

107 - EVALUATION OF THE EFFECTS OF SKIN HYDRATION AND WELL-BEING IN ELDERLY BEFORE AND AFTER MANUAL REFLEX MASSAGE

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INTRODUCTION

The phenomenon of aging is more present in the world today and with this it becomes more necessary to study mechanisms that help this growing population to have a more dignified and quality life (DIOGO, 2004). This population presents, with the advancing age, a decrease in the epidermis-dermis thickness; reduction of the elasticity and secretion of sebum by the sebaceous glands; compromised immune response; decreased number of sweat glands; decreased vascular bed with fragility of blood vessels. Thus, it is evident the need of specific care for the skin of the elderly that attend the alterations of the integumentary system (BRANDÃO, BRANDÃO, 2006).

The atrophy of the apocrine and sebaceous glands causes dryness of the skin, loss of subcutaneous tissue, vascularization, decrease of small blood vessels, and other factors that compromise the integrity of the skin (GIST, 2009). Thus, the simultaneous increase in loss of the transepidermal barrier and the water content of the stratum corneum is one of the characteristics of cutaneous aging. Feeling dry skin, opaque appearance, with deeper expression lines (GONÇALVES, CAMPOS, 2009).

In view of the above, the maintenance of skin hydration, as well as the cellular renewal capacity of the organism, is essential for the preservation of health, softness, flexibility, elasticity and skin joviality (Leonardi, 2008). Since water present in the epidermis is not enough for epidermal hydration if there are no factors for its retention, preventing evaporation into the environment (COSTA, A, 2009). That said, the aged skin shows that the dermis is dehydrated, as they have a decrease in the amount of glycosaminoglycans, essential proteins found in the dermis that have the ability to bind the water molecules and fix them. With aging, the fibroblasts begin to decrease the synthesis of these proteins and the ability to fix water on the skin becomes impaired. With less water in the dermis, metabolism decreases and wrinkles intensify (PEREIRA, 2013).

Briefly, we say that there are three main types of active substances that can help regulate hydration in the stratum corneum: occlusives, which form a layer of protection on the skin, literally a film, preventing the loss of water. Occlusive properties minimize evaporation of skin water and assist in the restoration of the hydrolipidic mantle, and are generally vegetable oils rich in essential fatty acids, butters and ceramides (PEREIRA, 2013).

We can also say that massage acts directly on the epidermis, stimulating the sebaceous and sweat glands, improving their physiological response, increasing the permeability of the pores, potentiating the microcirculation, moisturizing the skin, increasing the elastin production and consequently elasticity of the skin and adjacent structures (ABREU et al, 2012). Massage has its therapeutic role as well as having its social role, since it occupies the place of choice in the said practices - of comfort, therefore, the massage has as a search a well-being from physical manipulations considered natural, same time as a bodily pleasure (DUFOUR; COLS, 2001). It is noticeable that when touching the elderly we touch all their experience.

OBJECTIVE

To evaluate the effects of skin hydration and well-being in the elderly, vital signs such as oxygenation, pulsation and blood pressure before and after manual reflex massage.

METHODS

This research was carried out in N.C.I- Community Center of the Elderly: Santa Vincenza Gerosa - BOMPAR, in São Paulo. A group of 15 female volunteers, aged between 60 and 80 years, autonomous and independent, were selected. The study consisted of three sessions of manual reflex massage, lasting one week. Before each massage were performed, the completion of the anamnesis form, reading and signing of the T.C.L.E - Free and Informed Consent Form, approved by the Ethics Committee of the Anhembi Morumbi -SP University. After that, the evaluations were divided into two moments: Evaluation of hydration of the hands before and after the massage through SKINUP equipment and evaluation of well-being through the verification of vital signs: oxygenation, pulsation and blood pressure.

The manual reflex massage was performed with a cream (cold cream - excipient) with the following assets: shea butter that is a great antioxidant and the silicone that promotes softness. Cold cream contains moisturizing, lubricating, refreshing and emollient properties.

Exclusions were excluded for all elderly patients with chronic decompensated diseases, with skin diseases, pre-existing allergies. Three different groups were organized, containing five volunteers in each, G1 receiving only reflex manual massage, G2 receiving only hydration through the selected cosmetic, G3 receiving the reflex manual massage associated with the selected cosmetic

Blood pressure, oximetry and heart rate per minute were measured for the evaluation of well-being, and for the assessment of skin hydration, SkinUp was used before and after each session.

Noting that the massage performed in groups 1 and 3 is the same, the only difference was the use of the cream as a coadjvant, only, in group 3.

Check list of reflex manual massage:

All groups were previously cleaned with neutral soap; hold your fingertip and rotate finger-to-finger clockwise and

counter-clockwise. 3x each finger. (Perform twisting movements of the fingers); press the thumbs into the palm of the client's hand, from the wrist line toward the 5x middle finger; with your thumb and forefinger, press two points on each finger over the proximal phalanx over the medial and distal phalanx 3x; close your hand and make sliding movements across the palm of the client's hand; with the region of your two fists, make slides on the back of the hand in the direction, center to sides, having the thumb running the slide 5x; slide your thumb circularly over the back of the hand, first with one hand, while the other holds the middle of the back of the hand, then 5x each region; make loosening movements, holding with the thumbs in the posterior region of the handle and the indicators in the anterior region of the handle, with the middle fingers, to realize the looseness; interlace your fingers with client's fingers and make circular wrist movements clockwise and counterclockwise. 5x each direction; with your thumb and forefinger holding your finger, do slide and pull on each finger, performing 3x; with one hand, hold the customer's arm near the elbow and with the palm of his other hand, extend the client's wrist. Hold for about 05 seconds; now, do the wrist stretching down too for 05 seconds; make tilt movements of the handle from one side to another; slide with both hands flat, gently tracing the joints of the arm; repeat all movements in the other hand.

In group 2, only the occlusive cream was applied,

1. Apply occlusive cream;
2. Wait five minutes.

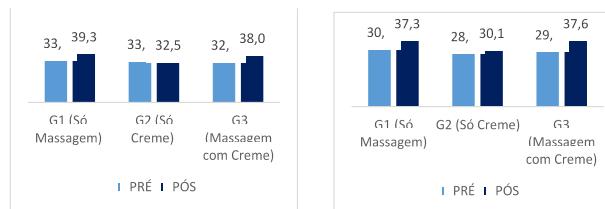
RESULTS

Each group was started with 5 volunteers totaling 15, however during the course of the research there were withdrawals, thus, group 1 ended treatment with 2 volunteers, group 2 ended treatment with 3 volunteers and group 3 ended treatment with 4 volunteers.

The results demonstrate the efficacy of the treatment with the application of the reflex manual massage technique with emphasis on skin hydration, aiming to improve cutaneous hydration of the hands and clinical aspects of skin aging.

It is important to point out that in this study, an occlusive cream that has cold cream as an excipient with the following active ingredients: silicone and shea butter was used as an adjunct to the treatment to verify the benefits at the end of the treatment.

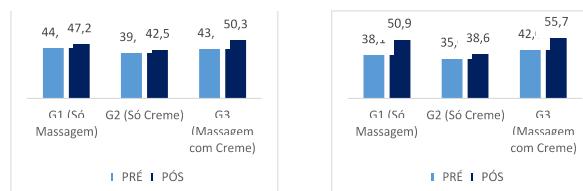
Following the graphs with the results of before and after the application of the proposed protocol can be observed.



Graph 1: Water levels of hydration of the right hand on the back.

Graph 2: Water levels of hydration of the left hand on the back.

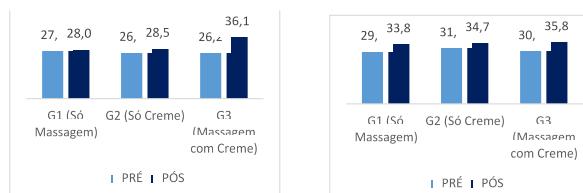
According to graphs 1 and 2, it is possible to observe better results after application of the protocol in the G3 group, where the massage with the cream was applied as a coadjvant, being increased by 5.5% and 8.5% the skin hydration level, in the right and left hand.



Graph 3: Water levels of hydration of the right hand in the palm.

Graph 4: Water levels of hydration of the left hand in the palm.

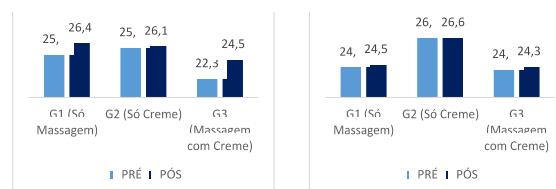
According to graphs 3 and 4, it is possible to observe better results after application of the protocol in group G3, where the massage with the cream was applied as a coadjvant, being increased by 7,2% and 13,7% the level of cutaneous hydration, in the right and left palm respectively.



Graph 5: Water levels of hydration of the right hand in the palm.

Graph 6: Water levels of hydration of the left hand in the palm.

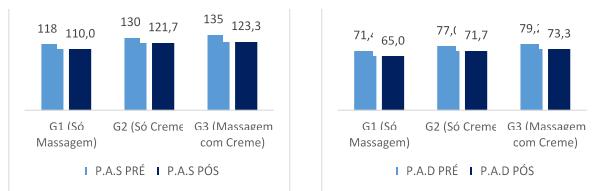
According to the graphs 5 and 6, it is possible to observe better results after application of the protocol in the G3 group, where the massage with the cream was applied as a coadjvant, being increased in 9.9% and 5.6% the skin elasticity level, in the right and left hand, respectively.



Graph 7: Lipid levels of hydration of the right hand in the palm.

Graph 8: Lipid levels of hydration of the left hand in the palm.

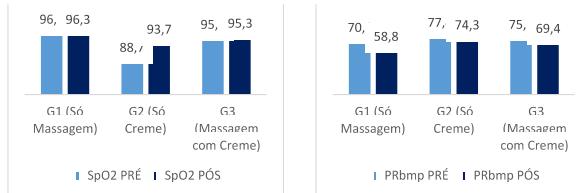
According to graphs 7 and 8, it is possible to observe better results after application of the protocol in group G3, where the massage with the cream was applied as an adjuvant, being increased by 2.2% and 0.2% the skin elasticity level, in the right and left palm respectively.



Graph 9: Diastolic blood pressure levels.

Graph 10: Systolic blood pressure levels.

Observing the graphs 9 and 10, it is possible to notice the reduction of the maximum and minimum blood pressure, allowing us to evaluate the well-being, taking into account that with the relaxation of the body there is a decrease in the heart rate.



Graph 11: Levels of arterial pulse oximetry.

Graph 12: Heart rate levels per minute.

According to figure 11, it is possible to observe that there was an increase in the oxygen saturation in the blood stream, thus increasing the nutrients supply in the blood circulation of the volunteers. In figure 12 it is possible to observe the reduction of the heart rate that is promoted through the relaxation of the massage.

DISCUSSION

The main objective of the study was to evaluate cutaneous hydration and well-being before and after reflex manual massage, comparing the effects between groups.

As shown in both graphs, the data presented by group G3, emphasize the best results researched, emphasizing, in this way the efficiency of the combination of the two practices performed, that of manual reflex massage, having as an adjuvant of the work a cream of an occlusive nature, making even more effective results.

In group G1, as a group in which only the practice of reflex manual massage was performed, presented excellent results when compared to water levels.

The G2 group had lower results than the other groups, because according to the results obtained, the short-term treatment is inefficient, since the long-term treatment has a gain in efficiency, since the absorption of the cream of nature would result in a higher result, thus preventing the decrease of water in the tissue.

In the literature can be found works with objectives similar to this study. CERVI (2014) understands that aging well today has become of the utmost importance, and in the view of aesthetic professionals it is imperative to understand that being physically fit and aesthetically contributes to the overall state of health of quality of life. Considering this, manual reflex massage forms an integral part of the field of aesthetics, as discussed in all work, has its numerous therapeutic and physiological benefits. The massage is defined by Domenico and Wood (1998), as a scientific method of treatment of certain dysfunctions through mechanical-manual procedures, applied skilfully and systemically to the body. According to Hudson (1999), massage is a therapeutic form of showing affection and concern and can have profound effects on the health and well-being of the patient.

According to the results of the comparative evaluation between skin moisturizing and massage, it is concluded that the use of cosmetics is an essential adjunct to a good result, aiming at the thought of Pimentel (2007), states that hydration should be used proving the improvement in texture of the skin, the products should be specific to each body region, given that the skin has different reactions and textures. Hydration favors elasticity, maintains water balance, revitalizes the skin and attenuates expression lines, since, according to Bergfeld (1997), it says that the well-being of the skin is an important part of our general state of health. Good health is important for healthy skin, and healthy skin reflects a lifestyle as a whole.

As an evaluative requirement, we used performance indicators to assess SBP, DBP, SpO2, PRBMP, and also requested the completion of the evaluation of well-being, focusing on the concept of WHITE JP et al. . (2003) reports that massage increases circulation by stimulating venous drainage, increasing muscle tissue metabolism and elasticity, promoting relaxation through the enhanced parasympathetic system and reduced sympathetic nervous system activity. The results presented by the graphs of blood pressure and oxygenation show large before and after responses to blood pressure levels, when it was analyzed that the index of decrease was greater evidenced, finding that the fact of manual reflex massage influences in a physiological and systemic way , is credited to the fact that massage stimulates the release of endorphin, reducing anxiety and provoking a deep relaxation.

The results obtained by the present study allow a complete evaluation of the efficacy of the moisturizer with the junction of reflex manual massage.

FINAL CONSIDERATIONS

Through this research it was possible to conclude that the treatment with the application of reflex manual massage technique with emphasis on cutaneous hydration presented beneficial effects on the improvement of clinical aspects of skin aging in the elderly volunteers researched.

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ABSTRACT

Introduction: From the statistical proportions of the World Health Organization, Brazil will be composed of 32 million people in the age group of 60 years or more. In old age the reduction in size and function of the sweat and sebaceous glands begins, exposing the skin to dryness and the appearance of cracks. **Objective:** This study evaluated the effects of cutaneous hydration and well-being in the elderly, before and after manual reflex massage. **Method:** A group of 15 female volunteers, aged between 60 and 80 years old, who were autonomous and independent, were selected. The study consisted of three sessions of manual reflex massage, lasting one week. Before each massage were performed, the completion of the anamnesis form, reading and signing of the T.C.L.E - Free and Informed Consent Form, approved by the Ethics Committee of the Anhembi Morumbi -SP University. After the evaluations were carried out, they were divided into two moments: Evaluation of the hydration of the hands before and after the massage through SKINUP equipment and evaluation of well-being through the verification of vital signs: oxygenation, pulsation and blood pressure. **Results:** According to the results of the comparative evaluation between skin hydration and massage, the use of cosmetics is an essential adjuvant for a good hydration result. It is possible to observe the decrease of the heart rate that is promoted through the relaxation of the massage. **Final considerations:** Through this research it was possible to conclude that the treatment with the application of the reflex manual massage technique with emphasis on skin hydration presented beneficial effects on the improvement of the clinical aspects of skin aging in the elderly volunteers researched.

SOMMAIRE

Introduction: D'après les proportions statistiques de l'Organisation mondiale de la santé, le Brésil sera composé de 32 millions de personnes âgées de 60 ans ou plus. Dans la vieillesse commence la réduction de la taille et la fonction de la sueur et des glandes sébacées, exposant la peau à la sécheresse et l'apparition de fissures. **Objectif:** Cette étude a évalué les effets de l'hydratation cutanée et du bien-être chez les personnes âgées, avant et après le massage réflexe manuel. **Méthode:** Un groupe de 15 volontaires féminins, âgées de 60 à 80 ans, autonomes et indépendantes, a été sélectionné. L'étude a consisté en trois séances de massage réflexe manuel, d'une durée d'une semaine. Avant chaque massage, la forme de l'anamnèse, la lecture et la signature du formulaire de consentement libre et éclairé, approuvé par le comité d'éthique de l'Université Anhembi Morumbi -SP, ont été complétés. Après les évaluations, ils ont été divisés en deux moments: Évaluation de l'hydratation des mains avant et après le massage à travers l'équipement SKINUP et évaluation du bien-être à travers la vérification des signes vitaux: oxygénation, pulsation et tension artérielle. **Résultats:** Selon les résultats de l'évaluation comparative entre hydratation de la peau et massage, l'utilisation des cosmétiques est un adjuvant essentiel pour un bon résultat d'hydratation. Il est possible d'observer la diminution de la fréquence cardiaque qui est favorisée par la relaxation du massage. **Considérations finales:** Grâce à cette recherche, il a été possible de conclure que le traitement avec l'application de la technique de massage manuel réflexe en mettant l'accent sur l'hydratation cutanée présente des effets bénéfiques sur l'amélioration des aspects cliniques du vieillissement cutané chez les volontaires âgés interrogés

RESUMEN

Introducción: A partir de las proporciones estadísticas de la Organización Mundial de la Salud, Brasil estará compuesto por 32 millones de personas en el grupo de edad de 60 años o más. En la vejez se inicia la disminución de tamaño y función de las glándulas sudoríparas y sebáceas, exponiendo la piel al resecamiento ya la aparición de fisuras. **Objetivo:** Esta investigación evaluó los efectos de la hidratación cutánea y del bienestar en ancianos, antes y después del masaje manual refleja. **Método:** Fue seleccionado un grupo de 15 voluntarias, ancianas, sexo femenino, con edades entre 60 a 80 años, autónomas e independientes. El estudio fue compuesto por tres sesiones de atención de masaje refleja manual, con duración de una semana. Antes de cada masaje fueron realizadas, el llenado de la ficha de anamnesis, lectura y firma del T.C.L.E - Término de Consentimiento Libre y Esclarecido, aprobado por el Comité de Ética de la Universidad Anhembi Morumbi -SP. Después de realizar las evaluaciones que se dividieron en dos momentos: Evaluación de la hidratación de las manos antes y después del masaje a través del equipo SKINUP y evaluación del bienestar mediante la verificación de los signos vitales: oxigenación, pulsación y la presión arterial. **Resultados:** Conforme a los resultados de la evaluación comparativa entre hidratación cutánea y masaje, el uso de cosméticos es un coadyuvante esencial para un buen resultado en la hidratación. Es posible observar la disminución de los latidos del corazón que se fomenta a través de la relajación del masaje. **Consideraciones finales:** A través de esta investigación fue posible concluir que el tratamiento con la aplicación de la técnica de masaje manual refleja con énfasis en la hidratación cutánea presentó efectos benéficos en la mejora de los aspectos clínicos del envejecimiento cutáneo en las voluntarias ancianas investigadas

RESUMO

Introdução: A partir das proporções estatísticas da Organização Mundial da Saúde, o Brasil será composto por 32 milhões de pessoas na faixa etária de 60 anos ou mais. Na velhice se inicia a diminuição de tamanho e função das glândulas sudoríparas e sebáceas, expondo a pele ao ressecamento e ao aparecimento de fissuras. **Objetivo:** Esta pesquisa avaliou os efeitos da hidratação cutânea e do bem-estar em idosas, antes e depois da massagem manual reflexa. **Método:** Foi selecionado um grupo de 15 voluntárias, idosas, sexo feminino, com idades entre 60 a 80 anos, autônomas e independentes. O estudo foi composto por três sessões de atendimento de massagem reflexa manual, com duração de uma semana. Antes de cada massagem foram realizadas, o preenchimento da ficha de anamnese, leitura e assinatura do T.C.L.E – Termo de Consentimento Livre e Esclarecido, aprovado pelo Comitê de Ética da Universidade Anhembi Morumbi –SP. Após foram realizadas as avaliações que foram dividida em dois momentos: Avaliação da hidratação das mãos antes e depois da massagem através do equipamento SKINUP e avaliação do bem-estar através da verificação dos sinais vitais: oxigenação, pulsação e a pressão arterial. **Resultados:** Conforme os resultados da avaliação comparativa entre hidratação cutânea e massagem, o uso de cosméticos é um coadjuvante essencial para um bom resultado na hidratação. É possível observar a diminuição dos batimentos cardíacos que for promovido através do relaxamento da massagem. **Considerações finais:** Através desta pesquisa foi possível concluir que o tratamento com a aplicação da técnica de massagem manual reflexa com ênfase na hidratação cutânea apresentou efeitos benéficos na melhora dos aspectos clínicos do envelhecimento cutâneo nas voluntárias idosas pesquisadas.