

EXPERIENCE OF USE IN OUTPATIENT OZONE THERAPY FOR PREVENTION AND REHABILITATION OF PATIENTS AFTER MYOCARDIAL INFARCTION

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✓ Resume

Ozone therapy and physiotherapy are used for rehabilitation and intensive treatment of patients. According to most scientists, they are used with 95% effect. As well as cardiovascular disease increases, such as myocardial infarction. In addition, diseases of the circulatory system are the main pathology that characterizes the number of deaths in our country. Rehabilitation therapy in the clinic is not effective enough for cardiovascular diseases [5,6,7,8].

Key words: ozone therapy, myocardial infarction, prevention, rehabilitation, cardiovascular pathology.

ОПЫТ ПРИМЕНЕНИЯ В АМБУЛАТОРНЫХ УСЛОВИЯХ ОЗОНАТЕРАПИИ (ОЗ) ДЛЯ ПРОФИЛАКТИКИ И РЕАБИЛИТАЦИИ БОЛЬНЫХ ПЕРЕНЕСШИХ ИНФАРКТ МИОКАРДА

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✓ Резюме

Озонотерапия и физиотерапия используются для реабилитации и интенсивного лечения пациентов. По информации большинства ученых, они используются с 95% эффектом. А также сердечно-сосудистых заболеваний увеличивается, таких как инфаркт миокарда. Кроме того, заболевания системы кровообращения являются основной патологией, характеризующей количество смертей в нашей стране. Реабилитационная терапия в поликлинике недостаточно эффективна при сердечно-сосудистых заболеваниях [5,6,7,8].

Ключевые слова: озонотерапия, инфаркт миокард, профилактика, реабилитация, сердечно - сосудистая патология.

МИОКАРД ИНФАРКТИГА УЧРАГАН БЕМОРЛАРНИ ОЛДИНИ ОЛИШ ВА РЕАБИЛИТАЦИЯ ҚИЛИШ УЧУН АМБУЛАТОРИЯ ШАРОИТИДА ОЗОН ТЕРАПИЯСИ (ОЗ) ДАН ФОЙДАЛАНИШ ТАЖРИБАСИ

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✓ Резюме

Озон терапияси ва физиотерапия беморларни реабилитация қилиш ва интенсив даволаш учун қўлланилади. Кўпчилик олимларнинг фикрича, улар 95% таъсир билан ишлатилади. Шунингдек, миокард инфаркти каби юрак-қон томир касалликлари кўпаймоқда. Бундан ташқари қон айланиш тизими касалликлари мамлакатимизда ўлим сонини ифодаловчи асосий патология ҳисобланади. Поликлиникада реабилитацион даволаш юрак-қон томир касалликлари учун етарли самарага эга эмас [5,6,7,8].

Калит сўзлар: озон терапияси, миокард инфаркти, олдини олиш, реабилитация, юрак-қон томир патологияси.

Relevance

In recent years published a number of papers are devoted to the rehabilitation of persons after myocardial infarction (MI), but to date doctors, therapists conducting outpatient stage of rehabilitation, do not have clear recommendations on the scope and duration of the treatment of patients early after mi, based on functional class (FC) coronary heart disease (CHD). Methods ozone therapy and physiotherapy are increasingly used in the treatment and rehabilitation of patients to THEM [1,3,9,12].

According to most authors, the efficiency is 90 - 95%. However, in recent years the increase of cardiovascular pathologies, including myocardial infarction. In addition, diseases of the circulatory system are the main pathology, which determines the mortality rate in our country. This shows the importance of the

polyclinic stage of rehabilitation of patients with cardiovascular diseases [2,4,10,11].

Material and methods

The work is done in the Department of rehabilitation and physical training (sports medicine) ASMI city of Andijan regional cardiology clinic, and Central district hospital district of Andijan region of Uzbekistan.

The study included 154 patients (Fig.1), including 38 women (25%) and 116 men (75%) aged 30-68 years.

Patients were sent for rehabilitation by cardiologists of regional polyclinics and cardiological dispensaries.

The control group consisted of 138 people (Fig. 2) who underwent rehabilitation until 2014, in whom FC was not determined and ozone therapy was not performed. Of these, 31 (22%) transferred small focal, 68 (49%) large focal, and 39 (29%) transmural MI.

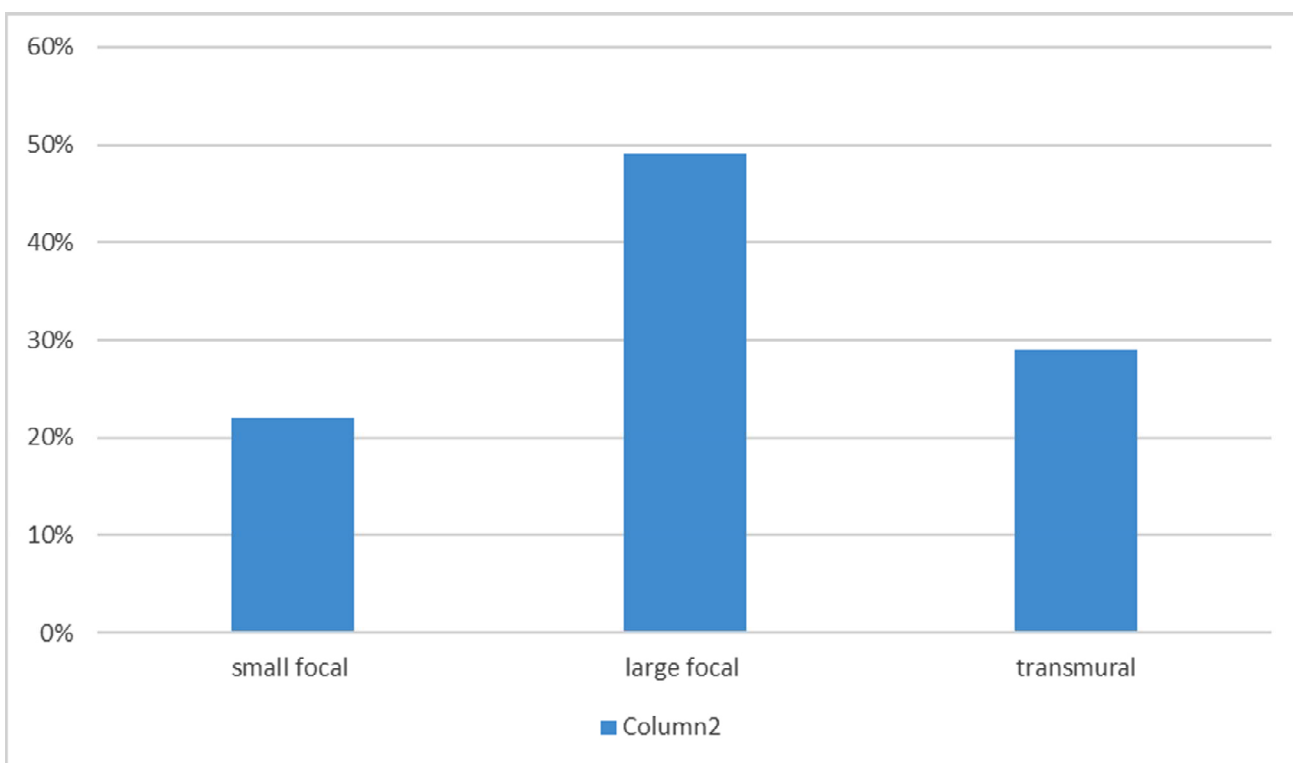
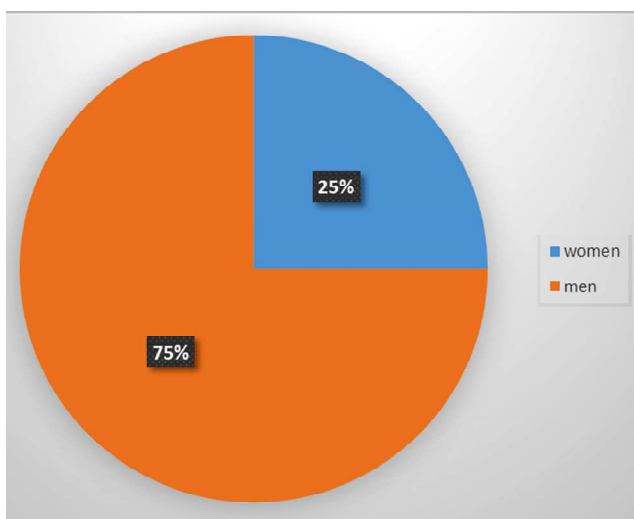


Fig. 2. The composition of the control group.

In practical work used functional classification of patients with cardiovascular disease proposed by the New York Association of cardiologists (6).

Results and their discussion. Rehabilitation and ozone therapy was carried out in three modes: gentle, gentle, trainees (4). Depending on the mode of physical activity the program included: physiotherapy, dosed walking, exercise on a stationary bike, Jogging dosed, prevention or autogenic training, oxygen, vitamin, or drug cocktails, ozone therapy, in the absence of contra indications massage.

Ozone therapy in rehabilitation all patients started with the implementation of the sparing regimen of physical activity. On average, this period of rehabilitation lasted 14 days. In the appointment of the gently-training regime has taken into account the patient's state of health, the reaction of the cardiovascular system under load took into account

the time elapsed from the date of the disease. The duration of this period of rehabilitation was on average equal to 25 days. When you assign a training regime took into account all the above factors and perform the test with 25 sit-UPS with support. The time spent executing the samples were fixed, rating Series1; men; 75%; 75% Series1; women; 25%; 25% men women small focal large-focal transmural 17 was carried out according to conventional methods. Rehabilitation was considered to be completed if the patient performed the test with 20 squats without support for the same time that it took to complete the same samples or translated into a coaching regime or faster, provided a positive assessment of the reaction to the load. The duration of the rehabilitation period averaged 30 days.

In the control group of 118 patients started the rehabilitation course excluding FC and ozone therapy, completed the course 78 (58%), 63(42%) stopped visiting

lesson on not depending on our reasons, mostly due to the fact that he was discharged for work and was unable to visit rehab facilities. On average polyclinic stage of rehabilitation in this group was 73 days.

Of the 134 patients of the main group, which is ozone therapy, FC was determined: 10 sets IU 78-II 39=III, 7 - IV FC. Patients with 1 FC started classes immediately gently-training regime. Rehabilitation the activities included in the program of gentle treatment were administered to patients with II, III, IV, FC, finished this stage of rehabilitation averaging at II for 6 days, from III for 15 days and IV for 28 days.

The rehabilitation program according to the light regime consisted of gymnastics, dosed walking, oxygen cocktails, ozone therapy, prevention, training on a stationary bike for 3-5 min. without load and massage.

In the appointment of the gently-training regime has taken into account the tolerance of the load on the previous stage, the patient's general condition, the tolerance to physical load (TFN), training on the Ergometer. The power of picked individually, taking into account the recommendations of the cardiologists who conducted the definition of TFN.

For visual monitoring of cardiac activity used the portable electrocardioscope (PAX-01) connected to a single channel electrocardiograph. Recorded thoracic abduction V5. In addition, we measured heart rate and blood pressure, while exercising on the cycle Ergometer was slowly increased to 5 min at the occurrence of a criterion for termination of the samples taken when defining exercise capacity, exercise was stopped and the patient was sent for consultation to the cardiologist to correct motor mode (1).

Patients with FC 1 were at this stage on average 8 days, with the II -13 days, III-19 days. Came patients with FC IV, came out of rehab at this stage, since the further expansion of the motor mode was associated with the risk for their health.

The course on the training regime has allowed patients, well carrying the load of the previous stage of rehabilitation. The exercise program included in addition to the above funds, measured running, sedentary games, autogenic training.

Patients with 1 FC were in the final stage an average of 14 days, with the II-18 days, and the III is 24 days. Of the 134 patients who started to undergo rehabilitation, a complete training 106 (79%), 28 (21%) stopped attending classes earlier than we term not depending on us reasons. Patients who came to rehabilitation with the I FC, were on rehabilitation in an average of 22 days, with the II - outpatient stage took place on average for 37 days, with III - an average of 58 days, and IV - an average of 64 days.

Conclusions

Thus, the data obtained provide evidence that a comprehensive prophylactic treatment of O3-ozone therapy and the definition of FC will give the opportunity to individualize the rehabilitation program, which contributes to more rapid restoration of the health of patients undergoing THEM. The personalization program will also enable you to complete the course of rehabilitation to a greater number of patients referred for restorative treatment.

LIST OF REFERENCES:

1. The Ministry of Health of the Republic of Uzbekistan, the Institute of Health and Medical Statistics, "Static Materials of Medical Institutions of the Ministry of Health of the Republic of Uzbekistan for 2015" Tashkent 2016.
2. Sumin A.N., Barbarash O.L. Features of cardiological rehabilitation in older age groups. *Cardiosomatics* 2010; 1: 51-62.
3. Apanasenko G.A., Naumenko R.G. II Q. - *Balneologist* - 2014, No. 4-c. 59-61.
4. Alekhina, S.P. Ozone therapy: clinical and experimental aspects / S.P. Alekhina, T.G. Scherbatyuk. - N. Novgorod: Litera, 2003.- 240 p. 615.83 A-491 Ab / scientific
5. Kamaev I.A. Ozone therapy: the pros and cons [Electronic resource] / I.A. Kamaev, M.N. Mushroom, E.A. Perevezentsev / Actual problems of modern medicine. - Yekaterinburg: B.I., 2014. - S. 151-154.
6. Chumakova G.L.O., Kiseleva E.V., Aleshkevich V.V., Chursina V.I. Choosing the optimal intensity of physical training in patients with myocardial infarction and arterial hypertension, *Journal of Heart Failure*. 2012; 5: 50-54
7. Efremushkin G.G., Antropova O.N., Osipova I.V. Physical rehabilitation in complex therapy of patients with low cardiac output. *Tech archive* 2013; 75 (12): 50-54
8. Repin A.N., Lebedeva E.V., Sergienko T.N.O., Karpov R.S., Comprehensive rehabilitation of patients with coronary heart disease in combination with anxiety-depressive disorders, *Cardiosomatics* 2016; 1: 32-38
9. Nikolaeva L.F. Aronov D.M. Rehabilitation of patients with coronary heart disease - M., 1988. 9. Prevarsky B.P., Shatko V.N. // *Cardiology* - 2012, No. 1-c. 68-71.
10. Teplyakov A.T. Ischemia and myocardial infarction / A.T. Teplyakov, A.A. Garganeeva. - Tomsk: Publishing house Tom. University, 2014. 497 p.
11. Aspects on the intensity and the relief of pain in the prehospital phase of acute coronary syndrome: experiences from a randomized clinical trial / C. Zedigh [et al.] // *Coron. Artery Dis.* - 2010. - Vol. 21. - № 2. - P. 113-120.
12. Cohen M. Therapy for ST-Segment elevation myocardial infarction patients who present late or are ineligible for reperfusion therapy / M. Cohen, C. Boiangiu, M. Abidi // *J. Am. Coll. Cardiol.* - 2010. - Vol. 55. - P. 1895-1906.

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