SUMMARY AND CONCLUSIONS

Stretch marks or striaedistensae can be considered a common skindisorder, but their physiopathogenic mechanisms have not been totally clarified. Although it is considered an esthetic complaint, it may have serious psychosocial consequences besides the local and systemic alterations of the conjunctive tissue.

Causes of SD are not clear, and a number of theories have been proposed and a number of treatment modalities are available for their treatment, yet none of them is consistently effective with a high incidence and unsatisfactory treatments, stretch marks remain an important target of research for an optimum consensus of treatment.

The presence of hormonal receptors in the skin and their participation in the pathogenicity of other disorders has been demonstrated.Asa number of studies have shown that estrogens have many important beneficial and protective roles in skin physiology like acceleration of cutaneous wound healing, protection against skin photoaging,improving collagen content and quality, they also increase skin thickness and enhance vascularization.While androgens affect several functions of the human skin, testosterone has been shown to perturb the epidermal barrier homeostasis in adult human skin. It is also known that, under physiologic conditions, glucocorticoids regulate the synthesis of glycosaminoglycans in skin fibroblast culture. Moreover, topical corticosteroids reduce collagen synthesis and induce skin atrophy.

The present study aimed to study the expression of estrogen, androgen and glucocorticoid receptors in normal skin and striae distensae to explore the proposed role of hormonal factor throughout the clinical course of the disease includedstudying receptors in striae due to different cause like pregnancy, obesity andcorticosteroid therapy.

Skin biopsies were taken from 30 patients with striae distensae divided into three groups according to the cause of striaegroup (1):Consists of 10suffering from striae caused by pregnancy,group (2):Consists of 10 obese patients suffering from striae and group (3):Consists of10 suffering from striae after taking cortisone therapy. In addition 20 healthy volunteers were chosen as control subject for comparison of the results. Both patients and controls were sex and age matched.

Histopathological analysis of histological changes for these biopsies by H & E and immunohistochemical study of estrogen, androgen and glucocorticoid receptors in striae distensae were done.

The results of this study showed significant difference between oestrogen, androgen and glucocorticoid receptor in striae patients and normal volunteers ($P<0.05$)as we found increase androgen and glucocorticoid receptors expression in patients with striae than normal volunteers while there was increase inoestrogen receptor expression in healthy volunteers than in the patients with striae.

Also there was insignificant difference in oestrogen&androgen receptor expression regarding the cause but there was significant difference in glucocorticoid receptor as we found that glucocorticoid receptors more expressed in patients with SD caused by glucocorticoid therapy than caused by pregnancy or that happened as a result of obesity.

In conclusion, this study has considered the fact that SD similar to the process of scarring, in order for the formation of lesions to occur, there must be reorganization and restructuring of ECM, coordinated by hormonal stimulation andthe balance between (ER, AR &GR) action as under certain conditions there is an increase in these hormonal receptor expression, suggesting that regions that undergo greater mechanical stretching of the skin may express greater hormonal receptor activity and This activity may influence the metabolism of the extracellular matrix, causing the formation of striae distensae. The preliminary results appear to be relevant and represent aninitial step towards an understanding of the pathophysiology of striaedistensae.