131 - THE USE OF WALKING AS A FACTOR OF REDUCTION AND MAINTENANCE OF PRESSURE LEVELS OF PARTICIPANTS IN THE PROGRAM "WALKING FOR HEALTH" IN ARAGUAÍNA-TO.

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INTRODUCTION

Epidemiological studies on hypertension (HA) are performed frequently. Knowing the prevalence of this disease has become endemic is of great relevance.

The IV Brazilian Guidelines on Hypertension points hypertension with high prevalence and low control rates, considering it as one of the most important public health problems. The prevalence of hypertension in our population is over 30%.

According to ANVISA (National Health Surveillance Agency) in 2010, hypertension is one of the most frequent causes of hospitalization among hypertensive and 75% use the public health system (SUS) meeting to be held in primary health care.

Studies have shown the positive benefits of aerobic exercise for the control and maintenance of hypertension (Teixeira, 2000; Monteiro, ROLIM, SQUINCA, SILVA, TICIANELI, Amaral, 2007). Significant reductions resulting from the guided exercise are presented as a supporting factor in the treatment of hypertension.

The walk is ideal for all age groups, and people with high blood pressure (HBP). Walking is an easy activity to perform requires very little equipment and technical terms and provides access to those who seek to exercise, being also the most appropriate physical activity to get out of your comfort zone and engage in an active life. The risks of injury are associated with a reduced practice of more vigorous activity. So that appropriate stimuli cause the walk is required intensity, duration and weekly frequency.

It has been shown that aerobic exercise performed regularly provokes physiological responses resulting in significant autonomic and hemodynamic changes that will influence the cardiovascular system.

For the hypertensive action of physical exercise is necessary to be potentiated the hypertensive patient make a change in the style of life independent of blood pressure levels. The reduction in blood pressure arising from a healthy lifestyle helps to minimize other risk factors present.

The hypertensive action of exercise training in hypertensive individuals is observed in a few sessions of aerobic exercise, and this reduction is perpetuated over time of practice activity.

Because of this information and so many others that are affected by the media and scientific sources on the benefits of aerobic exercise primarily for hypertension, this study aims to verify the effects of guided hiking program in hypertensive participants.

METHODOLOGY

The present study is a quantitative trait, the sample containing 05 adults of both sexes with a mean age 55.2 ± 15.49 years, being selected for deriving intentional extension project "Walking for Health" developed on the premises of Institute Tocantinense Presidente Antônio Carlos (ITPAC).

The practice of walking occurred at the racetrack with 367,05m circumference and floor consisting of gravel dust. Inclusion criteria were the regular participants, this regularity was 05 days in the week. Project participants who did not follow this parameter regularly were excluded from the sample.

For measurement of systolic and diastolic blood pressure (SBP and DBP) used 03 sphygmomanometer with stethoscope. The blood pressure measurement was performed before and after each practice session of aerobic exercise (walking). The prescription of the walk took place individually. The work intensity was determined between 50-70% of maximum heart rate (MHR). The target zone training was established through calculations of MHR. By using the Karvonen formula and resting heart rate (RHR). The duration of the walking time was 60 minutes.

Hypertension these participants were diagnosed by medical experts awhile, before the integration of the program there, and most of them had mild to moderate hypertension. All participants were under regular pharmacological treatment for hypertension during the training period, and accompanied by their private physicians.

All members agreed to participate in the study by signing the free and clear (IC) consent, informing all the explanations of the study. The study was approved by the Research Ethics Committee of the Institute Tocantinense Presidente Antônio Carlos.

Data were cataloged in Microsoft Excel 2007. Oficce program for presenting the data descriptive statistics were used, with the average values and the Student t test for paired samples.

MEASUREMENT OF BLOOD PRESSURE SYSTOLIC AND DIASTOLIC

Blood pressure was measured with aneroid sphygmomanometer Premium brand verified and approved by INMETRO (National Institute of Metrology, Quality and Technology).

The blood pressure measurement was performed 02 months. The collected data was performed before the intervention of the walk and after their action.

We ask the participants to follow the following procedure: to reach the site of the walk, waited for 10 minutes sitting with the arm height position of the heart, and soon there after this rest, the blood pressure measurement was made. We consider these values as pre-training.

This procedure was done for all individuals participating in the sample. Blood pressure was measured after completion of the activities following the same parameter, the recorded values were estimated as post-training. Being considered all two measures for analysis. All hypertensive patients were adequately informed as to the procedures to be performed.

We also inform you that the practice of walking would be suspended if the resting blood pressure was above 160 mmHg x 100, except for medical advice.

STATISTICAL ANALYSIS

Values are presented as mean. Comparisons between the two periods (pre- and post-training) were calculated using the Student t test for paired samples, adopting a significance level of $p < 0.05$.

RESULTS AND DISCUSSION

The following tables display the results.

PARTICIPANTS	AVERAGE PBS PRE-TRAINING	AVERAGE PBS POST-TRAINING	AVERAGE REDUCTION PBS
1º	144, 5	131, 8	12, 7
2º	144, 3	133, 9	10, 4
3º	134, 7	116, 4	18, 2
4º	142, 6	126, 8	15, 7
5º	137, 5	124, 1	13, 3
AVERAGE GENERAL	**141, 2**	**128, 4**	**12, 7**
TESTE T			**P<0,05**

PBS= Pressure blood systolic

Table 1. Individual and overall mean value of systolic blood pressure (PBS).

PARTICIPANTS	AVERAGE PBD PRE-TRAINING	AVERAGE PBD POST-TRAINING	AVERAGE REDUCTION PBD
1º	96, 3	87, 2	9, 0
2º	90, 4	85, 4	5
3º	91, 7	85, 2	6, 4
4º	82, 6	80, 5	2, 1
5°	90,00	86, 6	3, 3
AVERAGE GENERAL	**89, 6**	**84, 6**	**4, 9**
TESTE T			**P<0,05**

PBD = Pressure blood diastolic

Table 2. Mean individual and overall value of diastolic blood pressure (PBD).

The main result of this study was that in two months of hiking oriented associated with pharmacological treatment, were effective in lowering blood pressure in hypertensive individuals.

According to the mean pressure values shown in Table 1, the (PAS) pre-training, the participant who has attained the highest average was number 2, 144, 3 mmHg, and the lowest average was number 3, to 134.7 mmHg. In the (PAS) post-training was the highest average of the participant number 3, 116, 4 mmHg, and the lower was the average number 5, 124, 1 mmHg. But when checking the reduction in the overall average (PAS), the mean reduction was a participant 3, 18, 2 mmHg, and the smallest was 2nd with 10, 4 mmHg.

Diastolic analyzing means (in Table 2), the pre-training, the greater the number of participant 1, 96, 3 mmHg, and the lower the number 4, 82, 6 mmHg. In the highest average post-training participant was 1st again with 87, 2 mmHg, and the smallest was the participant number 4, 80, 5 mmHg. But being checked data in the general reduction (DBP) greater mean reduction was the participant's 1, 9, 0 mmHg, and the smallest number was 4, 2, 1 mmHg.

Various mechanisms responsible for the reduction of blood pressure after an exercise program have been presented.

These include reduced cardiac output (CO), the sympathetic nervous system activity and peripheral vascular resistance (PVR), and increased baroreflex sensitivity and plasma volume (Teixeira, 2000, p. 26).

The food intake may have been a factor that promoted this change to reduce one individual to another. The hypertensive patient must follow a proper eating pattern so that these do not influence the increase in blood pressure.

The reduction of salt intake, reduced alcohol consumption, cessation of the habit of smoking and control and / or reduce body weight when controlled can leverage the benefits of exercise in controlling hypertension.

A study by Meurer and Matte UNISUL developed at the university in the city of Shark in the state of Santa Catarina was found that two months of "Walking with UNISUL" program was statistically significant, reduction in systolic blood pressure was 13.3 mmHg and diastolic by 3.3 mmHg, approaching the values found in this study, which were 12, 7 mmHg for SBP and 4, 9 mmHg for DBP.

As Laterza, Amaro, Negrao and Rondon (2008, p. 326) regular exercise is an excellent non-pharmacological therapy and should be considered as a major intervention measures for the treatment of hypertension.

It is of great importance to maintain the target zone in the practice of aerobic activity. The labor intensity of this study was controlled during the two months of training, ie, the stimulus was always appropriate and this may have contributed to a greater reduction on blood pressure.

Teixeira (2000, p. 25) states that blood pressure reduction "can be seen after two weeks of training, persisting while the individual remains active."

For Medina, Lobo, Sousa, and Kanegusuku Forjaz (. 2010, p 104) "greater BP reductions are achieved through: a) arrangements involving larger muscle groups such as walking / running or cycling; b) lower intensities (40% to 60% of peak VO2) and c) Large volumes of training.

It is important to note that the practice of hiking had no side effects on the participants during and after the sessions, which proved to be a safe practice for hypertensive people.

As a final result this study has demonstrated that the program of guided walk was significant and confirmed the benefits of aerobic exercise in lowering blood pressure in hypertensive individuals.

CONCLUSION

The results, we can say that a program of guided walk followed by 02 months with disciplinary intensity from 50 to 70% and a weekly attendance of 05 days can significantly reduce hypertension, as with drug therapy served in pressure control blood and prevented changes in the degree of hypertension.

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ABSTRACT

The present study aims to analyze the influence of a two-month walking program oriented on blood pressure (BP) in hypertensive individuals. 05 adults of both sexes with an average age of 55.2 ± 15.49 years, being selected for deriving intentional extension project "Walking for Health" were observed. The blood pressure measurement was taken for 02 months. The collected data was performed before the intervention of the walking program and after their action. The investigated sample exhibited significant reductions (- 12, 77 and 4, 93 mmHg for systolic and diastolic blood pressure, respectively). We conclude that the program of guided walking exerted a positive effect on blood pressure in hypertensives.

KEYWORDS: walk, blood pressure, hypertensive.

MARCHER COMME FACTEUR D'UTILISATION ET DE RÉDUCTION DE MAINTENANCE DES NIVEAUX DE PROGRAMME PRESSION PARTICIPANTS "MARCHE DE SANTÉ" DANS ARAGUAINA - TO.

RÉSUMÉ

La présente étude vise à analyser l'influence d'un programme de deux mois orientée sur la tension artérielle (TA) chez les personnes hypertendues à pied. 05 adultes des deux sexes avec un âge moyen de 55,2 ± 15,49 ans, sont choisis pour dériver projet d'extension intentionnel "Marche Pour la Santé» ont été observés. La mesure de la pression sanguine a été effectuée 02 mois. Les données recueillies ont été effectués avant l'intervention de la marche et après leur action. L'échantillon étudié présentait d'importantes réductions (- 12, 7:04, 9 mmHg pour la systolique et la pression artérielle diastolique, respectivement). Nous concluons que le programme de randonnées guidées exercée effet positif sur la pression artérielle chez les hypertendus.

MOTS-CLÉS: marche, la pression artérielle, l'hypertension.

CAMINAR COMO FACTOR DE REDUCCIÓN DE USO Y MANTENIMIENTO DE NIVELES DE PROGRAMA PRESIÓN PARTICIPANTES "CAMINAR PARA LA SALUD" EN ARAGUAINA - TO.

RESUMEN

El presente estudio tiene como objetivo analizar la influencia de un programa de dos meses orientada sobre la prezem arterial (PA) en hipertensos a pie. 05 adultos de ambos sexos, con una edad media de 55,2 ± 15,49 años, siendo seleccionados para derivar proyecto de extensión intencional "Caminando por la Salud" se observaron. La medición de la prezem arterial se realizó 02 meses. Los datos recogidos se realizó antes de la intervención de la caminata y después de su acción. La muestra investigada mostró reducciones significativas (- 12, 7:04, 9 mmHg para la prezem arterial sistólica y diastólica, respectivamente). Llegamos a la conclusión de que el programa de senderismo guiada ejerce efecto positivo sobre la prezem arterial en hipertensos.

PALABRAS CLAVE: pie, la prezem arterial, hipertensión.

UTILIZAÇÃO DA CAMINHADA COMO FATOR DE REDUÇÃO E MANUTENÇÃO DOS NÍVEIS PRESSÓRICOS DE PARTICIPANTES DO PROGRAMA "CAMINHANDO PARA SAÚDE" EM ARAGUAÍNA – TO.

RESUMO

O presente estudo tem como objetivo analisar a influencia de dois meses de um programa de caminhada orientada sobre a pressão arterial (PA) em indivíduos hipertensos. Foram observados 05 indivíduos adultos de ambos os sexos com média de idades 55,2±15,49 anos, sendo selecionada de forma intencional oriundos do projeto de extensão "Caminhando para Saúde". A aferição da pressão arterial foi realizada por 02 meses. Os dados coletados foram realizados antes da intervenção da caminhada e após a prática da mesma. A amostra investigada exibiu reduções significativas (- 12, 7 e 4, 9 mmHg para pressão arterial sistólica e diastólica, respectivamente). Conclui-se que o programa de caminhada orientada exerceu efeito positivo sobre pressão arterial de hipertensos.

PALAVRAS-CHAVE: caminhada, pressão arterial, hipertensos.