




Treatment of stretch marks: a research focused on biomedicine aesthetics

Stretch treatment: research focused on aesthetic biomedicine

Received: 04/01/2019 | Accepted: 05/19/2019 | Published: 06/20/2019


Cecilia Carvalho de Oliveira

 <https://orcid.org/0000-0003-2960-0651>

Faculdade Cenecista de Rio das Ostras, FACRO, RJ, Brazil

E-mail: ceciliaoliveira.c@gmail.com

Raquel Chaves

 <https://orcid.org/0000-0002-9534-7730>

Faculdade Cenecista de Rio das Ostras, FACRO, RJ, Brazil

E-mail: raquel.chaves@gmail.com

Summary

Increasingly, the aesthetic procedure has been sought with objectives ranging from satisfaction guys The treatments pathological. All you days they are created new protocols, new aesthetic devices and instruments, new cosmetic formulations, all with a single purpose: keep skin youthful and free of imperfections. One of the treatments that has been shown to be very efficient in this regard is the micropuncture . A technique that consists of injuring the layers more superficial areas of the skin in order to provoke a controlled inflammation and promote the activation of collagen cells . The increase in these cells activates the production of collagen and elastin, substances responsible for skin firmness and elasticity. A micropuncture technique in treatment of stretch marks It is investigate you effects. it suits to point what O success from the technique go in addition of epithelial uniformity and consequently good tissue aesthetics, with benefits for the self esteem of patient It is satisfaction guys of professional, what he has in your hands The possibility in observe The evident improvement from the skin of patient, since what detain Oknowledge and properly perform the micropuncture . that micropuncture is a technique effective in the treatment of stretch marks, with the reduction of the size, in millimeters, it provides a improvement in the picture of this dysfunction. Some actives help in the formation process of collagen It is elastin, promoting the filling from the skin, changing the your aspect .

Keywords : _ Micropuncture . Collagen. Microneedling . Treatment .

Abstract

Increasingly, the aesthetic procedure has been sought with objectives ranging from personal satisfaction to pathological treatments. Every day new protocols are created, new aesthetic devices and instruments, new cosmetic formulations, all with one purpose: to keep the skin young and free from imperfections. One of the treatments that has been shown to be very efficient in this regard is micropuncture . A technique that consists of damaging the most superficial layers of the skin in order to cause a controlled inflammation, and promote the activation of collagen cells. The increase in

these cells activates the production of collagen and elastin, substances responsible for the firmness and elasticity of the skin. The micropuncture technique in the treatment of stretch marks and investigating the effects. It should be noted that the success of the technique goes beyond epithelial uniformity and, consequently, good tissue aesthetics, with benefits for the patient's self-esteem and personal satisfaction of the professional, who has in his hands the possibility of observing the evident improvement of the patient's skin, as long as hold the knowledge and properly execute the micropuncture . that micropuncture is an effective technique in the treatment of stretch marks, with the reduction in size, in millimeters, provides an improvement in the framework of this dysfunction. Some assets help in the process of formation of collagen and elastin, promoting the filling of the skin, changing its appearance.

Keywords: Micropuncture . collagen. Microneedling . Treatment.

Introduction

Stretch marks are acquired skin atrophies due to the rupture of elastic fibers and collagens , The principle reddish It is after whitish, there is evidence what O your appearance it is multifactorial, no only factors mechanics It is endocrinological, butalso predisposition genetics, leading to the imbalance of structures what make up O tissue connective. They appear mainly on the thighs, buttocks, abdomen, breasts and back of the trunk. Described as: strips or lines, with depression or elevation of tissue, at which there is one changein color It is texture. To the stretch marks appear at the body where The skin suffered one strength mechanics excessive(Pereira, Azevêdo & Texeira , 2009).

The term stria was coined for the first time in 1898. Atrophic striations , *striae distensae* or popularly known as stretch marks, can be defined as a process degenerative skin, which is benign and which vary in color according to the evolutionary phase (Mondo, 2004 & Amaral 2008). It is an acquired tegumentary atrophy that has several nomenclatures, vary according to languages, possible etiologies and skin appearance macroscopically analyzed. Clinically, are characterized for the morphology, in general linear, atrophic and superficial and eventually discreetly creased, with minimal wrinkles transverse to your major axis what disappear when pulled (Vazin , 2011 & White, 2007)

1. Structure It is function from the skin.

The skin is a lining organ, has a flexible and resistant membrane and is the largest organ of the human body, composed of three layers of tissues: epidermis, dermis and hypodermis. A epidermis It is The layer more superficial from the skin, formed per epithelium pavement stratifiedIt is stratum horny, considered The main barrier The permeation. AND one region what it has manylipids and keratin, organized in lamellar layers, which end up harming the diffusion in active (Silva, 2010).

1.1 Epidermis

A skin It is considered as being composed for the epidermis, epithelium stratified hornywhich its main cellular components are macrophage cells and are involved in several pathologies, as mycoses It is dermatitis in contact It is to the cells of system melanic. These cells are distributed in five layers epithelial. They are they: stratum corneum (stratum corneum) peeling), layer lucid (in cells flattened It is core little apparent), layer grainy(very flattened cells with a granular structure) and the process begins of keratinization, layer prickly or in malpighi (composed per cells polyhedral

perfectly just put), layer germinative (layer basal, composite per cells young people what if multiply constantly) (Junqueira, 2004).

1.1.1 dermis

The dermis is found below the epidermis, which is the layer where blood vessels are located. blood vessels, sebaceous glands and nerves. Under the dermis, there is also the subcutaneous tissue, formed per fabrics fibrous, rubber bands It is fatty. They are four to the macromolecules produced by mesenchymal cells and which are involved in the composition of the dermis: elastin (fibers elastic), proteoglycans , glycosaminoglycans It is collagen. A dermis It is constituted primarily per substance fundamental (interstitial), fibers, vases nerves, in addition in polysebaceous follicles and sweat glands. These structures are divided into three regions main: dermis superficial or papillary, dermis deep or reticulate, dermis adventitia (Scheneider , 2009).

1.1.2 Hypodermis

The hypodermis is extremely important for attaching the epidermis and dermis to the structures underlying tissues, and is also known as the subcutaneous tissue, subcutaneous tissue, or fascia superficial. As mammals continuously consume energy, but feed with intermittence, it is understood The importance in one reservoir in energy, represented for the tissue adipose. A distribution from the fat no It is uniform in all to the regions of body. Us individuals normal, some regions never accumulate fat, such as the eyelid, the umbilicus, the penis, and the joint folds. In other regions, on the contrary, there is a greater accumulation of tissue adipose: the proximal portion of the limbs, the abdominal wall, especially the portions side (Gurro & Gurro , 2002).

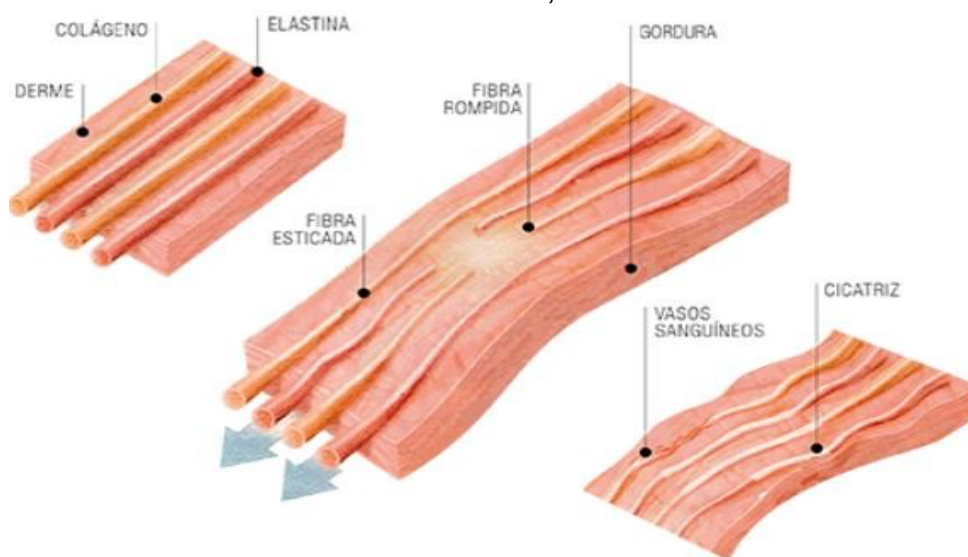
The hypodermis is related in its upper portion with the deep dermis, constituting it the dermo-hypodermic junction , in general, seat of the secretory portions of the apocrine glands or eccrine It is in hair , vases It is nerves. Functionally, The hypodermis, in addition in deposit nourishing in reserve, participate at the isolation thermal It is at protection mechanics of body to the pressures It is external trauma and facilitates skin mobility in relation to underlying structures (Leonardi , 2008).

2. Histology of stretch marks

To the stretch marks anything more are from what one type in symptom introduced for the skin in state in atrophy, what he can to be caused for the reduction from the activity of the fibroblasts at production in headquarter extracellular space and in the rupture of existing fibers. Lesions show loss of elasticity and impaction, but are histologically differentiated from senile lesions or scars, because in them, the fibroblasts are star-shaped and in the atrophic ones, the shape of fibroblasts predominant is globular as shown in figure 1 below. Therefore, histological changes are completely different, not being able to be compared with any other dermal lesion (Bravin , 2007)

FIGURE 1: image illustrative from the scar from stretch mark

Source: Lima, 2010



3. more types common of stretch mark

You types more common in stretch marks they are described from the following way:

A) Pink: It consists at the process initial in training from the healing in function of disruption of the vases blood. Your form in this phase It is reddish, predominating O character inflammation, localized edema, swelling and itching may appear. Treatment at this stage presents better results, considering that the cells are still alive and with greater capacity in response regenerative. (Macedo, 2010)

B) Nacreous: these are older stretch marks, grayish-white or yellowish in color. present this formation due to the fact that melanin is no longer produced in the place where the fibers are they break. Its main characteristic is the accentuated decrease in the thickness of the skin, forming a depression, like a scar, from which its definition as such results. The treatments mainly involve the narrowing and attenuation of depression, although some authors consider that, at this stage, they are not as effective, serving only to improve the appearance from the stretch mark, leaving her more narrow It is decreasing your depression. Us say in guitarand Guirro (2004, p. 392), stretch marks are considered atrophic due to their characteristics. decrease in skin thickness, “[...] resulting from the reduction in the number and volume of its elements and is represented by thinning, wrinkling , dryness, less elasticity, rarefaction of the hairs ”. In atrophic striae, it is common to observe aspects of depression and hypochromia, but with the preservation of skin appendages, such as hair , glands sweaty It is sebaceous. Note below on figure 2.

C) Albas: injuries white, depressed It is finely wrinkled, seem similar The scars; Atrophy epidermal It is decrease of density of collagen . (guirro & Guirro).

Figure two: stretch marks whitish (pearl)
Source: <https://clinicapremium.com.br> accessed in March 2018



4. Impact Social

In surveys of some experimental articles, participants showed suffering mental health that raise reflections on how much an organic problem, considered common, he can hinder The experience of process in gestation or in slimming. You results also demonstrated the importance of body image for these women, and its relationship with The self esteem. A image corporal it says respect The perception from the image what one person he has of your own body It is of the feelings generated per it is perception ; It is View per scholars as one entity in constant self construction It is self destruction, in constant change, growth It is development. They are involved Law Suit aware It is unconscious doing part to the experiences, memoirs, intentions It is aspirations. encompasses yet The relationship with Oenvironment and with the body images of others, as well as the attitudes of others towards their bodies and their relationships. It is a mental representation that one makes of oneself; being plastic It is mutable prints Meanings many different It is individualized. AND tightly conditioned per standards social interfering at the behavior, particularly in the relations interpersonal (Schildes , 1999, Griep & Aquino, 2012).

There is a constant search for appropriate resources and techniques for tissue repair. connective tissue injured by stretch marks, in search of alternatives to, if not eradicate, at least minimize the physical and psycho-social consequences of people with stretch marks (Azevêdo , teixeira & Saints, 2009). A aesthetics It is a constant search for new means of treatment, especially those that show results body and facial satisfaction . In a study done by a cosmetic laboratory, it was observed that stretch marks are among the top five causes of female insecurity. Fence 45% of Brazilian women between 15 and 25 years old have this aesthetic problem, not only in as a result of growth, as also already at phase adult, that percentage he arrives The 80%, mainly per cause from the pregnancy It is after from the menopause, O problem if intensifies It is hits deer in 92% of the women (Derma Oil , 2010).

5. Micropuncture

A micropuncture he was developed for the beautician Argentina Java jeiman , at the year in 1989, with the aim of promoting skin stimulation with dermograph and appropriate cosmetics thus initiating an inflammatory process. (Ribeiro, 2010) The injury caused along with growth factors stimulate collagen and elastin synthesis, rebuilding fibers broken. It is a treatment based on dermocosmetics , such as

hyaluronic acid . acid lactic acid, collagen, vitamin C and growth factors that are applied directly to the area to be treated (Body, 2015).

In micropuncture, a demograph is used, a device in the form of a pistol or pen, weighing 60 grams, containing in its interior an engine and a transmission shaft, its exterior one base with settings in speed, one Gauntlet, one cylinder head It is one ferrule (Figure 4).

Its vibrators provide back and forth movements driven by the drive shaft. transmission that through the speed base, vary the speed, being changed according to with the depth of the skin to be worked on, together with a stainless steel needle (measuring 6cm in length with the plastic holder and 0.39mm in diameter) and the tip plastic guide what determines O size from the needle external. To the techniques used at the procedure they are: puncture, introduction from the needle in points about The stretch mark without to need usepressure at application, no passing in 0.2mm in depth, so arriving only until Thederms papillary, It is scarification, Slipping about The line from the stretch mark with The needle in one angle45th (Lima, Lima & Takano , 2013). Watch at figure 3 below.

FIGURE 3: Photography in one device dermograph



Source: tudobelaestetica.com.br

5.1 Procedure

O procedure It is considered little invasive, one turn what O stimulus occurs punctually above each stretch mark separately, at the superficial level of the skin. Can be Two different types of needles were used, a polypropylene needle to perform the scarification (sliding over the stretch mark that will stimulate a local inflammatory process and controlled) or a thin needle with a tip, which will be punctured throughout the stretch mark extension. The puncture, in addition to contributing to the formation of the inflammatory process promotes The opening in microchannels what facilitate The permeation in Principles active important, as you polyhydroxy acids . One big advantage of this technique It is what she no damages the epidermis, then no he has removal in tissue, just disruption, with that The recovery ofpatient is faster.

Watch at figure 4 It is 5 (Smith & Oliver, 2010).

FIGURE 4: Before and after from the session of micropuncture in stretch marks nacreous.



Source: <https://clnicadtratationapizani.com.br>

FIGURE 5: before and after treatment with micropuncture in striae alba(whitish).



Source: ligia lottery (2018)

Mechanism in action

The mechanism of action of the technique is divided into three stages: percutaneous induction of collagen, healing and maturation. The first stage begins with

the loss of fullness of skin barrier, with the objective of breaking down keratinocytes, which allows the release of cytokines, such as interleukin and interleukin 1 α , the latter predominating. To the cytokines promote dermal vasodilation, in addition to the migration of keratinocytes for restoration of epidermal damage (Lima, Lima & Takano , 2013).

In the second phase, the healing phase, cell proliferation occurs, that is, the exchange of neutrophils per monocytes, occurring The angiogenesis , The epithelialization It is The proliferation in fibroblasts, subsequent to the production of type III collagen, elastin, glycosaminoglycans and proteoglycans. Simultaneously, O TGF – α It is O TGF – β (factors in growth of the fibroblasts) are released by monocytes. On average, five days after the injury, the fibronectin is complete, enabling the deposit of collagen below the basal layer of the epidermis (Lima, Lima & Takano , 2013).

And finally, in the third phase, that of maturation, there is a slow replacement of collagen type III by type I collagen, which is more durable and can remain for five to seven years. The tissue is therefore regenerated and the appearance of the skin is improved. See below in tables 1 and figure 6 (Lima, Lima & Takano , 2013).

5.3 Phototypes

TABLE 1: Table in phototypes

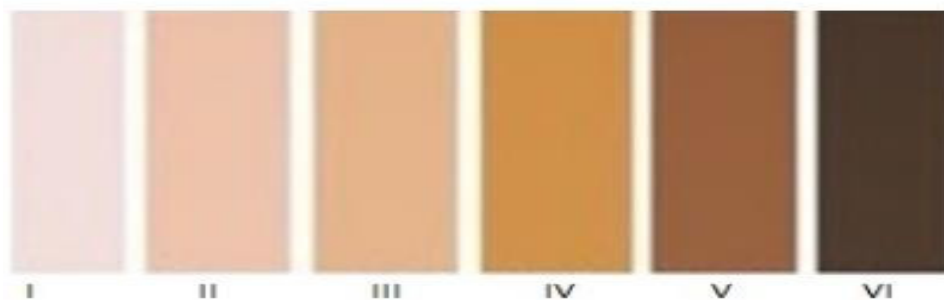
Phototypes	Group	Erythema	Pigmentation	sensitivity
I	White	Ever if burn	Never if tan	Very sensitive
II	White	Ever if burn	To the times if tan	Sensitive
III	Brunette clear	Burn moderate	tan moderate	Normal
IV	Brunette moderate	Burn little	Ever if tan	Normal
V	Brunette dark	Burn rarely	Ever if tan	Little sensitive
SAW	black	Never if burn	Ever pigmented	Insensitive

Source: Callander , 2012

The most famous classification of skin phototypes is the Fitzpatrick scale , created in 1976, by dermatologist and director of the Department of Dermatology at the School of Medicine from Harvard, Thomas B. Fitzpatrick . He organized the classification into phototypes according to each person's ability to tan under sunlight, sensitivity and tendency to turn red under the sun's rays. Fitzpatrick made this scale from visualizations empirical (Portal, 2015).

Fitzpatrick classification , people who have phototype VI can presented hyperpigmentation . A hyperpigmentation it happens due increase from the pigmentation from the skin, what takes on one color more dark of what The color original. Occurs especially after an injury to the skin, such as a scratch, an acne breakout, inflammation or allergy (Ribeiro & Ohara , 2002) as demonstrated in figure 8.

FIGURE 6: phototypes



Source: full, 2015

Hyperpigmentation is reversible through the use of depigmentants . they are defined as active principles used in industrialized topical preparations that interfere with the synthesis of melanin production, with the purpose of lightening the hyperpigmentation of the skin, used in cases such as chloasma, melasma, freckles, freckles and post-treatment hyperpigmentation inflammation such as acne spots, insect bites, burns, among others. see on figure 7 a case of hyperpigmentation in stretch marks (Frizo , 2010)

FIGURE 7: Hyperpigmentation in stretch marks nacreous in patient in phototype IV.



Source: Larissa Veloso gomes

5.4 more assets used

With It is made potentiated, O active will direct for one response more fast It is efficient of the skin through microchannels that facilitate the absorption of the active in an efficient way, being able to increase the penetration of larger molecules by up to 80%. Therefore, it is possible to state thatthe combined action of micropuncture and cosmetic actives can enhance the results (Klayn , Limana & Moares , 2012).

TABLE 2: assets more used in procedures of microneedling , stand out:

Vitamin W	Powerful antioxidant what increase you pro-collagen mRNA levels type I It is III.
Vitamin A	Stimulates The production in fibroblasts.
Vitamin B3	Used at the treatment in hyperchromias.
peptides in Copper	Necessary in collagen synthesis carried out by the fibroblasts.
Zinc	Required in elastin synthesis production in collagen.
Factors in Growth	They are released for the body after Themicropuncture , but also they can to be inserted at skin.

Source: information researched for the author

6. Justification

Stretch marks usually occur from a mechanical skin process such as pregnancy and the slimming. This event impairs the appearance of the skin, which starts to present ascar on its surface. When it comes to minimizing scars on the skin, there is no shortage of options in treatment in offices and clinics of aesthetics.

A Dermatology It is aesthetics walk The steps wide at the field from the beauty It is O secret ischoose a trusted clinic and, above all, a duly qualified professional with title in specialist for the Society Brazilian in biomedicine Aesthetics (SBBME) or Sociedade Brasileira de Dermatologia (SBD), who will prescribe the best protocol for treatment for each patient, taking into account the individuality of each patient. Those they are you professionals more qualified for The realization of the procedures mentioned in their resolutions. Micropuncture is a procedure that recently arrived in Brazil and already had something to say. Its effects are fantastic, as mentioned, it improves the scars of stretch marks promoting The replacement in collagen It is elastin It is improving them until what stayimperceptible . This new treatment procedure is now considered the gold standard for stretch marks. It is important that the equipment is registered with the National Surveillance Agency Sanitary (ANVISA). That certification ensures The quality of product as, per example, in relationship to the steel used, number in needles, length It is diameter of needles, The sterilization of the same and in this way contamination and complications are avoided. The importance looking for a qualified professional, an appropriate place for the patient to perform the procedure It is essential, then patients with problems already mentioned they are contraindicated.

7. Goals

The aim of this study is to point out the success of the micropuncture technique in the treatment of stretch marks and investigate the effects. It should be noted that the success of the technique goes beyond the standardization epithelial It is consequently good aesthetics tissue, with benefits for self-esteem of patient It is satisfaction guys of

professional, what he has in your hands The possibility in observe The evident improvement from the skin of patient, since what detain Oknowledge and properly perform the micropuncture . Even with the success of the technique, in theBrazil, does not have a high number of researches on its benefits, the intention of this research is to add positively the technique of micropuncture in stretch marks and show the your benefits.

The present work has the specific objective of describing the mechanism of action of micropuncture on stretch marks and also gather scientific data that prove the efficacy of the treatment.

8. Methodology

You methods employees in this search are based in researches bibliography, aiming expose points important about The technique in micropuncture . They were used articles of bases Scielo , Surgical and cosmetic Dermatology , Google academic, PubMed researchedin between the period of March The november 2018.

9. Results It is discussion

TABLE 3: a leave of the analyzed articles we have:

Author It is Year	goal of the study	Results
LIME, AND V A.; LIME, M A.; TAKANO, D. (2013).	Clarify O mechanism in action of the technique microneedling .	it was found O use of microneedling as form in vehicular active with retinol It is Vitamin W
ADY AUST AND VOGT (2010)	A efficiency from the technique inpercutaneous induction of collagen in stretch marks.	For the study, 22 people of sex feminine They passed by applying the technique and had as result improvement in general appearancefrom the skin.

NGE, A. N.; COAST, R.; BUENO, JS	skin treatment grooved by the method of microneedling .	Showed results positives after in accomplish 6 sessions of the treatment.
ANGE; COAST AND BOENO (2013)	Association of microneedling with growth factors instretch marks atrophic	obtained one result positive after in performed nine sessions, showing up effective.
F MELLO(2014)	Improvement at area groovedbeing noticeable to patients after treatment.	On a scale of satisfaction from 1 to 10 whereto the majorities of patients reported being satisfied with the treatment after performed two sessions.
ROOK(2002)	Check the effectiveness of technique of microneedling in phototype patientstall.	it was found what people who have the phototype VI, can present hyperpigmentation .
KLAYN; LIME; MORAES; GARCIAPATITI. (2012; 2013).	Check the effectiveness of this technique together with the permeation in active.	There was an improvementsignificant after three sessions of microneedling with 15 day intervals associated with a complex in active.

Through of this revision in literature, with base in 20 articles of the which they were researched, the authors report the success and importance of percutaneous collagen induction in the technique of micropuncture in associated stretch marks or no The active, in agreement with The classification of the phototypes in skin suggests what how much more high O phototype, bigger It is O risk in hyperpigmentation , soon then the technique does not provide a significant improvement in cases of phototype VI. although we last years you have increased O use from the technique for soften to the stretch marks, The technique in micropuncture and the publication of scientific works on the subject is still recent, which hinders a comparison between they.

For Fabbrocini , (2009) to the needles need penetrate more deep for stimulate the production of elastic fibers from the deep layers of the dermis towards the surface.

According to Lima (2013) the technique promotes advantages and disadvantages, as it states that the main positive points are: stimulation of collagen production without removing the epidermis; time in healing It is more short, with any less scratches in effects side effects to the techniques ablative; low cost when compared to the in procedures what require technologies with high investment. And the points he considers negative are: technical procedure that require restraining; time to recovery if indicated injury moderate The deep.

Second doddaballapeer (2009) to the microlesions provoked at skin, stimulate

The collagen production, generating an inflammatory process, increasing collagen synthesis, elastin and other substances present in the tissue, restoring the integrity of the skin. Lima et al., 2013 microneedling makes the skin thicker and more resistant, in addition to having a time in healing more short in relationship The others treatments. Assists also at permeation in active, as O factor in growth, contributing for one improvement significant at the treatment.

10. Conclusion

In the research carried out here, the mechanism of action of the technique of microneedling, the decrease in the social impact on the lives of patients who have stretch marks, that micropuncture is an effective technique in the treatment of stretch marks, with a reduction in size, in millimeters, provides an improvement in the picture of this dysfunction. Some assets help at the process in training of collagen and elastin, promoting O fill of the skin, changing its aspect, what could be observed during the research is that according to the classification of the phototypes in skin, concludes – if what how much more high O phototype, bigger It is O risk in hyperpigmentation, soon then The technique no provides one improvement significant in cases of high phototype, because it has the risk of a post hyperchromia inflammatory even though reversible, O process in depigmentation It is slow. Measurements may to be adopted per biomedical aesthetes in improving this dysfunction. They exist studies regarding treatment with growth, some biomedical aesthetes It is use The technique associate The one mix in compounds, then assistant at improvement from the technique. He was concluded what The technique in micropuncture It is effective, low cost and low risk of Side effects.

11. References

Borges, FS (2010). *Dermato -functional: therapeutic modalities in aesthetic dysfunctions*. 2nd ed. They are Paul: Phorte.

Brait, DC, Tessesine, S., Rocha, VF, & Dantas, LV (2018). Microneedling associated with growth factors and vitamin C in the treatment of stretch marks, fibrous edema and tissue sagging in the gluteal region. *Fisioterapia Brasil*, 19 (1), 80–88. <https://doi.org/10.33233/fb.v19i1.2186>

Fabbrocini, G., Padova, MP de, Vita, VD, Fardella, N., Pastore, F., & Tosti, A. (2009). Treatment of periorbital wrinkles by collagen induction therapy. *Surgical & Cosmetic Dermatology*, 1 (3).

Guirro, ECO, & Guirro, RRJ, (2004). *Dermat -functional physiotherapy: fundamentals, resources, pathologies*. 3 ed. Barueri.

Lima, AND. v. A., Lima, M. A., & Takano, D. (2013). *Microneedling: study experimental* It is classification from the injury provoked. *Surg cosmetic Dermatol*. Recife.

Griep RH, Aquino EML, Chor D, Kakeshita IS, Gomes ALC, Nunes MAA. reliability test- retest of body self-image silhouette scales in the Longitudinal Health Study of Adult. *Cad. Health Public*. 2012;28(9). [access in 3 set 2013]. Available: <http://dx.doi.org/10.1590/S0102-311X2012000900017>

Leonardi , GR (2004). *Applied Cosmetology* . 1st ed. São Paulo:Medfarma .

Lange , AN, Costa, R., & Bueno, JS (2013). *Treatment of striated skin by the method of microneedling associate to the use of oil in pink musket*. In : SEMINAR IN SEARCH AND SEMINAR IN INITIATION SCIENTIFIC, 11., 2013, Curitiba. Journal of Abstracts, Curitiba.

macedo, O. R. (2010). *Stretch mark, damage The flower from the skin* . Available in: Access in: 28 Aug. 2011.

May, M. (2011). *Treaty of Aesthetic Medicine* . 2nd ed. 3. Vol. Sao Paulo: Rock.

Mondo, P., & Negrão, MC P. (2015). *Microneedling : bases physiological It is practices*. CR8 Publishing company, 2015.

oil , D. (2010). *O your reducer in stretch marks DERMA OIL* . AVAILABLE EM : www.tratamentoparaestrias.com Access on 03 of sea. 2010.

Oguido , CMK, & Shibatta , LS (2011). permeability _of Actives in Cosmetology. V *Multiprofessional Congress in Health - Attention to the Elderly*.

Pereira, L. M. B. No. et al. d. It is made from the dermatonia in treatment in stretch mark. *Physiotherapy To be, River January* , 2 (2).

Silva, T. V. (2008). O It is made from the microcurrent galvanic at the treatment in stretch marks atrophic. *Physiotherapy Ser, Rio de Janeiro* , 3 (4).

Silva, W. R., & Oliveira, d. F. (2010). *Action of laser red in one protocol for stretch marks nacreous* . Camboriu: UNIVALI.

Silva, A. M. A., Andrade, K. F., & Vieira, SL (2004). *Acupuncture in Physiotherapy dermatosis Functional at Face* . Sobrafisa .

Sheneider , AP (1999). *Nutrition aesthetics*. They are Paul. Athenaeus , 2009.

Schilder SHOVEL. Image of body: to the energies constructive from the psyche. They are Paul: Martins Sources.

Silva, JA, et al. "Cutaneous Drug Administration: Challenges and Strategies for the Development of Transdermal Formulations". *Journal of Basic and Applied Pharmaceutical Sciences* , vol. 31, no. 3, September 2010.

Sabatovich , O. (2004). *Dermatology Aesthetics* . They are Paul: Athenaeus .

Ribeiro, C., & Ohara , M. T. (2002). Hyperpigmentation localized from the skin. *Magazine Racine, They are Paul* ,67 .

White, p. TO THE et al. (2007). *Effects from the galvanopuncture at the treatment of stretch marks atrophic* . 2007.

Vanzin , S. B., & Camargo, W. P. (2011). *understanding Cosmeceuticals : Diagnostics and Treatments*. They are Paul: Saints.