic therapy medications used to treat this category of patients.



### on results of the clinical use of the multicomponent peptide bioregulator CardioTIDE PLUS

#### Clinical characteristics of patients

The Control group included 6 patients with a similar diagnosis, gender and age.

All patients complained of anginal pain, shortness of breath during exercise, restriction of physical activity, headaches, high blood pressure (BP), periodic oedema on the legs and in the periorbital area.

The duration of the disease progression ranged from 8 to 19 years, progressive dynamics of the pathological process development was reported.

All patients used to received basic therapy for a long time, which gave a short-term therapeutic effect, requiring correction in stationary conditions.

The Control group patients were treated with medicines in common use. The Main group patients in addition to standard medicines were prescribed multicomponent peptide bioregulator CardioTIDE PLUS orally one capsule 2 times per day 20-30 minutes after meal with a sufficient amount of water, for 30-45 days, depending on the severity of the pathological process. The contraindication was considered to be an increased individual sensitivity to the components of the medicine.

#### Methods of the study

To assess the effectiveness of the multicomponent peptide bioregulator CardioTIDE PLUS administration, we analyzed the dynamics of patients' complaints, as well as objective indicators: general blood and urine test, biochemical blood test, Holter monitoring of the electrocardiogram (ECG) and PB, performed on the system "Kardiotehnika-4000", data of echocardiography (ultrasound examination of the heart).

#### Results of the study

It should be mentioned that the data of echocardiography (ultrasound examination of the heart) are not only objective diagnostic criteria for the pathological process development stages, but also have great prognostic significance for the medicinal therapy.

It was found that administration of the multicomponent peptide bioregulator CardioTIDE PLUS inpatients with CHD, myocardial infarction suffered in the past in combination with hypertension (arterial hypertension, II degree, risk of cardiovascular complications, 4 degree), chronic cardiac insufficiency, II-III functional class, (NYHA) contributed to a decrease in the intensity and multiplicity

of anginal pain, a decrease in the clinical manifestations of chronic cardiac insufficiency (dyspnea with physical exertion, edematous syndrome), reduction and stabilization of arterial hypertension. A more rapid regression of clinical symptoms in patients of the Main group as compared to the Control group was found out (on average by  $2.1\pm0.21$  days). A decrease in the expenditure of "short" nitrates up to complete failure in patients with manifestations of postinfarction angina was reported.

Essential dynamics of echocardiographic parameters was not observed. However, we noted a tendency to increase the ejection fraction by 4-6% after 30-45 days of the multicomponent peptide bioregulator CardioTIDE PLUS administration.

In patients of the older age group, a similar but less pronounced dynamics of subjective indices was observed, which was also qualified as a positive effect of the therapy.

It should be mentioned that a more stable and pronounced effect of improving the functions of the cardiovascular system was noted with a longer duration of the multicomponent peptide bioregulator CardioTIDE PLUS administration for 40-45 days, allowing to draw conclusions about dependence of this clinical effect on the duration of the medication administration.

Monitoring patients, who received in complex therapy multicomponent peptide bioregulator CardioTIDE PLUS, we have not found out any side effects, complications or drug dependence. In no case withdrawal of this medicine was required.