TREATING DISCUS HERNIA USING A SELF DEVELOPED METHOD - A NEW TECHNOLOGY WITHOUT SURGICAL INTERVENTION

Dr. Mitrichka Dz. Stardelova, Department of Kinesiology and Anthropology,
"St. Cyril and Methodius" University, Skopje, Republic of Macedonia
E-mail: mstardelova@yahoo.com
Academician Prof. Dr. Angel Dzambazovski, Department of Kinesiology and Anthropology, "St. Cyril and Methodius" University, Skopje, Republic of Macedonia
E-mail:info@physotherapy.mk

Received: September, 01.2014.
Accepted: October, 03.2014.
Original Article
UDK 616.711-007.43-085.8

Abstract. This paper includes an experiment that was performed on a hundred patients by using our self-developed methods during a two year period. The treatment of discus hernia was carried out by using our self-developed methods combined with a completely new technology, as well as clinical biomechanics, chiropractics, massotherapy, thermotherapy, cryotherapy and various other specific exercises practiced in esthetic and orthopedic kinesiology - kinesitherapy.

50 females and 50 males aged 35 to 55 underwent our therapy and the results we obtained display very high curative effects.

Keywords: *Discus hernia; Chiropractic; Thermotherapy; Manual massotherapy; Cryotherapy; dzambogal; Esthetic and orthopedic Kinesiology.*

1. INTRODUCTION

Discus hernia as a problem of the 21 century. Discus hernia is a side effect of the new lifestyle brought by civilization, and the pandemic emergence of a group of diseases which are caused by insufficient physical activities on the one hand, and a poor diet caused by industrial and other types of unhealthy food on the other. Being a part of nature, humans are born to walk through, conquer and adapt nature to their own needs. If we take into consideration that in the past it was necessary for humans to perform every task using physical force, and that, in order to adjust nature to their needs and to survive, the use of that physical force tended to reach 100%, today we are witnessing quite the opposite. Instead of the 98% use of physical force, the percentage of physical activities in our contemporary generation tends to drop to zero. Thus, modern humans, that is the contemporary generation, live in a state of idleness, a state of hypokinesis. As a result, degenerative diseases have spread, disrupted and weakened the function of the musculoskeletal frame. These are the so called diseases of civilization known as the various types of skeletal deformations: scoliosis, kyphosis, funnel chest, knock-knee, bowleggedness, arthrosis, periarthritis, degenerative diseases, cardiovascular, hormonal and many other types of disruptions to the musculoskeletal frame as well as to other organs and systems, which are generally known as hypokinetic diseases, or diseases arising from insufficient physical activities. Currently, one of the most frequent diagnoses is the spinal condition known as discus hernia.

In our physiotherapeutic research we created a program consisting of different physiotherapeutic procedures. We call this program a prescription for natural treatment of discus hernia - a kinesiological medical treatment for relieving complications caused by discus hernia.

Corresponding Author
Dr. Mitrichka Dz. Stardelova, Department of Kinesiology and Anthropology,
"St. Cyril and Methodius" University, Skopje, Republic of Macedonia
E-mail: mstardelova@yahoo.com

2. RESEARCH GOAL AND EXPERIMENT DESCRIPTION

The main research goal is to examine the capacity of our program - prescription for eliminating discus hernia with a completely new and complex physiotherapeutic method - a kinesiological medical method, which is a medical technology that we have developed. The method's purpose, and simultaneously the

subject of our study, is the treatment of discus hernia in the lumbar area of the human body (L1 to L5 including the sacral part).

The experiment was conducted in the institute for applied kinesiology in Skopje, Republic of Macedonia during 2011, 2012 and 2013 with the participation of a 100 patients, 50 of which were male and the other 50 were female. All patients were diagnosed by radiograph with discus hernia.

2.1. Experiment description

The experiment took place as an intensive rehabilitation program for the duration of six days, while some patients underwent double treatments daily depending on their medical state. The patients in the groups, who were aged 35 to 55 and who willingly underwent the treatment, were divided into subgroups, and the results from our physical program - prescription were analyzed with respect to the improvement of their state of health and the elimination of discus hernia.

Ten to twelve days after the one week treatment, a control treatment was conducted in order to assess the patients subjective opinion on their state of health. With the intention to ascertain the psychophysical changes in the human system, the patients were subjected to psychological and physiological measuring tests before starting the treatment and then again ten to twelve days after finishing the treatment. The psychological measuring tools used in the tests were: test A1 which consists of 80 questions used to measure the patients"s anxiousness, test K10 which consists of 40 questions used to measure functional changes of the cardiovascular system and H40 used to measure hypochondria. The obtained results from the first and second measuring were compared in order to mark any changes that might have occurred before and during the patient's treatment.

In terms of the physiological state, the following physiological measuring tools were used: low blood pressure, high blood pressure, respiratory rate and heart rate.

3. RECEIVED THERAPY

3.1. Prescription and experiment description

Every patient was examined initially and their entire medical documentation was reviewed, and the acquired data was compared with a chiropractic manipulation of a detailed spinal examination, more specifically of the columna vertebralis and medulla spinalis, which was then analyzed in order to determine whether the findings of the entire medical documentation correspond by ascertaining and establishing visual diagnostics. The following step was to determine the correct manner for conducting the treatment, that is, the prescription that consists of a combination of different applications and kinesiological medical interventions, for each individual patient. For this purpose, we used various techniques for manual correction of columna vertebralis and we determined the correct location for applying thermo therapy, which is essentially heated fango or parafango mass, on the entire spine, that is, the cervical and thoracic vertebra on the spot where pain is absent, by adding external heat to the tissue (from the outside toward the inside). We used cryotherapy with surface applications cooled to -20 ^{o}C, which were then isolated with medical sheets, on the location where the tear had occurred, in order to restore the tear and the bulge in the vertebral canal. The patient, together with the surface applications, was then wrapped in a medical sheet. Next, the patient was covered with a plasticized sheet, with the purpose of containing the body›s heat, followed by a wool sheet and then was left to lie still for 20-30 minutes. The temperature reached during thermotherapy is usually between 55^{o}C and 60^{o}C. After the required time had passed the patient was unwrapped, the applications were removed and the whole body was dried from the sweat with a towel. Then we started with massotherapy, which is always strictly programmed and controlled, along the entire spine (if necessary the entire body as well) in order to balance the muscle tone. During massotherapy, the body was laid over with a totally natural cream that we produce, known as «Dzambogal» (Џамбогал), which has a specific positive effect on the regulation of the muscle tone and the circulation of the blood. Finally, we concluded with clinical biomechanical balancing by using chiropractic technology, followed by special orthopedic exercises designed to strengthen the paravertebral musculature and restore the normal elasticity and psychophysical strength to the organism.

3.2. Proper prescription - program

(kinesiological-physiotherapeutic)

The patients, which were divided into subgroups of which 50 were male and 50 were female, were subjected to the following procedures:

Table 1. Divided patients into subgropus

THERAPY	DURATION
1. THERMOTHERAPY	20-30 minutes
2. CRYOTHERAPY	10-15 minutes
3. MASSOTHERAPY	10-15 minutes
4. CHIROPRACTICS	As needed
5. Medical - kinesiological exercises (esthetic and orthopedic kinesitherapy)	As needed

4. PURPOSE OF THERAPY

1. Muscle tone regulation with respect to the entire spine;
2. Complete restoration of columna vertebralis to its normal biomechanical state by using chiropractic, a manual medical intervention;
3. Restoration of muscle strength and elasticity to the entire musculoskeletal frame;
4. Amplitude normalization of the entire body's motions;
5. Individual elimination of any pressure on the peripheral nervous system - starting with the atlas and ending with the sacral region;
6. Elimination of pressure where the tear had occurred on medulla spinalis and restoring the bulge in the vertebral canal by applying local cryotherapy;
7. Expansion of the thoracic vertebrae with thermo therapeutic applications, vacuum-assisted bulge withdrawal by using cryotherapy on the injured lumbar part and restoration of medulla spinalis to its proper physiological state in the vertebral canal;
8. Patient preparation for home use of kinesiological - medical orthopedic exercises.

5. TASKS OF THE EXPERIMENT

1. Educating patients to use healthy food as much as possible in their everyday life by avoiding large quantities of industrial food is the primary task we have set in this research;
2. Regularly using kinesiological activities and medical exercises in everyday life complemented with optional frequent walking prior to the exercises so that the patients wouldn't forget that they also have legs;
3. Regulating body mass and volume, as well as elasticity, mobility and amplitudes of motion so that such degenerative diseases do not recur;
4. Educating patients that they should not wait and endure pain for too long and should seek medical assistance as soon as possible.

5.1. A short description of the applications

Thermotherapy - The goal with thermotherapy is to assist the blood flow regulation by adding external heat to the organism (from the outside to the inside), more specifically, to the musculoskeletal frame. This will cause the biomechanical function of the spine to normalize, which, combined with cryotherapy, will allow for a vacuum-assisted withdrawal of the medulla spinalis bulge - the section with discus hernia - in the vertebral canal, and thus normalize the physiological function of the nerve.

Cryotherapy - The goal with cryotherapy is to extract heat from the organism (from the inside to the outside) and cause vasoconstriction in the soft tissue - constricting the bulge and restoring it in the vertebral canal, that is to say, withdrawing the bulge in order to eliminate any mechanical obstacles and prevent any physical contact.

Massotherapy - The goal of the programmed massotherapy is to allow for unimpeded nutrition of the spine and to regulate the muscle tone. Thus allowing the bioelectric motor commands from the central nervous system to reach the rest of the organism unobstructed.

Chiropractic - The goal of chiropractic, together with massotherapy, is to set the columna vertebralis - the spine in a normal biomechanical position.

Medical exercises - The goal of these exercises, in their functional, biomechanical and esthetic sense, is to restore muscle strength, soft tissue elasticity and motion amplitude in all directions.

6. MEASURING TOOLS

The following psychological tools were used: test A1 which consists of 80 questions used to measure the patient's anxiousness, test K10 which consists of 40 questions used to measure functional changes of the

cardiovascular system and H40 used to measure hypochondria. The obtained results from the first and second measuring were compared in order to mark any changes that might have occurred before and during the patient's treatment.

7. OBTAINED RESULTS AND DISCUSSIONS

We can notice a significant statistical difference in the obtained results of all three measuring tools which were compared and analyzed with adequate mathematical methods. The results were orderly recorded before starting the therapy and then again 20 days after finishing the therapy. The perceivable changes, occurring during the start and the finish of the therapy sessions, display significant statistical data which confirm that under the influence of objective motoric-functional changes, the patients' perceptions also change. This means that the organism's proper functional and physiological performance also caused positive and efficient psychological changes, whose origin, we can prove, can be attributed to the influence of our therapy. In other words, positive psychological changes are the result of qualitative physiological and functional changes and the end result is the elimination of pain and the patient's positive feeling.

We also noticed other changes present in the functional measuring tools such as blood pressure, heart rate and respiratory rate.

The obtained results were processed by using multivariable and factor analyses methods, however they are not included in this study because of the sheer size of the findings.

Nevertheless, this research confirms that our work method, that is, the technology and the methodology for eliminating discus hernia without a surgical procedure, resulted with highly curative effects. The obtained results show that 90% of the patients achieved an excellent psychophysical state after the 20th day, 7% still experienced certain discomfort and were offered to continue the treatment with 6 to 10 sessions twice a week, and 3% were still experiencing pain and were counseled to undergo a surgical procedure.

8. CONCLUSION

This study confirms the premise that the technology and the methodology we have proposed demonstrating efficiency and a highly curative effect. We can observe the positive changes occurring in the central nervous system (the latent space), and in the musculoskeletal system (the manifest space).

The Swift curative effect is due to the biomechanical spine correction, that is, the restoration of columna vertebralis in its normal physiological state. First and foremost, the therapy takes effect through the integration of soft tissue in the regulation of dissimilar muscle tone and the restoration of muscle strength and elasticity, as well as through the biomechanical ratio of columna vertebralis in its normal physiological state.

If we take into consideration the general psychophysical health improvement, which is confirmed by the obtained results of our prescription - the physical program for treating discus hernia, we can recommend this method for wide public use in order to treat this bitter problem of our modern civilization. In our study, out of 100 cases, the patient's condition improved in 90% of them, 7% experienced partial improvement and 3%, judging by the severe tissue damage, were advised to undergo surgery. When asked how they felt during and after the treatment, the patients' answers show similarity with the aforementioned results.

Our final conclusion is that this self-developed programmed method of ours for treating discus hernia can be practically applied in all specialized centers for chiropractic physical medicine, and that with the addition of combined nutrition we can achieve highly curative effects.

Conflict of interests

Authors declare no conflict of interest.

REFERENCE

Dzambazovski, A. (1990). *Kinezioloska medicina*. Skopje.

Dzambazovski, A., & Dz, M. (2005). Stardelova: "*Specijalna kineziologija*", Orginalen naučen doklad. Rusenski Univerzitet. Ruse.

Dzambazovski A., M. Dz. Stardelova, Krstevska V. (2007). *Nasija opit v lecenieto na grbacnite deformacii. Na trzestvenoto cestvanie i naucna konferencija pod patronaza na rektora na NSA,*

"V. Levski" prof. L. Dimitrov, 60 godini Kineziterapija v Bulgarija.

Dzambazovski, A. (2011). *Kinezioloska medicina - sportska fizioterapija - hiropraktika - medicinska kineziterapija*. Skopje.

Dzambazovski, A., & Dz, M. (2011). Stardelova: *Teorija na antropoloskata kineziologija*. Skopje.

Enoka R. M. (2000). *Osnovni kineziologii*, (osnovi na kinezioloskata teorija - humana kinetika), Kiev.

Stardelova Dz. M (2006). *Ontogenetskiot razvoj kaj ucenicite od dvata pola od osnovnoto i srednoto obrazovanie vo Makedonija kako predikcija za selekcija vo sportot*. Doktorska disertacija, Maj, Skopje.

Stardelova Dz. M. (2004). *Kinezioloskata medicina i kinezioloskata ortopedija*. Ruse.