UMBILICAL CORD LINING CONDITIONED MEDIA FOLLOWING NANOFRACTIONAL RADIOFREQUENCY: POTENTIAL THEURAPEUTIC APPLICATION FOR STRIAE (STRECH MARKS)

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Background: The umbilical cord as a source of stem cells is an attractive one, as it is usually discarded as biowaste accompanying the delivery of a newborn. Umbilical cord lining conditioned media (CLCM) comprises the proteins secreted by epithelial and mesenchymal stem cells from the outer lining of the umbilical cord. CLCM has been shown to increase epidermal keratinocyte growth and proliferation, increase dermal fibroblast production of glycosaminoglycans, and have proven effective in the treatment of difficult-to-heal human wounds.

Striae distensae (stretch marks) are linear atrophic lesion that rarely causes any significant medical problems, aesthetically it can have a great psychological impact on affected patients. Treatment for striae distensae still remains challenging because of the limited benefits of various treatments.

Observation: We describe three cases of abdominal striae with Fitzpatrick skin type III to IV in our Dermatology outpatient clinic. All patients undergoing series for treatment with nanofractional radiofrequency followed by application of cord lining conditioned media. All subjects reviewed every 4 weeks for a total period of 12 weeks.

All patients agreed that they noticed visible changes, and there was significant reductions in both length and width of striae bands measure at 12 weeks post treatment visit compared to baseline measurements.

Key Message: The concentrated protein mix growth factors derived from umbilical cord lining when applied on to the skin, will help restore epidermal cell turnover time, aid in increasing dermal production of extracellular matrix protein, and enhance production of elastin to improve elasticity. In our opinion and based on results support the high degree of patient satisfaction and demonstrate the safe, effective use of CLCM application following nanofractional radiofrequency.