

Prophylaxis of Striae gravidarum with a Topical Formulation. A double blind trial.

Mallol J, Belda MA, Costa D., Noval A., and Sola M. 1991. Prophylaxis of Striae gravidarum with a topical formulation. A double blind trial. International Journal of Cosmetic Science 13(1): 51-7.

## Introduction

Pregnant women, who are influenced by the negative consequences of the appearance of striae (Stretch marks), tend to use products to prevent the problem. However a rigorous study to demonstrate their true efficacy does not appear to have been carried out.

This study aims to provide some clinical evidence as to the efficacy of prophylactic anti-striae oil (*Centella asiatica* extract, alpha-tocopherol, and collagen-elastin hydrolisates) on the development of striae. No effective treatment for the prevention of striae has been studied but there have been studies on active substances that can stimulate the fibroblast activity and hence the synthesis of collagen could be used to prevent striae when they are predictable (i.e. during pregnancy). No rigorous study has been carried out to-date on the prevention of striae. This study aims to record new data and to evaluate the true efficacy of a preventative anti-striae product during pregnancy.

## Method

This double blind randomized study used the active ingredient (*Centella asiatica*) and a placebo with no active component. Both products were similar in look, smell and feel. The study comprised of 80 pregnant women who were in the first 12 weeks of pregnancy, and the study was over 30 month period. Checks were performed, one at the moment of inclusion, three during the study and one during the last period of pregnancy. The appearance and severity of the striae were measured in A) the total group and B) in sub groups such as those who had previously had striae and different demographic groups.

## Results

In the placebo group 22 women ( 56%) presented with striae, whereas in the treated group only 14 women (34%) developed striae in the term of the pregnancy; this difference was significant (<0.005, x2 test).

In women with a history of striae during puberty the active oil induced a significant absolute prevention in 89% of the cases, whereas in the placebo group all women developed striae (p=0.00014;x2) test).

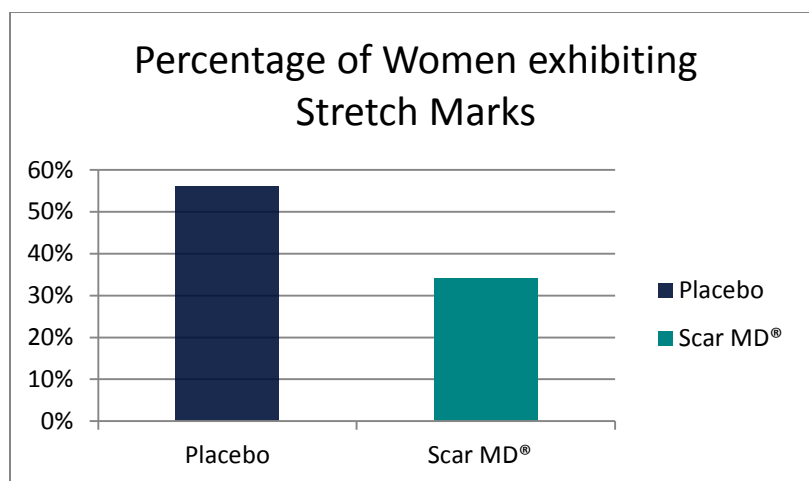
## Discussion

In a homogenous population group, the preventative effects was observed in the appearance of striae, with significantly less striae in the active treatment group and in the severity of the striae.

## Homogenous Patient Group

Parameter	Placebo	Treated	Whole Sample
Mothers Age	24.62 ± 4.63	26.44 ± 5.03	25.55 ± 4.89
Parity	1.39 ± 0.68	1.54 ± 0.81	1.47 ± 0.75
Weight Gain (%)	18.36 ± 5.57	18.59 ± 6.12	18.47 ± 5.82
Mothers Height (m)	1.61 ± 0.06	1.59 ± 0.05	1.60 ± 0.06
Child Weight (Kg)	3.42 ± 0.49	3.28 ± 0.44	3.26 ± 0.47

‘In this study, those women who used the active ingredients of Scar MD® experienced significantly less stretch marks.’



‘Women who had previously experienced the formation of stretch marks during puberty or pregnancy experienced a significantly absolute prevention of stretch mark prevention.’

