

181 - RELATION BETWEEN THE POSTURAL POSITION AND AGUDAS CARDIOVASCULARES ANSWERS DURING THE POWER TRAINING

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INTRODUCTION

The power training presents nowadays, like fundamental part of a physical activities program because of several studies showing the benefits and safety of the application at several contexts. Although the great increase of the blood pressure during the resistance training, the resistance training in long term does not raise the arterial pressure stillness. However, a regular program of resistance training moderates the answer of the blood pressure.

According PARKER, the exercises adversely resistance raise the blood pressure, cause the continuous muscular force COMPRIEM AS ARTERIOLAS PERIFERICAS, increase the resistance to the blood flow. The same answer maybe oriented to the position variation, where the power imposed to a bigger muscular mass, recruited for the postural maintenance and the gravity force needs to be hit by blood flow.

Another variables like intensity, balance, execution time must be carefully controlled for decrease the intensity of the CARDIOVASCULARES exercise like a blood pressure, heart frequency and blood pressure SISTOLICA, this show the relation between the oxygen consume PELO MIOCARDIO and the flux blood CORONARIO

So, the postural variation can be an important variable than too can be utilized for the intensity control on the power training. It is also not possible to find a big literature. So, like the different exercises, in different positions, can show different CARDIOVASCULARES answers (blood pressure, heart frequency and double product) for the same muscular group.

FARINATTI compared LEG PRESS and EXTENSAO DE JOELHOS EM PE E DEITADO, TRICEPS NO PULLEU E FRANCES E ROSCA BICEPS DIRETA E ALTERNADA. Found big differences with an increase like a 10% of the blood pressure on the EXTENSAO DE JOELHOS than the LEG PRESS

At one comparison between the SUPINO RETO DEITADO and SUPINO RETO SENTADO SIMAO didn't find big differences on these positions for these muscular groups.

So, the objective of this goal was ascertain the relation between the adopted position on the exercise realization for the training to the same muscular group and the CARDIOVASCULARES answers (heart frequency, blood pressure, and double product) during the power training.

Materials and methods

The sample was composed by eleven men, between 18 and 30 years, healthy, don't know if they were using a medication for a performance increase. They signed the contract.

The test was realized with a muscular group GRANDE DORSAL, NOS APARELHOS DE REMADA BAIXA E LIVRE NAREMADA CURVADA.

On the first day was realized with PRE-TESTES about the deslocated balance by each volunteer (test of 1 RM), one training to know the equipments and to adjust the used machines

On the second day, the volunteers were calm on the seat position at ten minutes for the stabilization of the blood pressure at calm using the ESFIGMOMANOMETRO VERTICAL DA UNITEC (EUA) and the heart frequency was measured with the CARDIOFREQUENCIMETRO DA POLAR S510 model (Finland). The verification was realized by only one valuer, experienced.

On the REMADA CURVADA, each person realized three series of 12 RM with 5 minutes break between that. Considering, the high blood pressure and the heart frequency happened during the last repetitions of a series (POLITO, 2003), the measured of PA was made between the last and one before the last on the three series and the FC measured on the final of the execution of 12 RM.

On the third day, was realized the tests on the APARELHO REMADA BAIXA, the volunteers were lay down at calm during 10 minutes, before the calm, was checked the blood pressure for this position. EM DECUBITO VENTRAL at machine was can vass the volunteers realize three series of 12 RM, with 5 minutes break the FLEXAO DE JOELHOS BILATERAL. The blood pressure was checked too between the last and one before the last, and the FREQUENCIA CARDIACA at the final series. The used APARELHOS and the attentions for the collect informations were the same than the BANCO FLEXOR exercise

During the realization of the series was recommended the volunteers didn't arrest exceedingly the breath with the GLOTE closed (MANOBRE DE VALSALVA), cause the blood pressure increase when realized this (MACDOUGALL et al, 1985), can be affect the answer of PA.

Was solicited, like safety and control, become void during the action CONCENTRICA, inspire on the EXCENTRICA action and count the repetition number on loud voice. Only on the serie ok each exercise was considered for the analyse the informations. The first was used to learn the exercise and the third like a control parameter.

Was used the T-student test, to comparison between the values founded on the CARDIOLOGICAS answers. The results had significant criterion P MENOR 0,05. Was made on the "excel 2003"

RESULTS

According showed on the figure 01, the average of the values of heart frequency were 93BPM on the realization of the exercise at the seat position and 101 bpm on the DECUBITO VENTRAL position

The average of blood pressure on the seat position was 113 mmhg and 92 mmhg and on the DECUBITO VENTRAL position was 125 mmhg and 80. Wasn't founded big differences for P MENOR 0,05 (figure 02)

The DUPLO PRODUTO on the realized seat exercise was 10.509 mmhg and on CUBITO VENTRAL was 12.625 mmhg. Bpm. Didn't founded big differences for P MENOR 0,05

ALTERCATION

The method considered gold standart, to check the blood pressure like is the direct method, it is put a CATETER connected A UM TRANSDUTOR at one ARTERIA, later the anesthesia local application. However the direct method be the most

accuracy and safe about the answers PRESSORICAS, exist risks to this method of pain, ESPASMOS, TROMBOSE HEMORRAGIAS, and this can be evasive. Another method who check the blood pression not so EVASIVA is the FINAPRESS, APARELHO who use FOTOPLETISMOGRAFica coach, register the reading of mmHg by the infrared light PLETISMOGRAFica, who likes on the right method show continuous each, registering the immediately variation at the blood pression.

Another studies about alike objectives were realized like the POLITO, ROSA and SCHARDONG (2004) who study the possibilite for alter the blood pression, heart frequency and double product on the EXTENSAO DE JOELHOS DE FORMA UNI E BILATERAL and accomplished that didn't were showed differences at all the watched variables. Apparently, the FORMA DE EXECUCAO UNILATERAL didn't echo on the CARDIOVASCULARES AGUDAS answers. However, the BILATERAL execution showed tendence to increase the values of PAS and D about the UNILATERAL relation, deserved the muscular mass used at the UNILATERAL exercise if bigger than UNILATERAL, what can be consider on the description to hypertension person.

Another goal realized by LEITE and FARINATTI what compares the exercise of LEG PRESS and EXTENSAO DE JOELHOS, FLEXAO DE JOELHO EM PE E DEITADO, TRICEPS NO PULLEY E FRANCES, ROSCA BICEPS DIRETA E ALTERNADA. Had who result a answer of heart frequency, blood pression and double product alike. Less for the QUADRICEPS, where happened a increase ok 10% on the answers of the EXTENSAO DE JOELHOS QUE NO LEG PRESS. So, the addiction goals need to make it, cause in some muscular groups, different exercises can show CARDIOVASCULARES differences.

MIRANDA et al, later one goal contrasting the HEMODINAMICAS answers (pa,fc, dp) at the realization about one exercise on the SUPINO RETO SENTADO E SPINO RETO DEITADO, Accomplished no had big differences, but was founded answers little bit below the SUPINO RETO DEITADO parameters

The nowadays study founded answers like the others adduced. Don't had big differences about the answers searched between the exercise seat or on the DECUBITO VENTRAL. But, during the exercise at the Remada, about a body position at the APARELHO, the person use a bigger force on the abdomen muscle and use another muscle to accessory the execution what can elevate a increase of thorax pression. That characteristics aspects to DECUBITO VENTRAL, can be worthwhile possible differences and GRADO alike value.

ACCOMPLISHMENT

So, was possible accomplish who the change of the position, on the Grande dorsal on the power trainement, don't meaning influence the blood pression on the person NORMOTENSOS. This can change the exercise position about the MUSCULACAO, isn't effective to control the blood pression changeability on the healthy persons, what can be used at the hypertension.

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RELATION BETWEEN THE POSTURAL POSITION AND AGUDAS CARDIOVASCULARES ANSWERS DURING THE POWER TRAINING ABSTRACT

The goal of this study is to check the relation between the position adopted to the realization the exercises to the treatment for the same muscular grouping and CARDIOVASCULAR answers (blood pression, heart frequency and double product) during force trainement. Eleven healthy women, they were not using any kind of medication. 3 series of 12 maximum repetition with five minutes of interval between the series, about the REMADA CURVADA E REMANDA BAIXA SENTADA exercise. The serie. The blood pression was measuret on stillness and after the last repetition each serie. The results found did not show big different on the blood pression, blod pression and double product between two realized exercises.

Key word: CARDIOVASCULARES answers, power training.

RELATION BETWEEN THE POSTURAL POSITION AND AGUDAS CARDIOVASCULARES ANSWERS DURING THE POWER TRAINING RESUME

The goal of this study is to check the relation between the position adopted to the realization the exercises to the treatment for the same muscular grouping and CARDIOVASCULAR answers (blood pression, heart frequency and double product) during force trainement. Eleven healthy women, they were not using any kind of medication. 3 series of 12 maximum repetition with five minutes of interval between the series, about the REMADA CURVADA E REMANDA BAIXA SENTADA

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Key word: CARDIOVASCULARES answers, power training.

RELACIÓN ENTRE LA POSICIÓN POSTURAL Y RESPUESTAS AGUDAS CARDIOVASCULARES DURANTE EL ENTRENAMIENTO DE FUERZA

RESUMEN

El objetivo de este estudio fue verificar la relacion entra la posicion adoptada em la realizacion de ejercicios para entrenamiento de los mismos agrupamientos muscular y lãs respuesta CARDIOVASCULARES (frecuencia cardíaca, presión arterial, doble producto) durante el entrenamiento de fuerza. Once personas del género femenino saludables y que no estaban em uso de ningún medicamento realizaron 3 series de 12 repeticiones de REMADA CURVADA E REMADA BAIXA SENTADO.La frecuencia CARDIACA fue medida en reposo y después la ultima repeticion, tambien de cada serie.Los resultados encontrados no apresentaran diferencias significativas en la frecuencia cardíaca, presion arterial y doble producto entre los dos ejercicios realizados.

Palabra llave: Respuestas Cardiovasculares, entrenamiento de fuerza

RAPPORT ENTRE LE POSIÇÃO RÉPONSES TRANCHANTES POSTURALES ET CARDIO-VASCULAIRES PENDANT LA FORMATION DE FORCE

Je RÉSUMÉ

L'objectif de cette étude était pour vérifier le rapport parmi la place adopté dans la réalisation d'exercices pour former des mêmes grupamento musclés et les réponses cardio-vasculaires (fréquence du coeur, tension et double produit) pendant la formation de force. Onze individus du féminin du genre, sain et ce n'était pas de toute médecine accompli 3 série de 12 répétitions maximales (RM) avec 5 minutes d'intervalle parmi la série en cours d'utilisation, des exercices d'extension bilatérale d'épaules dans la place des places assises (Ramé bas) et dans la place dans le pied, avec inclination du tronc approximativement 45° devant (Ramé courbé). La fréquence du coeur a été mesurée dans le reste et après qu'il la finisse / il répétition de chaque série. La tension a été vérifiée dans le reste et parmi l'à côté du dernier et il la finit / il répétition, aussi de chaque série. Résulté les trouvés n'avez pas présenté de différences considérables dans la fréquence du coeur, tension et double produit parmi les deux exercices accomplis.

Les mots accordent: Réponses cardio-vasculaires, Former de Force.

RELAÇÃO ENTRE A POSIÇÃO POSTURAL E RESPOSTAS AGUDAS CARDIOVASCULARES DURANTE O TREINAMENTO DE FORÇA

RESUMO

O objetivo deste estudo foi verificar a relação entre a posição adotada na realização de exercícios para treinamento do mesmo grupamento muscular e as respostas cardiovasculares (frequência cardíaca, pressão arterial e duplo produto) durante o treinamento de força. Onze indivíduos do gênero Masculino, saudáveis e que não estavam em uso de nenhum medicamento para algum eventual problema de saúde realizaram 3 séries de 12 repetições máximas (RM) com 5 minutos de intervalo entre as séries, dos exercícios de Remada curvada e remada baixa sentado. A frequência cardíaca foi medida em repouso e após a ultima repetição de cada série. A pressão arterial foi aferida em repouso e entre a penúltima e a ultima repetição, também de cada série. Os resultados encontrados não apresentaram diferenças significativas na frequência cardíaca, pressão arterial e duplo produto entre os dois exercícios realizados.

Palavras chave: Respostas Cardiovasculares, Treinamento de Força.