

THE MILLIMETRIC THERAPY'S APPLICATION IN CARDIOLOGY

THE FILL-IN

The millimetric therapy is a therapeutic action by electromagnetic millimetric waves (1 - 10 mm) extremely high frequencies (30 - 300 GGC) and low intensity (less than 10 mVt/sm²).

Central and peripheral nervous system, nonspecific adaptive, protective and regulatory systems of the organism take part in the therapeutic effect.

Millimetric electromagnetic millimetric waves are absorbed by skin receptors and makes normalizing influence to vegetative nervous system, endocrinal system and immunity system. Also it makes good influence to neuro-immuno-endocrinal factor's (including the systems of glucocorticoids' and opioids' regulation, markers of antioxidant and pro-oxidant protection) synthesis and reception.

These effects evident in anti-inflammatory, analgetic and anti-edema actions, good tissue's regeneration, high nonspecific resistance of the organism (thanks for the stimulation of immunity), general and regional hemodynamics' improvement, antistress effect, normalization of vegetative nervous system's regulation.

For the last 30 years of millimetric therapy's application in Russian medicine a lot of scientific researchers are investigated, tens of new medical technologies are approved and introduced, many theses are defended, many monographs are written, many patients are treated.

During more than 30 years millimetric therapy showed poly-medical effect of millimetric waves, an absence of unfavorable late fates, side effects and absolute contraindications. (T.A.Ordynskaya, P.V.Poruchikov, V.F.Ordynskiy, 2008)

THE ABSTRACT OF APPLICATIONS OF MILLIMETRIC THERAPY IN CARDIOLOGY

Last year's millimetric therapy is imagined as a most promising non-drug method for treatment of cardiac diseases.

According to data from scientific literature, the using of millimetric therapy for the patients with 1-2 class hypertension shows the hypotension effect for the decrease of blood's minute volume and peripheral vascular resistance; normalization of vascular tone and vegetative system.

Millimetric therapy makes a good influence for peripheral vascular tone.

The rheoencephalography and peripheral rheovasography during the treatment show the improvement of cerebral circulation and peripheric circulation for the pulse volume's increase and vascular tone's normalization.

Millimetric therapy makes a good influence for the hemostasis and fibrinolysis of the patients with cardiac infarction. This influence manifests by the blood's anticoagulating and fibrinolytic potential's activation, which forwards to blood's rheology's improvement and microcirculation's regeneration in the zone around the infarction.

After the course of millimetric therapy in acute period of myocardial infarction, the tolerance for physical exercise is better as compared with the control. It's noted good influence of millimetric therapy to main indexes of electrocardiogram (ΣR и ΣQ). It's observed a decrease or full disappearance of pain syndrome.

The using of millimetric therapy for the patients with ischemic heart disease in the period of preparation for coronary artery bypass grafting, in aggregate with traditional medical treatment, makes it possible to decrease average number of cardiac attacks for 31,5%, painful myocardial ischemia for 21,2%, average number of ventricular ectopic beats per day for 30,7%, supraventricular ectopic beats - for 26% relative to raw data. This is in twice better than the data from control group's patients. The improvement of myocardial metabolism show itself by the lack of postoperative myocardial infarctions.

The course of millimetric therapy decreases the myocard's readiness for the arrhythmias, which usually occurs after reperfusional stress. Clinical effect of presurgical millimetric therapy shows itself in improvement of heart possibility to sinus rhythm's restoration, decrease of arrhythmia's frequency and severity, defibrillation's limen's decrease. Cardioprotective and anti arrhythmic effects of millimetric therapy associate with an activation of stress-limiting systems of the organism, which are detected by the decrease of acid polypeptide's HSP-70 synthesis in ischemic tissue sampling.

Millimetric therapy in the period of rehabilitation after coronary artery bypass grafting can decrease the rate of cardiac attacks, cardiac decompensation, angina pectoris. It also improves central hemodynamics in the rest and physical activity, increase the tolerance for physical activity, decrease the rate of ventricular and supraventricular extrasystoles.

The publications, in which completed controlled cases of millimetric therapy using was described, were studied for this analysis. Observable groups were comparable by the age, sex, severity and duration of the disease, concomitant disease's availability.

Millimetric therapy wasn't investigated in control groups; sometimes an imitation of millimetric therapy was investigated. Blind method was used for control (placebo-control). All statistical data manipulations are adequate.

Contacts for cooperation:

Prof. Dr. med. Dmitrii Medvedev, MD, Ph.D.

Head of the laboratory of rehabilitation, St. Petersburg Institute of gerontology and Bioregulation



Professor, Department of rehabilitation and traditional methods of treatment, St. Petersburg Medical-Social Institute

Medical Advisor, Triomed, LLC, St. Petersburg

Corresponding Member, Russian Academy of Medical and Technical Sciences

“Triomed” LLC
Ligovskiy Prospect , 10/118
Office Center «Oktyabrskiy»
Office 5141
Saint-Petersburg, Russia
+7 911 098 2285
rsc-ide@yandex.ru