

77 - RESISTANCE TRAINING IN OLDER HIPERTENSIVE¹GERALDO MAGELA VILAR DE MEDEIROS;^{1,2,3}MARCOS ANTÔNIO MEDEIROS DO NASCIMENTO;

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INTRODUCTION

Studies show that the practice of exercise regular physical influences to a low and also maintenance of blood pressure, causing what me by hypertensive effect after exercise physical, which represents values reduced blood pressure (OLIVEIRA et al. 2011).

There are many disagreements among authors when the hypertensive effect that occurs after the exercises, the physical activity provides acute or chronic health effects in relationship to cardiovascular physiology, especially the pressure the arterial resistance training can be performed using different modes with free weights or machines, moreover, there are the variables methodological examples: training volume, intensity, number of repetitions, the time interval between the series, between the repetitions and between exercises, among others, therefore, is very important that the study has is variables well certain methodological and organized(MAIOR et al. 2007) in this regard, the importance of resistance training for elderly hypertensive patients can clarify many doubts.

The practice of resistance training, regular physical exercise, weight training, you can take our organism to various adaptations, for example the phenomenon of hypotension after exercise. Therefore, this study aimed at a greater emphasis on importance of resistance training for the elderly hypertensive however, in discussions about the training effects stood on the arterial pressure, there are some divergences, taking into account, the fact of the training cause positive effect, namely reduced pressure values taking into account the blood group held the training. But it's not a significant result (MAIOR et al. 2007).

METHODOLOGY

On literature review survey of type systematic, subsidized by studies articles investigated the primary importance of resistance training for elderly hypertensive patients. Whit the middle of search through specialized sites, complete articles were selected in t he language Portuguese, Published in the period from 2008 to 2013.

REVIEW OF THE LITERATURE

The theoretical support of this study Will identify the physiological and a cardiovascular system settings some of its components, such as the pressure and arterial hypertensions, physical exercises and its health benefits, definition of physical exercises targeted to hypertensions and their answers physiological, each topic with their due references.

The heart is one of the main organs of the human body; acts as a pump, vacuuming and propelling the blood playing an important role in blood circulation dynamics, there are three layers involving the heart, epicardium. The myocardium and the endocardium internally in the heart we find the right atria and left comer, that run on blood reception, also we find the right and left ventricles, that help in expulsion of the blood from the heart in hearth we can also find right coronary arteries, and lefts, born of ascending aorta and nourish every tissue of the hearth and in also responsible for blood supply. The aorta artery in turn is the main artery of the human body. She rises in the left ventricle and carries blood from the heart to blood all over the body, the blood returns to the heart via the coronary sinus formed by the cardiac veins, the hypertension when Hypertension if left untreated can cause other diseases in all these specific parts of the heart (MONTEIRO et al. 2007)

Blood pressure is the result of tension witch flux blood exerts on the walls of blood vessels, with that, depending on a few factors such as the volume blood, the capacity of the circulation who need a combination between them to determined initially the values blood pressure, which in turn can be determined for other's factors, however, biologically it's not normal to the increased blood pressure with ageing, so the prevention is the ideal way to combat hypertension arterial high blood pressure can be considered a the main causes of heart diseases in Brazil and in the world, 30% of the population has high rates of blood pressure which ends up Hypertension (MAIOR et al. 2007).

According to the VI Brazilian guidelines of hypertension (2010), hypertension in considered thought levels altered blood pressure is considered high blood pressure when the value of systolic blood pressure is equal to or less than 140 mmHg, and pressure is equal to or less than 90 mmHg diastolic blood, arterial is systolic pressure considered normal when it's greater 130 mmHg and is diastolic greater 85 mmHg and is considered a great level of arterial pressure when the measures are equivalent to greater 120 mmHg blood pressure systolic and greater 80 mmHg blood pressure, diastolic there are true normotensive individuals are those who always manages to keep the blood pressure values within these normal patterns, individuals with isolated systolic hypertension are those who have normal diastolic blood pressure and the high systolic. There is also hypertenses of white apron.

That occurred when the patient because of nervousness or other factors present high arterial pressure levels to be damaged in a doctor's Office and be evaluated on your premises features measures considered normal. In addition to these we have the masked hypertension that is set when the individual presents conditions normal blood pressure and when passing by a period where you will have your blood pressure observed, theses the same conditions are ranging to high conditions.

According Miranzi et al. (2008) there is still a concept that defines fully the term quality of life. We can say that the quality of life are relating various factors such as the familiar, social economic, and the term more important to heal. So the lifestyle in close enough for a good quality file. For example by means of physical exercises we can reach to achieve some of these points, to the practice physical activate, we are relating with other people, with teachers that convey information about the physical exercises, with other practitioners of the same. We are also preventing and even retrieving our organism of same diseases such as hypertension, thus improving our quality epidemiological.

Studies show that lifetime risks of develop hypertension are 60% to 70% higher in sedentary than those who engage in regular physical activity. (JR; TIMERMAN; STERFANINI, 2009).

According Agondi et al. (2012) considering the risk of acquire cardiovascular disease, talking about problems caused by a poor diet, excess salt intake(sodium)being recommended for these individuals a consumptions of very little amount of salt

daily.

For the World Health Organization are chronic diseases' responsible for a high number of deaths in our county, the cardiovascular disease is one of the most important of them, the smoking can lead to these cardiovascular diseases, mainly lung problems. High blood pressure and even cancer. (BERTO; CARVALHAES; MOURA, 2010).

On the question of alcoholism, some studies say that the first contact with alcoholic beverages happens very early in life some people, in cases these first contact becomes repetitive, and with the passage of time the individual will taking an alcoholic, with that, the number of diseases the horn high arterial cardiovascular in increasing pretty too because of this high number of alcoholics in our society. The over dose of alcohol can lead to other various diseases in cardiovascular system and also psychiatric problems (MONEGO; JARDIM, 2006).

Some studies say that so conducted predominantly aerobic exercise for the reduction of heart disease others have indicated that the anaerobic exercises are of wide importance, training with weights (bodybuilder) can help in prevention of heart problems, as the Group mused are carried out through the join motion with contraction with concentric and eccentric muscle, too there is static or isometric contraction where there is no movement, however, with lower efficiency for the effect of training, with that, also improving fitness in training effect, thereby also improving physical fitness in general, such as: body composition, strength, power,

Muscular endurance, among others (GERAGE et AL. 2007) exercise is very important for witch want to age, but, especially for elderly people who seek a better quality of life, this particular physical exercise can be the with weight training, in this case the training resisted, because some studies report the fall of blood pressure, and we must be careful in the gravity of that resistance training because some factors such as intensity and volume should be prescribed carefully (PRADO et al. 2010).

Though, Cunha et al. (2012) conducted a study that had goals focused on training intensity, checked the elderly hypertensive blood pressure controlled through medicines for two types of training the group 1 performed the exercises with a particular load and other group 2 performed the exercises with the half load, however, the first group used 8 repetitions and the second group 16 repetitions, the same exercises, used intensities different, however, with equal volume, the results of the study, showed that the blood pressure values of the two groups, group 1 had significant reduction in blood pressure diastolic blood pressure and media, and the group had 2 reduction on blood pressure diastolic, in this study, reached the conclusion that the two trainings promoted cardiovascular benefits.

Though Werneck et al. (2011) the hypertensive effect after the effort depends primarily on the intensity of the work because the magnitude and duration of the hypertensive effect may submit different results depending on the type and intensity of work performed.

On the other hand the behavior of arterial pressure after the resisted exercise is fickle, and some experiments showed 18-20 reduction, while others have not shown any change.

PRESENTATION AND ANALYSIS OF RESULTS

According to Dutra (2009) in studies aimed at to the hypertensive effect powders exercise, found that the values blood pressure suffer a reduction for varying periods after the end of the financial year, but resisted, there are studies which do not can reach significant values of pressure drop arterial in this research were analyzed more deeply eight articles, they found positive results in relation to tall the pressure after resistance training, according to Kolb et al (2012) after the completion of the annuity or training resisted the drop in blood pressure occurs named as post-exercise hypotension, it is important to undertake the physical exercise for hypertensive people, however is not yet well clarified the Best type of physic exercise.

In the study of Queiroz; Kanegusuku e Forjaz (2010) was conducted a review cited six studies training should stood in relation to blood pressure, where in other two has not been found, though, in those studies that involved elderly hypertensive patients, the same were in use of different medications of antihypertensive drugs, which undermines the emphasis on the effect of resistance training on blood pressure.

According to Monteiro e Sobral Filho can classify the effects of physical exercise in immediate, acute and chronic late-arriving the that goes along with the session of physical exercise are the treble, those that occurs in the immediate pre and post periods of exercise are those elected immediate acute, the ones that happen within the first 24, 48, and 72 hours even are the acute effects of exercise later, can be found decrease in BP levels, mainly in hypertensive, there are also chronic effects of physical exercise, the adaptations, so, there are positive effects after the physical exercises so we should practice exercise regularly to maintain a healthier life.

CONCLUSION AND RECOMMENDATIONS

Taking into consideration the lifting of the evidence recent scientific findings from this systematic review, one can conclude that resistance training is important in the life of elderly hypertensive, because the studies analyzed more deeply in this research, it was concluded that training resisted falls in blood pressure values, so, we can use it with means of preventing hypotension, and even horn not pharmacological treatment, however requires if more works in the literature that the intervention of the physical education professionals, in order to enrich the topic covered in this survey, with that I leave open the possibility of continuation of this research, using his own monitoring of hypertensive through the resistance training.

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RESISTANCE TRAINING IN OLDER HIPERTENSIVE ABSTRACT

This research is a study of bibliographical revision subsidized by scientific articles, aims to observe the importance of resistance training for the elderly with hypertension, because high blood pressure is one of the diseases that most affect the Brazilian population and that has as main characteristic the high blood pressure, reaching people from all age ranges, adults, young and mostly elderly, people of both sexes and which wants to race, this research had emphasis on studies of the year 2008 to 2013, however, according to the criteria for inclusion and exclusion of studies were not found in the years 2010 and 2013, 8 were selected studies, 4 in the year 2008, 1 in the year 2009, the year 2011 1 and 2 in the year 2012, That showed reductions in the values of blood pressure in elderly people, therefore, it can be concluded that the resistance training is important in the life of elderly hypertensive patients, therefore, can be a way of preventing Hypertension and even a form of non-pharmacological treatment.

KEY WORDS: Arterial hypertension, resistance training, elderly.

FORMATION DE RÉSISTANCE PAR HIPERTENSIVE RÉSUMÉ

Cette recherche est une revue de la littérature subventionné par les articles scientifiques , a pour objectif d'observer l'importance de la formation de résistance pour les patients hypertendus âgés , parce que l'hypertension est l'une des maladies qui affectent le plus la population brésilienne et dont la principale caractéristique pression artérielle , ce qui affecte des personnes de tous les groupes d'âge , les adultes , les jeunes et notamment les personnes âgées des deux sexes et de toutes races , cette recherche met l'accent sur les études de l'année 2008 à 2013, cependant , selon les critères d'inclusion et d'exclusion ne des études ont été trouvés dans les années 2010 et 2013 ont été sélectionnés 8 études , 4 en 2008 , 1 en 2009 , 1 en 2011 et 2 en 2012, qui a montré des réductions dans les valeurs de la pression artérielle des personnes âgées, Par conséquent , on peut conclure que la formation de résistance est important dans la vie des patients hypertendus âgés , car il peut être une forme de prévention , l'hypertension et même une forme de traitement non pharmacologique.

MOTS-CLÉS: hypertension, la formation de résistance , les personnes âgées .

EL ENTRENAMIENTO DE RESISTENCIA EN LOS MAYORES HIPERTENSOS RESUMEN

Esta investigación es una revisión de la literatura subvencionada por artículos científicos , tiene como objetivo observar la importancia del entrenamiento de resistencia en pacientes hipertensos de edad avanzada , ya que la hipertensión es una de las enfermedades que más afectan a la población brasileña y que tiene como principal característica la presión arterial alta , que afecta a personas de todas las edades , adultos, jóvenes y personas de edad avanzada , especialmente , de ambos sexos y todas las razas , esta investigación tiene un énfasis en los estudios del año 2008 a 2013 , sin embargo , de acuerdo con los criterios de inclusión y exclusión no los estudios se encuentran en los años 2010 y 2013 se seleccionaron 8 estudios, 4 en 2008 , 1 en 2009 , 1 en 2011 y 2 en 2012 , que mostró una reducción en los valores de la presión arterial de las personas mayores , por lo tanto , se puede concluir que el entrenamiento de resistencia es importante en la vida de los pacientes hipertensos de edad avanzada , ya que puede ser una forma de prevención , hipertensión e incluso una forma de tratamiento no farmacológico .

PALABRAS CLAVE: Hipertensión, entrenamiento de resistencia, los ancianos.

TREINAMENTO RESISTIDO EM IDOSOS HIPERTENSOS RESUMO

Esta pesquisa é um estudo de revisão bibliográfica subsidiada por artigos científicos, tem como objetivo observar a importância do treinamento resistido para idosos hipertensos, pois a Hipertensão arterial é uma das doenças que mais afetam a população brasileira e que tem como principal característica a pressão arterial elevada, atingindo pessoas de todas as faixas etária, adultos, jovens e principalmente idosos, pessoas de ambos os sexos e qualquer raça, essa pesquisa teve ênfase nos estudos do ano de 2008 a 2013, porém, de acordo com os critérios de inclusão e exclusão não foram encontrados estudos nos anos de 2010 e 2013, foram selecionados 8 estudos, 4 no ano de 2008, 1 no ano de 2009, 1 no ano de 2011 e 2 no ano de 2012, que mostraram reduções nos valores da pressão arterial de idosos, portanto, pode-se concluir que o treinamento resistido é importante na vida de idosos hipertensos, pois, pode ser uma forma de prevenção a Hipertensão Arterial e até mesmo uma forma de tratamento não farmacológico.

PALAVRAS CHAVE: Hipertensão Arterial, Treinamento resistido, idosos.