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PATIENT RECOVERY POST MYOCARDIAL HEART ATTACK WITH HYDROTHERAPY

***Vizitiu Elena*[1],**
***Benedek Florian*[2],**
University "Ștefan cel Mare" from Suceava

Abstract. *The study is aimed at recovering the patient post myocardial infarction and kinetotherapist role in improving quality of life through the application of funds from hidrokinetotherapy. Hidrokinetotherapy programme seeks to play a part as possible physical and psychological possibilities and expeditious reintegration into family life, the patient's social and professional. We want the recovery program to optimize the work of the cardiovascular apparatus of the patient, physical exercises in water at the same time helping to restore functionality of the myocardium and coronary system.*
Keywords: *myocardial infarction, patient, recovery, hidrokinetotherapy.*

Introducere. Hidrokinetoterapia has the influence on the cardiovascular, and kinetoterapeutului strategy in cardiac pathology is of paramount importance, since in recent decades, myocardial infarction took a large-scale among adults age III. The exercises will run in water include many benefits and can be defined as the art of harmonizing functions combined with respiratory movements, performed in the aquatic environment, in order to give the body a steady propulsion and continuously in a certain rhythm [1, 2].

Thus, exercises performed correctly dosed and contribute to the development of lung capacity and physical resistance to their patients, to the development of harmonious, prophylaxis and therapy of cardiovascular diseases, the medical rehabilitation and relaxation [4, 5].

Recovery or rehabilitation of persons with cardiac disease is defined by the World Health Organisation as "a set of measures aimed at improving the ability of playing physical and or mental patients, letting them by means own reintegration into society".

In this sense, the physical therapist has an essential role in the recovery of the persons post myocardial infarction, it is proposed that physical exercises to overcome in a complex process to optimize the physical condition and avoid Vasily Stalin. By implementing a program of individualized, hidrokinetotherapy, progressive controlled, supervised, and the psychological recovery of the patient.

Among frequent pathologies of cardio-vascular system include myocardial infarction, which is defined as a part of becoming necrotic cardiac due to reduce or stop blood circulation in one of the coronary artery branches through a thrombus (clot or) transported through the bloodstream to the heart [3, 5, 6].

The therapist will guide you in achieving recovery after the early stages of mobilization of patients with this pathology, instituted by the International Society of Cardiology: stage I involves making some slight movements of the limbs, enabling it after a while and making minimum ADL;

Stage II allows positioning of the seated without support;

Stage III adds both borrowings from seated position at the edge of the bed and the Chair

In Stage IV, the patient is allowed to move;

Stage V includes exercises carried out free, but under the supervision of the therapist;

Stage VI allowed the patient to make a more intensive effort-boarding a floor;

Stage VII is considering moving outdoors, increasing distance, in comparison to the previous stage.

Respiratory gymnastics should not be omitted, which through specific exercises, diaphragmatic and thoracic both helps an early recovery.

Material and methods

Thesis hypothesis assumes that by implementing a program of exercises in water are positive influences a person's recovery post myocardial

infarction. The aim of the study is to demonstrate that hydrokinetotherapy means you can increase the capacity of effort and it can improve the patient's quality of life post myocardial infarction. Recovery via hydrokinetotherapy starts after approximately 3 months after the onset of myocardial infarction.

Organization and methods research. In carrying out the scientific article, we used the self-study method, which involves informing the theoretical and practical specialised literature, in the interests of attaining fair and recoveries. Of the methods we have used verbal explanation to illustrate and clarify the steps of recovery programme, in order to foster conversation method motivation and initiative, as well as the interest towards the program of recovery. As intuitive or nonverbal methods, we used the demonstration, practice, through which exposes the patient what they must accomplish in the end. The recovery program is used, individual training conducted by us in the first part of the program of recovery and undirected, in part two, and consolidation. I have never used the case study method, the graphical method.

The present study was carried out with a patient (A.N.) aged 48 years, diagnosed with acute myocardial infarction and who, following a coronarografii confirming that an artery or a part of it no longer operates at full capacity, it has been established, for prolonging life, installing a coronary stent.

The patient's recovery began immediately after the intervention, but the hidrokinetotherapy program I've started after 3 months of the onset of myocardial infarction in the Aquatics Complex and Kinesiology USV (swimming pool), for a period of 12 weeks. The frequency of the meetings was 2 per week, each meeting lasted 15 minutes initially but ended towards the end of the programme to 30 minutes in the water

In drawing up the scheme of treatment, the therapist takes into account a number of well-established objectives: choosing the most effective methods for the purpose of decreasing the recovery period; awakening the interest of the patient for physical activity; increase in capacity of maximum exertion; psychological recovery of the patient through the regaining of self-confidence, social reintegration and retraining; reduce relapses of the disease; restoring physiological balance of the patient; increased life expectancy.

Considering the fact that the patient had undergone surgery, could not perform the actual tests, and initial assessment consisted in recording of blood pressure values (TA), cardiac frequency (FC) and respiratory frequency (FR). Therefore, the patient came to the recovery program with the following values: TA-142/89 mmHg, FC-100 beats/minute, and FR-breathing 22/min.

Each meeting had the following structure: warming the body outside the pelvis; simple exercises ploeștiori or light in water; the program itself; breathing exercises.

The actual schedule of therapy was the following:

- Heat the body outside the swimming pool;
- Simple, light exercises in water: walking on the toes, walk with a knee lift at 90°.

The actual swimming program - in weeks 1-3 involves accommodation patient with the treatment program and the aquatic environment, as follows:

- Aquatic respiration - the patient is instructed to breathe properly, respecting the phases breathing (inspiration and expiration).
- Fly on the back 5x;
- Slip on the rear 4x7,10,15 m;
- Initiation in the 2 x 10 m brass process;
- Initiation in the crack, back 2x10 m.

Respiratory gymnastics, which means:

- Walk back with inspiration and slow and profound expiration.
- Inspire by moving arms to the side and returning with expiration.
- Expire on the surface of the water, causing small waves.

During the 6-7-8 treatment, program meet-

ings are amended under the following aspects: the distance which it traverses the patient increases, reaching the swimming 2x15 m lap swimming and in the process; 2x15 m bras.

Towards the end of the program-weeks 9-10, 11, 12, gets to last 30-35 meeting minutes, the patient's entire length swimming pool two times each method of swimming - 2x25m.

Analysis and interpretation of results. At the end of the hidrokinetotherapy program, were registered, compared to normal values, the following changes:

Table 1. Normal values Comparison, the initial and those obtained after treatment

	Normal values	Initial values	Values obtained after treatment
Blood pressure	129/85 Mmhg	142/89 Mmhg	132/83 Mmhg
Cardiac frequency	60-80 beats/ minute	100 beats/ minute	85 beats/minute
Respiratory frequency	16-18 breath/ minut	22 breath/ minute	19-20 breath/ min

The differences between the values that the patient he produced before the start of the program at hidrokinetotherapy and end of treatment were significant and can be seen and in the diagram below (Diagram 1). These changes to better tests are best suited for the patient with such pathology.

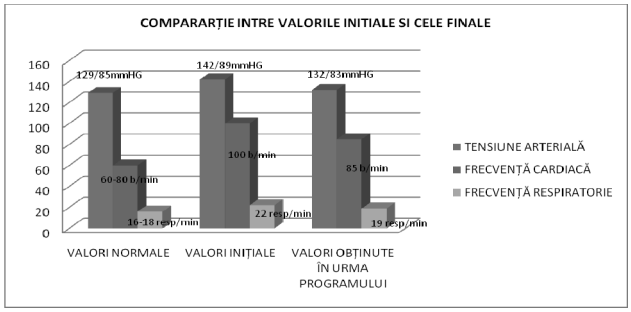

Diagram 1. Initial values and Comparison concerning the final recorded

Conclusions

As a result of the recovery program, the patient diagnosed with IMA, after installing stentului, and improved quality of life through the hidrokinetotherapy as follows:

1. the period of physical activity (effort) has risen to 15 min/meeting from 25-30/min session;.

2. Blood pressure has returned almost to normal value to 132/83 mmHg, 142/89 mmHg.

3. cardiac Frequency was changed from 100 b/ min at 85 b/min

4. Respiratory frequency was changed from 22 resp/min., at 19-20/min resp.

5. From a psychological point of view, the patient became more optimistic, more confident in his own forces and anxious to reintegrate in their professional activity. It is recommended to continue the practice of physical activities and hidrokinetotherapy in order to maintain a healthy lifestyle.

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