

A novel 'system' to aid the prevention of stretch marks during pregnancy: Results of a clinical trial, using a combination of a maternity support device and synergistic cosmetic formulations

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Background:

Striae Gravidarum occur during pregnancy in 50% to 90% of women¹⁻³. Striae can cause discomfort and itching. They initially appear as red or purple lines that gradually fade, leaving white, thin skin and can be a cause of considerable cosmetic concern leading to significant psychological distress⁴. There are no treatments to date that have been shown conclusively to help prevent the development of striae.

Method:

Recruitment:

159 women in weeks 12-14 of their pregnancy were recruited from the Instituto de Maternidad Y Ginecologia, Tucuman, Argentina. The control group consisted of women who used no creams or device and the treatment group consisted of women who used a combination of the maternity support device, day gel and night cream. The maternity support device was worn during the day; the participants were recommended to use the day gel twice daily and the night cream once, at bedtime.

Data collection and analysis:

Photographs were taken at the end of the first trimester and at term and were assessed by six independent clinicians. A visual scale was determined with "0" being no striae and "10" being multiple striae, as shown below.



Figure 2- Photo of the device alone (left) and in use (right).



Figure 1- Visual analogue 'scale' for the stretch mark scoring system, from left to right, score 0, 2, 4, 6, 8, and 10.

Results:

The incidence of *Striae gravidarum* in the control group was 66%, while in the incidence in the treatment group was 34%. The median severity score of the control group was 7, whereas in the treatment group it was 4.

Conclusion:

The 'system' combination of the specifically padded, skin support device and creams has shown a significant reduction in the development of *Striae gravidarum*. The contribution to significance of each component has not been trialed. Additional findings regarding the use of the device and creams were reported; at least one size change of the support band, two to three bottles of the day cream and one to two bottles for the night cream are required for the duration of the pregnancy.

Reference:

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