

37 - THE PREVALENCE OF STRETCH MARKS (STRIAE DISTENSAE) IN PREGNANT WOMEN WHO PARTICIPATES OF LEGIÃO DA BOA VONTADE INSTITUTION IN CASCAVEL CITY, PR, BRAZIL.

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INTRODUCTION

The skin or cutis, is the mantle lining the body, essential to life, and that isolates the organic components of the external medium. They comprise a complex structure of many kinds of tissue, arranged and interrelated in order to suit up, harmoniously in order to perform its functions (SAMPAIO and RIVITTI, 2000).

Pregnancy is a natural physiological process understood by the sequence of adaptations that occur in a woman's body from fertilization; it prepares the body for gestation and involves adjustments of many systems (MANTLE and POLDEN, 2005).

Stretch marks are considered as sequelae of periods of rapid growth of skin stretch with consequent disruption or loss of dermal elastic fibers; abdominal distention promoted by the growth of the baby during pregnancy cause stretch marks.

Besides these factors, there is a genetic and familial predisposition. The expression of genes crucial for the formation of collagen, elastin and fibronectin is decreased in people with stretch marks, there is a change in the metabolism of fibroblasts (GUIRRO and GUIRRO, 2002).

The morphological observations and molecular data of stretch marks suggest a correlation between the loss of capacity for synthesis of fibroblasts and the change the structure of connective tissue, collagen, elastin and fibers of fibrillin with significant reductions in place of the stretch marks compared to normal skin (MAIA, 2009).

These are regions of atrophy of the skin, they have a linear appearance, with variable length and width, they may be rare or numerous, with parallel disposition each other and perpendicular to the cleavage lines of the skin (GUIRRO and GUIRRO, 2002)

Part of the difficulty in determining its etiology is due to the fact that they are related to different clinical situations. They may appear by a sudden stretching of the skin, with consequent rupture or loss of elastic fibers, could result in rapid growth, weight gain or pregnancy. They may be related to endocrine disorders, primarily associated with corticosteroid and estrogen. Vigorous exercise and some infections like typhoid and leprosy are also considered as causes of stretch marks (PÉREZ, et al, 2002).

For Toschi (2004), the stretch marks are often observed in obese individuals, during pregnancy, in connection with Cushing's syndrome CS or in patients treated with corticoids.

The onset of early symptoms is variable; the first clinical signs may be characterized by pruritus, pain in some cases, flat papular eruption and slightly erythematous rosy. Stretch marks are called *striae rubrae* in this initial phase. In the next stage, where the process of formation is practically established, the lesions become white, almost pearlescent and are called *striae albae* (GUIRRO and GUIRRO, 2002).

According to Kede and Sabatovich (2004), the extremely high frequency of stretch marks, especially in women, allows questioning whether, in fact, should be considered as abnormal; however, issues of aesthetics and/or psychological, which often result and justifies the search for more effective treatments. What complements Guirro and Guirro (2002), reporting that these problems besides being unpleasant from the aesthetic point of view, cause behavioral and emotional changes, and lead to low self-esteem, thereby preventing complete harmony between body and mind .

The appearance of the individual, is reflected, largely, the appearance of your skin. The concern to maintain an aesthetically pleasing appearance for you and for yours similar, often justifies grievances and their concern with skin problems (MAGRINI, 2004).

The study of the pathophysiology of stretch marks is important not only for the development of preventive methods and more effective therapeutic, as for better understanding of local and systemic changes related to connective tissue (TANCSIK and MORAES, 2009).

MATERIALS AND METHODS

The study design is a quantitative cross-sectional that aims at determining the prevalence of stretch marks in women during pregnancy. It had a sample of 30 pregnant women who participate of the Legião da Boa Vontade institution, in Cascavel city, Parana State - Brazil.

To obtain information, a questionnaire was developed with 18 questions about factors associated with the presence, types, quantities and locations of stretch marks, besides the possible aesthetic dissatisfaction.

Volunteers received pertinent information regarding the risks and benefits of the project and were invited to signing the consent form. After the signing, the volunteers underwent interview.

The study participants were all volunteers who performed the correct and full completion of the questionnaire and signed a consent form.

Exclusion criteria for this study were those who refused to participate in the study, women who are not pregnant and aged below 14 years or above 50 years.

For analysis and data collection, the data were tabulated in Microsoft Office Excel 2013, and subsequently analyzed by SPSS 15.0 software.

RESULTS AND DISCUSSION

The main findings in the present study addresses the associations between the following variables: emotional factor, genetics, appearance, location, and method of prevention related to the prevalence of stretch marks in pregnant women.

The sample was taken in a public institution which the thirty pregnant participated, what characterizes a social group and does not represent a general population, aged 15 to 40 years old, female.

The presence of streaks was in 28 women (93.3%) and 16 of them (53.3%) already had stretch marks before pregnancy. From these 16 women, 13 (81.3%) realized in pregnancy aggravation of existing stretch marks. 12 women (40.0%) got stretch marks during pregnancy, the prevalence of stretch marks during pregnancy was 83.3%, what shows that pregnancy is an indicative factor of stretch marks.

Maia et al. (2009), believes that although the etiology of stretch marks is not well understood, it is accepted that the

combination of mechanical stretching of the skin with genetic factors, endocrine changes during pregnancy raises the possibility of the appearance of stretch marks in their study, they interviewed 164 primiparous of an only baby after 48 hours, and among these, 98 developed stretch marks during pregnancy.

Schalka et al. (2010), contest; they say that not all pregnant women develop stretch marks, and their number and size vary considerably. In their study, participated 56 pregnant women, primiparous, without previous abdominal striae, 44 women participated had no stretch marks during pregnancy and 12 developed stretch marks during pregnancy, stretch marks are phenomena resulting from distension of the fibers of the dermal connective tissue. This also contradicts the present study which of 30 women, 25 noted that during pregnancy occurred the aggravation of existing stretch marks or the emergence of them.

Genetics can influence the appearance of stretch marks, 76.6% of women who reported striae, had a family history, shown in Table 1. As in the study of Osman et al. (2007), where sixty percent of the participants had developed gravidic stretch marks, where they had family history.

Table 1. In this table is shown which is the relationship and the percentage who has stretch marks, with pregnant participants interviewed in Legião da Boa Vontade Institution, in Cascavel city, Parana state - Brazil.

RELATIOSHIP	WHO HAS STRETCH MARKS
Mother	36.7%
Sister	13.3%
Aunt	13.3%
Mother and sister	6.7%
Mother and aunt	3.3%
Sister and aunt	3.3%

The stretch marks are phenomena arising from stretching of the fibers of the dermal connective tissue and the location were higher on the abdomen with 66.5%, and then the breasts with 63.3%, which may be a result of increased elasticity of the tissue occurs mainly in these locations, and smaller percentages on thighs, gluteus and arms. This will be demonstrated by data in the table 2. Costa et al. (2010) agree and say that mainly occurs in these locations due to the enlargement of the breasts and abdomen, they conceived that physiological changes during pregnancy are among the most significant that the human body can suffer. Brennan et al. (2012) say that stretch marks affect 50% to 90% of women, and the abdomen, breasts and thighs are the most frequently areas affected, which contradicts the fact that the thighs are the most affected.

Table 2. It is shown in which location and the percentages that are found the stretch marks on body of pregnant participants of Legião da Boa Vontade institution in Cascavel city.

LOCATION OF STRETCH MARKS	
Abdomen	66.5%
Breast	63.3%
Thighs	20.0%
Gluteus	20.0%
Arms	6.6%

Regarding to body care, of the 30 volunteers only 20% used lotion for the prevention of stretch marks, 26.7% practiced some kind of physical activity and none sought medical treatment. The search of Brennan et al. (2012), may explain the fact that women were not fight against stretch marks. They used randomized controlled trials comparing topical preparations (with active ingredients) with placebo (this is, without active ingredients prepared) in pregnant women and has not found any evidence high quality to support the use of any topical preparations in preventing stretch marks falling on pregnancy.

Yamaguch et al. (2012) reports that stretch marks during pregnancy are a physiological change of the skin that many pregnant women experience. They are often accompanied by a reddish purple color during pregnancy and then lose pigmentation and become atrophic, the long-term after pregnancy. In this study, 93.3% of which have stretch marks, 46.7% showed stretch marks of whitish and 43.3% reddish, and 3.3% could not say. What contradicts the account of Yamaguch et al. (2012).

The concern with the appearance of stretch marks is evident in 93.3% of women, 70.0% answered that the presence of stretch marks is a reason that causes worries to them; 63.3% think that influences the choice of clothing, 53.3% have negative feelings; 46.7% feel ashamed of exposing the body to the partner in sexual activity, producing negative feelings about themselves.

Araújo et al. (2005), considers pregnancy a period of great importance, which brings physical, psychological and social changes for women, creates new meanings and requires adaptations. In a study with 12 pregnant women about the perception of the body during pregnancy, the participants reported that they feel afraid to not return to the previous physical appearance, and fear of the appearance of new stretch marks and cellulite. Costa et al. (2010), considers that physiological changes during pregnancy raises fears, doubts, anxieties, fantasies or simply curious about the changes occurring in the body. Findik et al. (2013), says that gravidicstriae are a common clinical condition in pregnant women and produces severe aesthetic trouble and can lead to psychological problems.

During pregnancy, many changes occur in the body of a woman, which makes her insecure about her appearance, causing frustration and many of these women are unaware of the changes that occur in the body during pregnancy. They only are aware of weight gain, however due to this factor, several changes occur and the lack about this information is the responsible for the ashamed feeling that pregnant women feel with the changes of their body.

CONCLUSION

This study concludes that there are high rates in the occurrence of stretch marks during pregnancy, which may cause a worsening of existing stretch marks or the emergence of them.

Much of the sample reported associations of stretch marks in family, which indicates that gene may interfere. The most affected locations were the abdomen and breasts, because these are the places with the greatest elasticity during pregnancy.

It was identified concern with aesthetics. It is very important that pregnant women to be conscious about the changes that occur during pregnancy, so they can prepare themselves psychologically and performing care for their body to have a healthy pregnancy decreasing the aesthetic dissatisfaction, both physical and mental aspect.

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ABSTRACT

Introduction: Stretch marks (striae distensae) are linear skin lesions, atrophic, well defined and secondary to connective tissue changes. They appear when there is a fast skin stretch. They are often associated by abdominal increase arising from pregnancy. **Aim:** To verify the prevalence of stretch marks during the gestation period just as well the esthetic dissatisfaction, localization, aspect and genetic influence. **Methods:** 30 pregnancy women 15-40 years old were interviewed, who participate of the Legião da Boa Vontade institution in Cascavel city, Parana State, south region of Brazil. It was elaborated a survey with 18 questions by the researchers, applied in May 2014, during pregnant activities time. For the statistical analysis, the data were tabulated on Microsoft Office Excel 2013 and subsequently analyzed on SPSS 15.0 software. **Results:** The results showed that 93.3% of women have stretch marks, however, 53.3% already had stretch marks before the gestation, 43.3% noticed the aggravation, and 40.0% noticed that in gestation period occurred the appearing of stretch marks. Therefore, the prevalence of stretch marks during gestation was 83.3%, the most common locations affected were abdomen and breasts, the occurrence of stretch marks causes worries about body and bad feelings in these women. **Conclusion:** The study revealed high prevalence of stretch marks during gestation period, what indicates that the gestation is an indicative factor for stretch marks emergence and worsening of stretch marks due to the stretching that occurs with tissue.

KEYWORDS: Stretch marks, pregnancy, prevalence.

PRÉVALENCE DE L'ÉTIREMENT CHEZ LES FEMMES ENCEINTS PARTICIPATION D'UN ÉTABLISSEMENT DE LA LÉGIÓN D'ACQUISITION (LBV) DE LA VILLE DE CASCAVEL, PR, BRÉSIL.

RÉSUMÉ

Introduction: Des taches linéaires de tissu conjonctif, atrophique. Peut apparaître quand il est rapide étirement de la peau, il sont souvent associés à l'élargissement de la grossesse abdominale causée. **Objectif:** déterminer la prévalence des vergetures pendant la grossesse, ainsi que l'insatisfaction, l'emplacement, l'apparence, et l'influence génétique esthétique qu'il présente. **Méthodes:** 30 femmes enceintes âgées de 15-40 ans institution de la Légion de la Bonne Volonté (LBV) participants de la ville de Cascavel, Pronté interrogé un questionnaire de 18 questions, écrit par les chercheurs eux-mêmes, appliquer un mois a été élaboré. mai 2014, à temps pour les activités que les femmes enceintes ont participé. Pour l'analyse statistique, les données ont été compilées dans Microsoft Office Excel 2013, puis analysées par le logiciel SPSS 15.0. **Résultats:** Les résultats ont montré que 93,3% des femmes avaient des vergetures, 53,3% avaient des vergetures avant la grossesse, 43,3% ont noté une aggravation et 40,0% ont noté que pendant la grossesse l'apparition des vergetures se est survenue. Par conséquent, la prévalence des vergetures pendant la grossesse est de 83,3%, avec des emplacements les plus évidents dans l'abdomen et les seins, et la présence de vergetures inquiète avec le corps et les sentiments négatifs de ces femmes. **Conclusion:** L'étude a révélé une forte prévalence des vergetures pendant la grossesse, ce qui suggère que la grossesse est un facteur indicatif pour l'apparition ou l'aggravation des vergetures en raison de l'étirement qui se produit avec le tissu.

MOTS-CLÉS: vergetures, la grossesse, la prévalence.

PREVALENCIA DE TRAMO EN MUJERES EMBARAZADAS QUE PARTICIPAN INSTITUCIÓN DE LA LEGIÓN DE LA BUENA VOLUNTAD (LBV) LA CIUDAD DE CASCAVEL, PR, BRASIL.**RESUMEN**

Introducción: Rayas de la distensión están bien definidas y cambios secundarios a lesiones cutáneas lineales de tejido conectivo, atrófica. Puede aparecer cuando hay un rápido estiramiento de la piel, que a menudo se asocia con la ampliación de embarazo abdominal causado. Objetivo: Determinar la prevalencia de las estrías durante el embarazo, así como la insatisfacción, la ubicación, la apariencia, y la influencia genética estética que presenta. Métodos: 30 mujeres embarazadas de edades 15 a 40 años en la institución de la Legión de la Buena Voluntad (LBV) participantes de la ciudad de Cascavel, Pr se entrevistó a un cuestionario con 18 preguntas, escrito por los propios investigadores, aplicado en un mes fue elaborado. mayo de 2014, a tiempo para las actividades que participaron mujeres embarazadas. Para el análisis estadístico, los datos fueron tabulados en Microsoft Office Excel 2013, y posteriormente se analizaron mediante el programa SPSS 15.0. Resultados: Los resultados mostraron que el 93,3% de las mujeres tenían estrías, 53,3% tenían estrías antes del embarazo, el 43,3% señaló empeoramiento y el 40,0% señalaron que durante el embarazo se produjo la aparición de estrías. Por lo tanto, la prevalencia de las estrías durante el embarazo fue del 83,3%, con los lugares más obvios en el abdomen y los pechos, y la presencia de las estrías es motivo de preocupación con el cuerpo y los sentimientos negativos a estas mujeres. Conclusión: El estudio reveló una alta prevalencia de estrías durante el embarazo, lo que sugiere que el embarazo es un factor indicativo de la aparición o el empeoramiento de las estrías debido al estiramiento que se produce con el tejido.

PALABRAS CLAVE: Estrías, embarazo, prevalencia.

PREVALÊNCIA DE ESTRIAS EM MULHERES GESTANTES PARTICIPANTES DA INSTITUIÇÃO LEGIÃO DA BOA VONTADE (LBV) DO MUNICÍPIO DE CASCAVEL-PR, BRASIL.**RESUMO**

Introdução: Estrias de distensão são lesões cutâneas lineares, atróficas, bem definidas e secundárias a alterações do tecido conjuntivo. Podem aparecer quando existe um estiramento rápido da pele, elas são, com frequência, associadas ao aumento abdominal decorrente da gravidez. Objetivo: Verificar a prevalência de estrias durante a gestação, bem como a insatisfação estética, localização, aspecto, e influência genética que ela apresenta. Métodos: Foram entrevistadas 30 mulheres gestantes com idades entre 15 a 40 anos, participantes da instituição Legião da Boa Vontade (LBV) da cidade de Cascavel, Pr. Foi elaborado um questionário com 18 questões, de autoria dos próprios pesquisadores, aplicado no mês de maio de 2014, em horário de atividades que as gestantes participavam. Para a análise estatística, os dados foram tabulados no Microsoft Office Excel 2013 e posteriormente analisados pelo software SPSS 15.0. Resultados: Os resultados apresentaram que 93,3% das mulheres apresentavam estrias, porém 53,3% já tinham estrias antes da gestação, 43,3% notaram o agravamento e 40,0% notaram que na gestação ocorreu o aparecimento das estrias. Portanto, a prevalência de estrias na gestação foi de 83,3%, com as localizações mais evidentes em abdômen e seios, e a presença de estrias causa preocupação com o corpo e sentimentos negativos nessas mulheres. Conclusão: O estudo revelou alta prevalência de estrias durante o período gestacional, o que indica que a gestação é um fator indicativo para o surgimento ou o agravamento das estrias, devido ao estiramento que ocorre com o tecido.

PALAVRAS-CHAVE: Estrias, Gestação, Prevalência.