73 - THE DIFFERENCES THROUGH CARDIORESPIRATORY WITH POWER LAB, MASSAGE THERAPY AMONG THE HOT STONES

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INTRODUCTION

In Brazil there are many cardiac deaths each year and kills more than seventy thousand people a heart attack according to (UMA-SUS/FMA, 2014), because the body subjected to stress undergoes great changes in metabolism , cardiac system is intimately influenced by the release of cortisol, which is a hormone that is directly connected to the stress, that causes a high production of white blood cells found in the body , but when viewed in excess accumulates in the walls of arteries and reducing the blood flow thus form -If clots increasing the risk of cardiovascular disease (HOUASSIS , 2001; LABRADOR , 1994) . Integrate the cardiovascular system with a propulsive contractile pump that is the heart , he sends blood to the entire body through veins and capillaries and systemic , making the exchange of oxygen , carbon dioxide and nutrients (POWER I,2001; GUITON, 1997)

The anti-stress massage is a manual technique that touches methodical aims therapeutic action due to the elimination of catabolic the body , benefits of relaxation and emotional support stimulating the elimination of toxins and waste , acting mainly in the circulation and into the venous and lymphatic return (YATES, 1989). The physiological system have significant influences in massage providing impetus for the body , replenishing the innate homeostatic balance (FIGUEIREDO , 2007; FRITZ , 2002) . Massage can decrease desfadigar fibers and tendon reflex tension , decrease respiratory rate and increase chest expansion . May cause vasodilation , decrease heart and nervous system pressure accelerates cell myelination and reduces anxiety (GUIMARÃES 1997). The stimulation of the nervous system is very significant , improving the production of glandular secretions and organ function. Besides relieving massage, we can mention the hot stone therapy , which promotes the effect of thermotherapy indicated in stress, anxiety and muscle tension . The warmth of the hot stones stimulates circulation causing vasodilation and increased local circulation . The heat emitted by the stones is the temperature of the portions of the lead body to the skin through the blood more effectively (SZERMAN , 2013) .

It is possible to observe the expansion of the local temperature , checking an area before and after application of the therapy. The place is warm , reflecting the increased blood flow. The conditions of body temperatures are regulated by mechanisms which are by thermoregulatory centers is located in the hypothalamus also by the sympathetic SNA , which maintains the balance of the degree of vasodilation of vessels in response to variation in internal body temperature and changes to room temperature and also influencing the balance and wellbeing (SINECLAIR , 2008) . As an evaluation method for the fidedignizar relieving massage and hot stone therapy , we used the PowerLab equipment, which is a device with several accessories and transducers via software when connected to the individual, measuring heart rate and respiratory rate .

OBJECTIVES

The importance of this study is to demonstrate through the PowerLab technology cardiorespiratory differences between anti-stress massage and hot stone therapy.

MATERIALS AND METHODS

This study was approved by the ethics committee and merit in research at the University Anhembi Morumbi - São Paulo / 2014. Upon approval , this research an experimental study where sample consisted of 3 females aged between 24 years was conducted to 34 years. Data collection for the study was conducted in the premises of the University Anhembi Morumbi , Campus Center . The volunteers were submitted to 4 sessions , and 2 were hot stone therapies protocol UAM (SZERMAN , 2013) and 2 anti-stress massage protocol UAM (NESSI, 2010), and services performed 2 times per week. All volunteers underwent a pre- and post - procedures in the laboratory on the second floor of the University Anhembi Morumbi by Powerlab , to measure blood pressure and a quiz machine software .

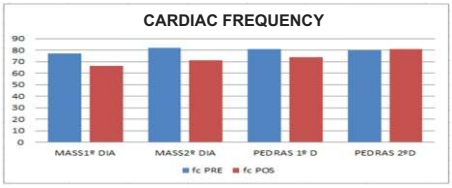
Females between 24 and 34 years were included .

People smoking , pregnant women , infants , skins with lesions at the site of application as burns , severe skin diseases , carriers landmark step , heart problems , people with decompensated chronic diseases , epilepsy and patients with malignancies were excluded .

Subsequently performed the selection of volunteers , they answered a token interview, in which was read together with the same Statement of Informed Consent Form (ICF) for the acquiescence of participation in the survey. The resources used for pre- and post - procedure were Powerlab , device to measure blood pressure and a questionnaire . The protocol was developed in the Laboratory Skills , located on the second floor of the University Anhembi Morumbi , unity center , local service were equipped with stretcher, auxiliary trolley, stool and step stool .

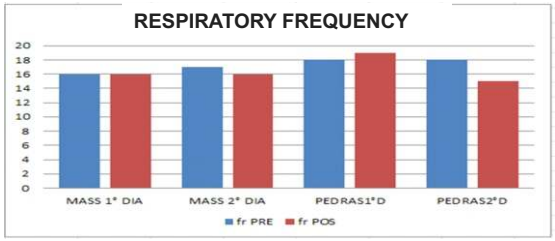
RESULTS AND DISCUSSION

Based on the results issued in relation to heart rate shown in Chart 1 of the proposed therapies , there was a significant improvement between the anti-stress massage in the cardiac system compared to hot stone therapy .

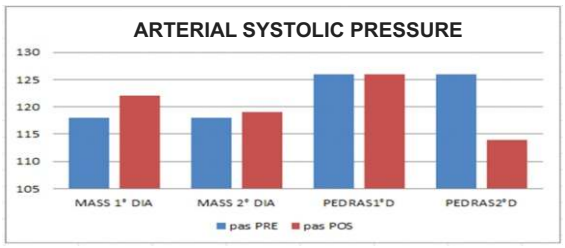


Graphical 1 - Comparison of heart rate before and after the applied therapy

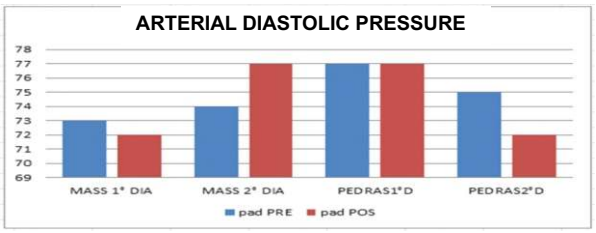
Based on the results issued in relation to respiratory rate shown in Graphical 2 of the proposed therapies , there was a significant improvement between the hot stone therapy in the respiratory system compared to relieving massage.



Graphical 2 - Comparison of Respiratory Rate before and after the applied therapy
The Graphical3 systolic blood pressure showed significant results for the hot stones compared to relieving massage.



Graphical3 - Comparison of systolic blood pressure before and after the applied therapy
Graphical 4 - diastolic blood pressure showed no significant results



Graphical4 - Comparison of diastolic blood pressure before and after therapy and applied

The number of heart beats per minute heart rate is corresponding to the body . In our study we found a significant difference in heart rate caused by stress-relieving massage. The hot stone therapy brought us results regarding respiratory rate . Was unveiled that differences in heart rate , assessed during the massage procedure are consequential stimulation of the autonomic nervous system in which the variations of these variables are associated with sympathetic efferent responses . In our findings were found to decrease in heart rate that can be explained by stimulation of the parasympathetic nervous system , taking into account that it acts on the heart by means of cholinergic substances , significantly reducing the number of heartbeats per minute.

Some results presented by (NIELSON, 1989) , shows , for example , that individuals who carry out the practice of massage , guests can enjoy a healthier body because the body is free of stress and therefore have more energy to fight infections normal .

Understanding language (MONEZ , 2009) methods are correlated relaxation through breathing , contact, elasticity and proprioception .

Respiratory system have an adequate response should occur normally, for that trunk and shoulders need to be loose and relaxed (MANOLI , 2000) .

Second (DOMINICO , 1998) claimed that massage allows a better functioning of the breath . Suitably applied to the region of the " rib cage indirectly by mobilizing the joints costovertebral and sternal Condo , avoiding the rigidity of these small joints " , thereby providing adequate improvement in muscular elasticity and increasing joint flexibility , with greater mobility of the rib cage and all that causing a full improves the lungs and blood oxygenation.

CONCLUSION

Through our studies , we obtain results that demonstrate the benefits of touch and its influences on physical and emotional well being in addition to the physiological effects .

The anti-stress massage showed significant responses to the cardiac system , but the hot stone therapy there was improvement in the respiratory system and the systolic blood pressure decreased by 9.6 % between pre and post , as the diastolic blood pressure showed no significant manifestations .

Thus we conclude that the Hot Stone Therapy and Massage presents relieving the immediate responses to physiological and metabolic effects well being and relaxation , need to evaluate the results of medium and long term .

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THE DIFFERENCES THROUGH CARDIORESPIRATORY WITH POWER LAB, MASSAGE THERAPY AMONG THE HOT STONES

ABSTRACT

This study aims to determine the cardiorespiratory system by PowerLab between relieving massage and hot stone therapy. The cardiorespiratory system is to transport oxygen through the cardiovascular system to oxygenate all peripheral tissue including muscle tissue . The anti-stress massage (NESSI , 2010) is a manual technique that interferes the cardiorespiratory system , it allows to reduce tensions as having therapeutic effect , eliminating the catabolic that are formed in the muscles . Among other therapies there are the hot stones (SZERMAN , 2013) which is a massage performed with specific instruments for technical stones , in the body producing organic and physiological responses . With the use of hot stones , circulation is increased rapidly , consequently happens a contribution of nutrient benefiting a detoxification in the body . And to analyze the frequency of cardiorespiratory stress-relieving massage techniques and Hot Stone Therapy , the PowerLab is a system designed for use in life science research and application in teaching to examine cardiovascular effects was used . The anti-stress massage showed significant responses to the cardiac system , but the hot stone therapy there was improvement in the respiratory system and the systolic blood pressure decreased by 9.6 % between pre and post , as the diastolic blood pressure showed no significant manifestations . We can conclude that the hot stone therapy and massage antistress feature immediate cardiorespiratory and metabolic responses to physiological well-being and relaxation , need to evaluate the results of medium and long term .

KEYWORDS : massage antistress; hot stones ; PowerLab.

VÉRIFIEZ LES DIFFÉRENCES CARDIORESPIRATOIRE AVEC POWERLAB, ENTRE MASSOTHÉRAPIE ET LES PIERRES CHAUDES.

RÉSUMÉ

Cette étude vise à déterminer le système cardio-respiratoire par PowerLab entre soulager massage et massage aux pierres chaudes . Le système cardio-respiratoire est de transporter l'oxygène à travers le système cardiovasculaire pour oxygéner les tissus périphériques , y compris tous les tissus musculaires. Le massage anti-stress (NESSI , 2010) est une technique manuelle qui interfère le système cardiorespiratoire , il permet de réduire les tensions comme ayant un effet thérapeutique , éliminant la catabolique qui sont formés dans les muscles . Parmi les autres traitements , il ya les pierres chaudes (SZERMAN , 2013) qui est un massage effectué avec des instruments spécifiques pour les pierres techniques , dans le corps la production de réponses biologiques et physiologiques . Avec l'utilisation de pierres chaudes , la circulation est augmenté rapidement , ce qui arrive par conséquent une contribution de nutriments au profit d'une désintoxication du corps . Et d'analyser la fréquence de techniques de massage anti-stress cardiorespiratoires et Hot Stone Therapy , le PowerLab est un système conçu pour une utilisation dans la recherche et l'application des sciences de la vie dans l'enseignement pour examiner les effets cardio-vasculaires a été utilisé . Le massage anti-stress a montré des réponses significatives au système cardiaque , mais la thérapie aux pierres chaudes il y avait une amélioration dans le système respiratoire et la pression artérielle systolique a diminué de 9,6% entre avant et après , comme la pression artérielle diastolique n'a pas montré de manifestations importantes . Nous concluons que la thérapie et massage aux pierres chaudes antistress ont cardiorespiratoire immédiate et réponses métaboliques à physiologiques bien - être et de détente , besoin d'évaluer les résultats à moyen et long terme.

MOTS-CLÉS: massage ; pierres chaudes ; PowerLab.

REVISE LAS DIFERENCIAS CARDIORRESPIRATORIA, CON LA POWERLAB, PARA TERAPIA DE MASAJE Y LAS PIEDRAS CALIENTES.

RESUMEN

Este estudio tiene como objetivo determinar el sistema cardiorrespiratorio por PowerLab entre el alivio de masaje y terapia con piedras calientes . El sistema cardiorespiratorio es transportar oxígeno a través del sistema cardiovascular para oxigenar todos los tejidos periféricos, incluyendo el tejido muscular. El masaje antiestrés (NESSI , 2010) es una técnica manual que interfiere el sistema cardiorrespiratorio , que permite reducir las tensiones como de efecto terapéutico , eliminando la catabólico que se forman en los músculos . Entre otras terapias no son las piedras calientes (SZERMAN , 2013) que es un masaje realizado con instrumentos específicos para los cálculos técnicos , en la producción de respuestas orgánicas y fisiológicas del cuerpo. Con el uso de piedras calientes , la circulación se incrementa rápidamente, por consiguiente, ocurre un aporte de nutrientes en beneficio de una desintoxicación en el cuerpo. Y para analizar la frecuencia de las técnicas de masaje cardiorrespiratorio para aliviar el estrés y la terapia con piedras calientes , el PowerLab es un sistema diseñado para su uso en la

investigación biológica y la aplicación en la enseñanza para examinar los efectos cardiovasculares se utilizó. El masaje anti-estrés mostraron respuestas significativas al sistema cardiaco , pero la terapia de piedras calientes se observó una mejoría en el sistema respiratorio y la presión arterial sistólica se redujo en un 9,6% entre el pre y post , como la presión arterial diastólica no mostró manifestaciones significativas . Llegamos a la conclusión de que la terapia antiestrés y caliente piedras masaje tienen cardiorrespiratoria inmediata y respuestas metabólicas al bienestar fisiológico y la relajación , es necesario evaluar los resultados de mediano y largo plazo.

PALABRA CLAVE: masaje ; piedras calientes ; PowerLab

VERIFICAR AS DIFERENÇAS CARDIORRESPIRATÓRIAS ATRAVÉS DO POWERLAB, ENTRE MASSAGEM ANTIESTRESSE E TERAPIAS DE PEDRAS QUENTES.

RESUMO

Este estudo tem como objetivo verificar o sistema cardiorrespiratório através do PowerLab entre Massagem Antiestresse e terapia de pedras quentes. O sistema cardiorrespiratório tem a função de transportar oxigênio através do sistema cardiovascular para que oxigene todo o tecido periférico, entre eles o tecido muscular. A Massagem Antiestresse (NESSI, 2010) é uma técnica manual que interfere no sistema cardiorrespiratório, pois permite diminuir tensões tendo como efeito terapêutico, eliminando os catabólicos que são formados nos músculos. Entre outras terapias há as de Pedras Quentes (SZERMAN, 2013) que é uma massagem instrumental realizada com pedras especificas para a técnica, produzindo no organismo reações orgânicas e fisiológicas. Com o uso das Pedras Quentes, a circulação é rapidamente aumentada, consequentemente acontece um aporte de nutriente beneficiando uma desintoxicação no organismo. E para analisar a frequência cardiorrespiratória das técnicas de Massagem Antiestresse e Terapia de Pedras Quentes, foi utilizado o PowerLab que é um sistema projetado para uso em pesquisas de ciências humanas e aplicação no ensino para analisar efeitos cardiovasculares. A massagem antiestresse mostrou respostas relevantes ao sistema cardíaco, porém a terapia de pedras quentes houve melhora no sistema respiratório e na pressão arterial sistólica que diminuiu 9,6% entre o pré e pós, já a pressão arterial diastólica não revelou manifestações importantes. Podemos concluir que a terapia de pedras quentes e massagem antiestresse apresentam respostas fisiológicas cardiorrespiratórias e metabólicas imediatas para o bem estar e relaxamento, necessitando avaliar os resultados de média e longa duração.

PALAVRAS-CHAVE: massagem antiestresse; pedras quentes; powerlab.