134 - COMPARATIVE STUDY ON THE TREATMENT OF ATROPHIC STRETCH MARKS IN WOMEN AFTER STRIAT AND ACIDS USE.

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INTRODUCTION

Physiotherapy has been gaining more space and expanding its performance area. One of these areas is the dermato-functional which is based on physical functional recovery and prevention of endocrine-metabolic, dermatological and musculoskeletal.

The stretch mark is defined as an acquired cutaneous atrophy, with linear aspect, in stretches with one or more centimeters wide, at first red, then pale and alluring (pearly). Few or numerous, they are arranged parallel to each other and perpendicular to the lines in the skin slits, indicating an elastic located imbalance, which characterizes then a skin lesion.(GUIRRO & GUIRRO, 2004)

The galvanic is based on physiological changes induced by electrical stimulation, caused by the galvanic current, and it acts on proteins that are dispersed in the fundamental substance of connective tissue in the dermis. When the galvanic current is released, electrochemical changes are caused around the needle reaching the isoeletric, leading a stabilization and augmentation of protein, as the sessions are made, reorganizing the local tissue of the dermis. (WHITE ET al, 2004.)

Treatment with acids such as glycolic acid is the easiest and most secure to implement, stimulating the blood vessels of the papillary dermis, and promoting collagen production. This acid has been used widely to treat many types of skin lesions such as: superficial, medium and deep wrinkles; dry skin, stretch marks, age spots and isolated phases of some lesions of psoriases. (SANTOS, 2009)

This research comes on the need to compare the improvement in stretch marks visual change in both techniques, contributing to scientific profile in the field of Physiotherapy Dermato-Functional, with the proposing of assisting the treatment of women with stretch marks. Then the general objective is comparing the effects of galvanic electrical stimulation and acids on stretch marks in women; and to this end, specific objectives were developed to verify the visual changes of stretch marks in the treated area and to identify the improvement on aesthetic appearance of the affected area. The work was accomplished through an experimental study, using a single group for it, comparing before and after each technique.

MATERIALS AND METHODS

The study was longitudinal. The method was exploratory, qualitative type of probability sampling is intentional. There was approval by the Research Ethics Committee of the Assis Gurgacz College with the opinion 379/2009 and protocol 207/2009. The research was conducted in Clinifisio (Physiotherapy Clinic), located in Ubiratã from January to February 2010. The population of this research consists of four female residents in Ubiratã-PR, with the same skin tone, ranging in age from 21 to 26 years old, suffering from striated skin in the region of gluteal.

It was taken ten physical therapy attendances for stretch marks with the application of galvanizing and acids. To participate in the study, the patients were informed about the method and technique to be worked, signing an awareness term and image authorization, and the clinical professionals have signed a consent form authorizing the execution of the research. The treatment was performed once a week, lasting 50 minutes each service individually. It was adopted as criterion for inclusion: not using any cosmetic that can affect the results; white and female. And the exclusion criteria: using cosmetics that can affect the results, black, male, change in sensitivity and changed cognitive status.

To collect data it was used: STRIAT appliance branded IBRAMED; informed consent form, evaluation form, contained in GUIRRO & GUIRRO (2007, p. 407); photographic record in all attendances using a camera PENTAX Optio M30 7.1 megapixels, always with the same photographic focus, taken by the same person, and the camera was always with a tripod, 25 centimeters far from the marked area for treatment, ensuring the same position in all the photos, which were taken before and after each visit, containing time and date on each photograph, so we obtained reliable results. In dealing with STRIAT, using the protocol proposed at the manual equipment (manual of the device, 2004 is available on the IBRAMED). The treatment dose we used ranged from 100 to 150 microamperes.

The protocol used with the acid was set according to the product line ADICOS description, composed by: glyco-active, mousse scrub, pre peeling, peel plus, revit plus, and Revita Mask. Analysis of the results for discussion of this work was by using photographs, through the perception of stretch marks visual improvement in the treated area, using both techniques and finally the comparison between them, trying to evaluate which one shows better results. We assessed the first and last photo of the treatment for comparison of results.

RESULTS

The results obtained by the treatment protocols between acids and galvanic, performed in four voluntary patients were partially satisfactory, even though cases with symptoms of different regeneration. The results are individually described below, where patients 1 and 2 were treated with acids and on patients 3 and 4 it was used STRIAT as treatment.

Patient 1: at this patient's clinical profile, the stretches appeared at the adolescence. It has continuous color white stretch marks along the delimited square by delimiting the stretches to be treated with acids following all the steps already described at the methodology. In the final photo it's noticed a significant decrease in the continuity of the stretches and the visual appearance visible on the right side to the middle of the photo. This patient received treatment with acids.



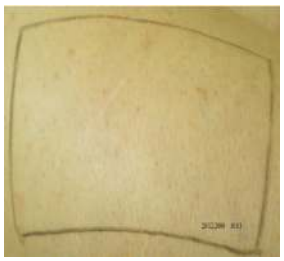
Picture 1: Before



Picture 2: After

Source: Research drawn up by the author (2010)

Patient 2: she has very visible white colored atrophic stretch mark, located in the middle of the delimited square for treatment with acids. The stretch marks appeared during the teenage years. The result after the tenth attendance was a substantial decrease in the atrophic stretch in which the display was difficult, achieving an improvement at stretch visual appearance, and it's possible to show the effectiveness of acid treatment on atrophic stretch marks.



Picture 3: Before



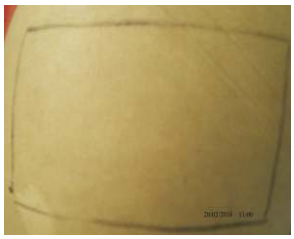
Picture 4: After

Source: Research drawn up by the author (2010)

Patient 3: in this patient the stretch marks appeared at adolescence, containing white colored stretch marks, continuous along the length of the marked square for treatment with STRIAT. After the tenth treatment it's noticed that the stretch marks are still present but they lost their continuity, there was an improvement in their view, but they are still present in small extent sizes with no continuity.



Picture 5: Before



Picture 6: After

Source: Research drawn up by the author (2010)

Patient 4: the patient has continuous white coloration stretch marks throughout the length of the marked square for treatment with STRIAT, and it appeared in adolescence. After the tenth treatment the results view was weakened due to poor healing of the patient.



Picture 7: Before



Picture 8: After

Source: Research drawn up by the author (2010)

DISCUSSION

We can notice the great effectiveness of the treatment, if the variables are controlled, differentiating number of sessions according to skin color, age, stretches size etc. Results can vary in each individual as in any other treatment of many diseases. This fact is centered on the reaction capacity of each individual, says GUIRRO & GUIRRO (2004). On this research, it's noticed on patient 4, who had no proper healing after treatment with STRIAT, hindering the results analysis, restating what the author says that the result depends on the reaction capacity of each individual.

The significant appearance improvement obtained in this study with the acid treatment where the results began to appear since the fifth attendance. RIVITTI at all (2007) stresses that the epidermis is atrophic and in the dermis the collagens

homogenized and the elastic fibers are largely decreased. The hair follicles and other annexes are missing, and with retinoic or glycolic acid treatment, after a few sessions of treatment there's an improvement on stretch marks visual appearance.

Glycolic acid and vitamin C are suggested for dealing with significant improvement on skin texture and appearance and on the stretch marks length and width. This treatment also improved torpidity atrophic scar and stimulation of fibroblasts leading to reconstruction of collagen and elastic fibers, says AZULAY et al (2004). The results also have shown significant improvement in torpidity scar and on the stretch marks length in patients 1 and 2.

AZULAY et al (2004) emphasizes in one of his studies that it's found effective and safe techniques in the treatment of atrophic scars although the results sometimes do not achieve disappearance of lesions. It also discusses that many therapeutic formulations are not unanimous or conclusive, and they don't contribute to better outcomes and patient satisfaction. This study discusses two techniques for treating stretch marks and the results didn't show the same response; the acid was more effective and STRIAT treatment didn't show significant improvement on stretch marks appearance in patient 4. There was no technique for complete lesions disappearance.

The dermato-functional physiotherapy have to be effective, safe and with satisfactory results during the sessions, in order to not to be a frustrating experience for both patient and therapist.

CONCLUSION

At the end of the study, we noticed that after comparing the two techniques both performed satisfactorily. But on the volunteers who received acid treatment the stretch marks visual appearance was very significant, after ten treatment sessions showed a decrease in thickness and continuity in the demarcated area to the study. However the galvanic current treatment was not effective in patient for due to poor tissue healing, but we need pointing out that the third patient showed excellent results in improving the stretch marks visual appearance, reaching this work goal. If the number of attendances were higher, the results could me even more satisfactory. Thus we can prove that the acid treatment is more effective, emphasizing that this protocol in painless to the patient, with no discomfort during treatment.

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COMPARATIVE STUDY ON THE TREATMENT OF ATROPHIC STRETCH MARKS IN WOMEN AFTER STRIAT AND ACIDS USE.

ABSTRACT

Introduction: The stretch mark is skin atrophy, acquired due to disruption of elastic fibers in the second layer in dermis. These disruptions form parallel lesions and can affect both sexes, but the frequency is higher among females, being the main complaint among women. Objective: to compare through this research the treatment of stretch marks, between using STRIAT and acids, if there was some improvement in stretch marks visual appearance. Methodology: the study was longitudinal, through the exploratory method, qualitative, with a probability intentional sample. The sample was composed by four female patients from 21 to 26 years old. To collect data it was used photographic record and an evaluation form. Results: there was improvement in the atrophic stretch marks visual appearance in both techniques. But the treatment with acids had a significant improvement in the stretch marks continuity and length. Conclusion: the research is concluded by noting that after ten attendances there was improvement at stretch marks visual appearance, reduction in the their continuity and length, except for the patient 4 because of poor healing , addressing the research objective. As this is a new field, much remains to be explored searching new scientific evidences.

KEYWORDS: Stretch Marks. Stretch marks treatment. Striata.

ÉTUDE COMPARATIVE DANS LE TRAITEMENT DES VERGETURES ATROPHIQUES CHEZ LES FEMMES APRÈS L'UTILISATION DE STRIAT ET ACIDES

RÉSUMÉ

Introduction : La vergeture est une atrophie de la peau, acquise en raison de la rupture des fibres élastiques présentes dans la deuxième couche du derme. Ces ruptures forment des blessures parallèles, pouvant affecter les deux sexes, cependant la fréquence est plus élevée dans les sexe féminin, en étant une des principales plaintes parmi les femmes.

Objectif: comparer à travers de la présente recherche le traitement des vergetures atrophiques, entre l'utilisation de STRIAT et acides, s'il y a eu amélioration dans l'apparence visuelle des vergetures. Méthodologie: l'étude a été du type longitudinale, selon la méthode exploratoire, du type qualitatif, en étant un échantillon probabiliste intentionnelle. L'échantillon a été composé de quatre patients appartenant du sexe féminin âgées entre 21 à 26 ans. Pour la collecte de données s'est utilisé de registre photografique et d'une fiche d'évaluation. Résultats: il y a eu amélioration visuelle dans l'apparence des vergetures atrophiques, dans les deux techniques utilisées. Toutefois le traitement avec des acides a obtenu une amélioration expressive dans la continuité des vergetures et dans la longueur de les mêmes. Conclusion: j'ai conclu la recherche en observant qu'après les dix visites il y a eu amélioration en apparence visuelle des vergetures, diminuition dans la continuité et dans l'extension des vergetures atrophiques, l'exception de la patiente 4 à cause d'une mauvaise cicatrisation, envisageant de cette forme l'objectif de la recherche. En étant ce recent domaine, il y a encore beaucoup à être exploré dans la recherche de nouvelles évidences scientifiques.

MOTS CLÉ : Vergetures. Traitement de vergetures. STRIAT.

ESTUDIO COMPARATIVO EN EL TRATAMIENTO DE ESTRIAS ATRÓFICAS EN MUJERES DESPUÉS DEL USO DEL STRIAT Y ÁCIDOS

RESUMEN

Introducción: La estría es una atrofia de la piel, adquirida debido al rompimiento de las fibras elásticas presentes en la segunda capa de la dermis. Esas rupturas forman lesiones paralelas, puede afectar a ambos sexos, pero la frecuencia es mayor entre las mujeres, siendo la queja principal de ellas. Objetivo: Comparar a través de la investigación el tratamiento de las estrías atróficas, entre el uso del STRIAT y ácidos, si hubo una mejoría en la apariencia visual en las estrías. Metodología: El estudio fue longitudinal, a través del método de exploración, del tipo cualitativo, siendo una muestra probabilística intencional. La muestra consistió de cuatro pacientes de sexo femenino de edad entre 21 a 26 años. Para recoger los datos se utilizó el registro fotográfico y un formulario de evaluación. Resultados: Se observó una mejoría visual en la apariencia de las estrías atróficas en ambas técnicas utilizadas. Sin embargo, el tratamiento con ácido obtuvo una mejoría expresiva en la continuidad de las estrías y la ruptura de las mismas. Conclusión: concluí la investigación observando que después de diez asistencias hubo mejoría en el aspecto visual de las estrías, la reducción en la continuidad y extensión de las estrías atróficas, a excepción de la paciente cuatro, por mala cicatrización, alcanzando el objetivo de la investigación. Siendo ese un campo nuevo, aún queda mucho por explorar en busca de nuevas pruebas científicas.

PALABRAS CLAVE: Las estrías. El tratamiento de las estrías. Striat.

ESTUDO COMPARATIVO NO TRATAMENTO DE ESTRIAS ATRÓFICAS EM MULHERES APÓS O USO DO STRIAT E ÁCIDOS

RESUMO

Introdução: A estria é um atrofia da pele, adquirida devido ao rompimento das fibras elásticas presentes na segunda camada á derme. Essas rupturas formam lesões paralelas, podendo afetar ambos os sexos, porem a freqüência é maior no sexo feminino, sendo uma das principais queixas entre as mulheres. Objetivo: comparar através da presente pesquisa o tratamento de estrias atróficas, entre o uso do STRIAT e ácidos, se houve melhora na aparência visual nas estrias. Metodologia: o estudo foi do tipo longitudinal, através do método exploratório, do tipo qualitativo, sendo uma amostra probabilística intencional. A amostra foi composta de quatro pacientes pertencentes do sexo feminino com idade entre 21 á 26 anos. Para a coleta de dados usou-se registro fotográfico e uma ficha de avaliação. Resultados: houve melhora visual na aparências das estrias atróficas, em ambas as técnicas utilizadas. Porém o tratamento com ácidos obteve uma melhora expressiva na continuidade das estrias e no comprimento das mesmas. Conclusão: conclui a pesquisa observando que após os dez atendimentos houve melhora na aparência visual das estrias, diminuição na continuidade e na extensão das estrias atróficas, com exceção da paciente 4 devido à má cicatrização, contemplando desta forma o objetivo da pesquisa. Sendo esse campo recente, ainda há muito a ser explorado em busca de novas evidencias cientificas.

PALAVRAS-CHAVE: Estrias. Tratamento de estrias. STRIAT.