70 - THE PRACTICE OF AEROBICS AS ADDITIONAL TREATMENT IN ELDERLY MEN DIAGNOSED WITH LUMBAR DISC HERNIATION

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INTRODUCTION

Currently, lumbar disc herniation is the most common diagnosis among the degenerative changes of the lumbar spine and co ¬ leading cause of spinal surgery. It is estimated that 2-3 % of the population may be affected, with a prevalence of 4.8% in men 2.5 % in women above 35 years. Because it is so common enough to be considered a global health problem, due to inability to generate (VIALLEET. AL. 2010).

Schmidt et al. (2005) report that about 80 % of the population at some point in their lives, have experienced the complaint of back pain and the incidence and prevalence of this symptom are so frequent that must be considered as disorders epidemic, which cause great social and economic losses, it is the most repeated complaints in health services, the main cause of absence from work and the pension benefits required by reason of disability caused. Furthermore , genetic variables , psychosocial, economic , access to social , health and education , poor living conditions and health , can also influence the worsening of symptoms , as referred Bringuente et al . (1997) This table can become even more aggravating when we associate with lumbar disc herniation with aging in older men .

The confrontation with the reality of the illness caused by illness characteristic of this period creates shortcuts to the meeting with one of the most difficult questions for the human being: the loss of independence “functional." We know that in the contemporary world, the economically active people inspire credibility and respect. From the moment that a person fails to produce economically, it is placed in a situation of ostracism, and this is particularly felt in the male subjects, due to the cultural and social context that man is responsible for managing and providing. This is an extremely simplified but validated the observation of day-to - day (ARCURI, 2006).

White (1998) says that most elderly men with chronic pain in the lumbar has sought the medical specialist physiotherapy, massage therapy, acupuncture, and chiropractic or controlled with pain medication. Most of these procedures used in isolation results to temporary relief, at best, because it is passive in nature. In other words, nothing is required on the part of the individual, which is totally dependent on the professional healthcare for relief or "cure” the pain. Being a chronic low back pain resulting from an unsuccessful surgery, poor posture, accident or condition untreated, the individual must return to a consistent level of activity to combat pain. This framework has led older men to acquire a large block resistance to treatments;fruits also aggregate of cultural values from generation to generation (ARCURI, 2006).

The resistance to conservative treatment leads the old man to present a picture of loss of autonomy leaving no alternative to joining the participation of physical activity programs in the water, especially water aerobics which is currently one of the most recommended by the medical field.

White (1998) says that the water to be an environment where gravity is eliminated, it is highly efficient for lumbar disc herniation , because the weight relief in joints and intervertebral discs . The primary purpose of the application of water aerobics for the elderly in this case should be the restoration of functional activity of the movement. One of the properties of water that most benefits in the treatment of lumbar disc herniation and hydrostatic pressure , because it exerts a uniform pressure around the joints relaxing them , thus providing greater comfort and ease at work stretching .

Still , it is related to the body meets resistance in all directions , creating an opportunity to use the muscles to increase strength , with movements that combine the real exercise " functional " used in everyday life instead of limited positions and trajectories of movement of which is restricted to need specific equipment (Baum , 2010) .

Some studies showed that elderly people who can not work out with comfort in discovering that land in the water it is possible to cause reduction of stress on the muscles , bones , tendons and ligaments .

Therefore this present study aimed to show the benefits of gymnastics applied in elderly men as one of the effective ways complementary treatment for lumbar disc herniation .

METHOD

This research was conducted between the periods from February to June 2013 and the participants were selected, eight elderly practicing gymnastics at the Sports Center Municipal City Caieiras - SP, which offers this activity Ace Tuesdays and Thursdays from 07h00 11h00 ace and 14h00 17h00 and Saturdays from 07h30 at 09h30. We used the following inclusion criteria for the study: age 60 years or more, minimum of three months in the activity of gymnastics, attendance, presenting routing doctors, physiatrists and physical therapists or for the participation of water aerobics classes and has a diagnosis of hernia lumbar disc.

We applied three assessment tools for data collection: adaptation to the physiotherapy evaluation of the lumbar spine used by the Department of Physical Therapy and Speech Therapy and Occupational Therapy, University of São Paulo (USP) and a test lift straight leg. Adapting the model physico-functional spine used by the School of Nursing of Ribeirão Preto (USP), consists of five items: identification, general signs and symptoms, postural and ergonomic aspects, psychosocial and economic aspects, specific signs and symptoms.

All data collection procedures were carried out at the place where the subjects participate in water aerobics classes. After a period of 60 days the tests were applied again seeking variations in the results obtained. There was no change in the methodology applied in aerobics class during the research period.

After receiving the announcement of the dates for the tests the week before, each subject received an initial Term of Free and Informed Consent Form (ICF), where the items were described on the ethical aspects of research and duly respected and signed by all employees who were willing to contribute to the study. The subjects were informed about the procedure to be adopted to respond effectively to the questionnaires and the test straight leg, since some subjects showed a degree very little schooling. In some cases there is a need to dictate to the questions to explain the subjects were able to respond appropriately. Test straight leg in some cases, there is a need to establish the correct position for execution of the movements. Both movements

were carried out passively.

The data contained in the application forms of physical therapy evaluation and physical-functional lumbar spine were entered and tabulated in Microsoft Office Excel 2007. Observed data , we analyzed 08 of the 55 graphs tabulated : previous occupationsbefore the injury, labor occupation current position at work, occupational physical activity, stage of pain, movement increases the pain, activities that reduces pain, improvements to water aerobics, change with the break of gymnastics.

Note that because it is a qualitative, descriptive, exploratory did not find it necessary to use a statistical analysis, using the program Statistical Package for Social Sciences (SPSS).

In raising test straight leg used a measuring tape to calculate the angle of elevation of the legs.

RESULTS

We can observe that the test leg straight performed at baseline, 72% of the subjects were able to reach a maximum angle of 35 ° which means that there is a voltage applied to the roots of the sciatic nerve and 18% of subjects achieved an angle even smaller, ranging from 20 º 30 ° indicating an absence of dural movement. After 60 days we observe a significant change in the results, where the minimum angle rose to 35 which show already a significant improvement in the stage before the pain is still present in this case constant. What draws attention in these figures is the increased angle where 10% of the subjects could exceed 70 degrees which might imply that the pain likely to be joint.

Regarding the physico-functional can observe that, once installed the disease many guys end up having to change their occupation labor or even terminating them early. The data show that 50% of the subjects currently exercise no function at work, with one case of ADL impairment. Calls attention to the fact that all these guys feel the need to continue exercising their labor, to feel included actively in society.

One of the hypotheses that can justify the installation of lumbar disc herniation in all subjects is related to the type of work environment in which subjects performed their functions. The lumbar disc herniation in this environment is characterized as WMSD (Work-Related Musculoskeletal Disorders), given a set of heterogeneous disorders, affecting muscles, tendons, synovium, joints, blood vessels and nerves that can appear in workers subjected to conditions of work (Martins, 2011) in which these functions were performed in the remaining positions and forced or remaining in a sitting position (Carvalho, 2007). Once installed, the herniated disc causes pain daily even not exercising their labor may even harm their activities of daily living (ADLs). It is observed that the intensity of pain is greater in guys who still try to continue exercising their labor or even modifying it.

Although older men resist adhesion to the practices of exercise, water aerobics in particular that has been recommended by the medical field has shown significant results in cases of lumbar disc herniation. In physical therapy evaluation, the data show us that before joining the aerobics 58% of the subjects were in the acute stage (lasting 1-4 weeks of pain) and 42% were already in the chronic stage of the disease (up to 12 weeks of pain) . The results show examples of positions held ADL will suffer impairment due to herniated lumbar disc and try to perform the movements increased pain intensity. Calls our attention moves that are executed in sequence as crouch and lie down (25% of subjects) and catch weight and squat (34% of subjects).

For the type of physical activity that causes a decrease in pain was observed through the data, that the water is a physical activity that contributes most positively to this factor. Still 100% subjects reported that they feel improvements in ADL and when they are not practicing (which occurs on cold days because of the season) feel negative changes.

DISCUSSION

Chronic pain is one of the most important problems, which hinder con ¬ ably the autonomy of the elderly in the performance of their daily duties, affecting their quality of life (QOL). Factors such as depression, and functional disability, dependency, social withdrawal, changes in sexuality, changes in family dynamics, economic imbalance, rity hopelessness, feelings of death and others are asso ¬ ciated with chronic pain . Pain becomes the, directs and limits the decisions and behaviors of the individual (Cunha, 2011) . Almost 70 % of the subjects analyzed had chronic pain at the beginning of the activity, requiring 50 % to change lifestyle in family, social and professional (retirement). It is known that the reference of masculinity within a culture is through the work, in which he develops, and leave this world a world audience for private (home) is a more serious issue than it has, and that by having a subjective characteristic, transferring a defense mechanism that sense of loss for the financial issue, less humiliating and emasculating (Arcuri 2006) .

Not having the commitment to carry out the activities before (work), difficulties in adapting the private world which is a traditionally feminine space, since the data showed that in 75% of subjects are married and excess free time could be filled with other productive activities, are some of the factors that may justify the framework lumbar disc herniation can cause the old man as quoted by Cunha (2011).

Agreeing with Cerri, (2003), Nassar (2004) and Portes Junior (2003), which show that the practice of gymnastics, especially for the elderly, often performed, decreases medication use, improves well-being and self-esteem, increases the willingness to perform Activities of Daily Living (ADL), increases social interaction and reduces pain in the body which in this case in the lumbar spine. The data showed that 42% of subjects reported a significant decrease in their pain. Still, 72% of subjects transformed the practice of gymnastics in a leisure activity, positively modifying the table set up by Cunha (2011).

Another fact that caught our attention was related to professional activities stunted, where 43% of the subjects exercised production activities carried out with vigorous efforts (factory floor) and or forced position (mechanical and electricians). Combining these data with the level of education presented by the group (70% did not complete the 2nd degree), we can understand more clearly the current status of lumbar disc herniation.

Almeida et al. (1999), tells us that back pain can also result from overloads, as a result of poor posture, dysfunction of joints and soft tissues, traumatic or pathological process or a combination thereof. Knoplich (2005) points out that the back pain is related to postural problems of order, due to the daily activities of inadequate environmental factors - whether family, work or study, changes in body structure, as the state of pregnancy and obesity, the residence by prolonged sitting in incorrect position, standing or on the act of driving a motor vehicle, the type of work and level of physical activity due to sedentary behaviors . The data presented fall to 20 % of individuals carry this pain since the 80s. Still, 37 % found that there was something more seriously wrong and the constant crises (“Caught column”) during working hours from 2002.

The way how they are understood causes of back pain expresses the model view biomedical already imposed, although not consistently understood by people (Almeida et al. 1,999) leading old man behavioral attitudes vary with the living standards they develop. The condition lie on the floor is made by many people believing that in this way may lessen the pain. The use of self-medication, gels and automassagens features are most used and this may arise from the difficulty of assistance, copies of receipts or previous experiences of illness of others in their social life (ARCHANGEL, 2007).

Ferreira (1998) also emphasizes that the patient selects the drugs through the help of family members, neighbors and

pharmacy clerks, and this self-medication, starts to control the development of their healing as they decide how and when tomar.Este framework as is evident in the data showed that even after several years of suffering with acute and chronic pain 67% of the subjects do not allege that any specific treatment and 42% never went through a MRI scan, which in our view the socio economic-would be a possible reason for this current picture .

Even with the benefits of gymnastics practice, we know that in these cases the benefits offered in areas governing subjective, but help effectively in the treatment of the injury. Decreased fatigue, feeling of relaxation, improvements in the Activities of Daily Living (ADL), improvements in the psychological aspects such as depression and self-esteem are perceived by the subject in general, but with regard to pain 50% of the subjects claimed that the pain back when they are not participating in water aerobics.

The combination of treatment before she composed physiotherapy, anti-inflammatory and stretching, where the latter still had poor adhesion of the subjects, was replaced by water aerobics and physical therapy with more effective results. Yet when doing water aerobics is not offered (vacation), 100% of the subjects claimed to feel shortages and difficulties in relation to pain and ADL begin to return.

We understand that the current frame as says Ferreira (1994), was due to the difficulty of man in seeking medical help (due to their socio-economic status), since it can lead to missing work, making continue to conduct their activities even with pain, thus seeking alternative resources, such as folk medicine and others.

This author understands, then, that pain perception and tolerance make the individual happy to take a pill instead of seeking a doctor.

On the other hand the access to diagnostic tests such as radiography, to be routine and inexpensive, should fa ¬ zer part of the imaging evaluation. Although the clinical picture canbe clear and suggestive of disc herniation , one should not forget the possibility of coexisting other changes that can be detected by radiography . The exam tactical and dynamic flexion and extension are important complements ¬ tions for more complete analysis of the column.

The method of choice is magnetic resonance imaging (MRI) . In Brazil still insists on use of computed tomography with that, despite being able to identify a herniated disc , does not approach the quality nor the sensitivity of MRI . Detailed par ing bone and soft tissues that can help not only the correct diagnosis, but even in therapeutic proposal , do the MRI examination indispensable for the correct ment of the patient.

Still, promote greater access to medical care , price on request city of imaging and safety of surgical procedures lead to high rates of surgery , a condition that is usually self-limited (VIALLE ET . AL. 2010).

Available places are offered to practice gymnastics for free, since we can not ignore the financial situation of the elderly in Brazil, increased social activities in the social environment they live in, improving the public health system, the creation of specialized sites to care for the elderly as there is already such units Paulista Institute of Geriatrics and Gerontology of São Paulo (IPGG) are some joint actions that can minimize the treatment of lumbar disc herniation in elderly men.

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THE PRACTICE OF AEROBICS AS ADDITIONAL TREATMENT IN ELDERLY MEN DIAGNOSED WITH LUMBAR DISC HERNIATION

ABSTRACT

This work aimed to show how the practice of water aerobics can help in the treatment of lumbar disc herniation in elderly men as well as significant improvements in activities of daily living (ADL) and his conception of quality of life. This study was conducted at the Municipal Sports located in Caieiras / SP, the periods from February to June 2013, where 12 men were selected elderly patients aged 60 years.For data collection we used three assessment instruments: a) adaptation to the physiotherapy evaluation of the lumbar spine used by the Department of Physical Therapy and Speech Therapy and Occupational Therapy, University of São Paulo (USP), composed of 18 questions, 10 questions closed and eight open b) raising test straight leg c) adaptation of the model physical and functional assessment of the spine used by the School of Nursing of Ribeirão Preto (USP), consists of five items: identification, general signs and symptoms , postural and ergonomic aspects, psychosocial and economic aspects, specific signs and symptoms. The data showed a significant improvement in the test straight leg, where 10% were able to exceed 70 degrees, improvements in the relief of pain, the ADV and psychological aspects.

KEYWORD: old man, aerobics, lumbar disc herniation

LA PRATIQUE DE L'AÉROBIC TRAITEMENT COMPLÉMENTAIRE CHEZ LES HOMMES ÂGÉS DIAGNOSTIQUÉ DE HERNIE DISCALE LOMBAIRE

RÉSUMÉ

Ce travail vise à montrer comment la pratique de l'aquagym peut vous aider dans le traitement de la hernie discale lombaire chez les hommes âgés ainsi que des améliorations significatives dans les activités de la vie quotidienne (AVQ) et sa conception de la qualité de vie. Cette étude a été menée dans les sports municipaux situés dans Caieiras / SP, les périodes de Février à Juin 2013, où 12 hommes ont été choisis patients âgés de 60 ans.Pour la collecte des données, nous avons utilisé trois instruments d'évaluation: a) l'adaptation à l'évaluation de la physiothérapie du rachis lombaire utilisé par le Département de physiothérapie et d'orthophonie et d'ergothérapie de l'Université de São Paulo (USP), composé de 18 questions, 10 questions fermé et ouvert huit b) relever essai jambe c) adaptation linéaire du modèle d'évaluation physique et fonctionnelle de la colonne vertébrale utilisé par l'école des sciences infirmières de Ribeirão Preto (USP), se compose de cinq éléments: l'identification, les signes et symptômes généraux , les aspects posturaux et ergonomique, les aspects psychosociaux et économiques, des signes et des symptômes spécifiques. Les données ont montré une amélioration significative de la jambe droite de test, où 10% étaient en mesure de dépasser 70 degrés, des améliorations dans le soulagement de la douleur, l'ADV et les aspects psychologiques.

MOTS-CLÉS: vieux, aérobic, hernie discale lombaire

LA PRÁCTICA DE LA AERÓBICOS COMO TRATAMIENTO ADICIONAL EN HOMBRES ANCIANOS CON DIAGNÓSTICO DE HERNIA DE DISCO LUMBAR

RESUMEN

Este trabajo tuvo como objetivo mostrar cómo la práctica de aeróbic acuático puede ayudar en el tratamiento de la hernia discal lumbar en hombres de edad avanzada, así como mejoras significativas en las actividades de la vida diaria (AVD) y su concepción de la calidad de vida. Este estudio se realizó en el Polideportivo Municipal ubicado en Caieiras / SP, los períodos de febrero a junio de 2013, donde fueron seleccionados 12 hombres ancianos de 60 años.Para la recolección de los datos se utilizaron tres instrumentos de evaluación: a) la adaptación a la evaluación de fisioterapia de la columna lumbar utilizada por el Departamento de Terapia Física y Terapia de Lenguaje y Terapia Ocupacional de la Universidad de São Paulo (USP), compuesto por 18 preguntas, 10 preguntas cerrado y abierto ocho b) la prueba de elevación pierna c) la adaptación directa del modelo de evaluación física y funcional de la columna utilizada por la Escuela de Enfermería de Ribeirão Preto (USP), se compone de cinco elementos: identificación, signos y síntomas generales , aspectos posturales y ergonómicos, los aspectos psicosociales y económicas, los signos y síntomas específicos. Los datos mostraron una mejora significativa en la pierna recta de prueba, donde el 10% fueron capaces de superar los 70 grados, las mejoras en el alivio del dolor, la ADV y aspectos psicológicos.

PALABRA CLAVE: anciano, aeróbic, hernia de disco lumbar

A PRÁTICA DA HIDROGINÁSTICA COMO TRATAMENTO COMPLEMENTAR EM HOMENS IDOSOS DIAGNOSTICADOS COM HÉRNIA DE DISCO LOMBAR

RESUMO

Este trabalho teve como objetivo mostrar o quanto a prática da hidroginástica pode contribuir no tratamento de hérnia de disco lombar em homens idosos assim como, obter melhorias significativas nas atividades de vida diária (AVDs) e na sua concepção de qualidade de vida. Este estudo foi realizado na Secretaria Municipal de Esportes situado na cidade de Caieiras/SP, nos períodos de fevereiro a junho de 2013, onde foram selecionados 12 homens idosos com idade mínima de 60 anos. Para a coleta de dados foram utilizados três instrumentos de avaliação: a) adaptação do questionário de avaliação fisioterapêutica da coluna lombar utilizado pelo Departamento de Fisioterapia e Fonoaudiologia e Terapia Ocupacional da Universidade de São Paulo (USP), composto por 18 questões, sendo 10 perguntas fechadas e oito abertas; b) teste de elevação da perna reta; c) adaptação do modelo de avaliação físico-funcional da coluna vertebral utilizado pela Escola de Enfermagem de Ribeirão Preto (USP), composto por cinco itens: identificação, sinais e sintomas gerais, aspectos posturais e ergonômicos, aspectos psicossociais e econômicos, sinais e sintomas específicos. Os dados mostraram uma melhora significativa no teste da perna reta, onde 10% conseguiram ultrapassar o ângulo de 70º, melhorias nos alívios das dores, nas ADV e aspectos psicológicos.

PALAVRA-CHAVE: homem idoso, hidroginástica, hérnia de disco lombar