REDERMALISATION

A New Era in *Skin Rejuvenation*

DR REZA MIA reports on a new, innovative procedure designed to hydrate, repair and revive skin.

Redermalisation is a novel concept in anti-ageing and aesthetic medicine, created to describe the previously unseen effect obtained by combining an injectable product containing both hyaluronic acid (HA) and sodium succinate – Hyalual – with specific injection techniques. The term was coined as far back as 2011, but is new to South African shores and describes the targeted anti-ageing effect produced by the techniques mentioned above.

The Hyalual effect

The techniques used to achieve redermalisation are based on multiple injections of Hyalual. The patterns used are then determined by an assessment of the patients' skin, which separates them into tired, wrinkled ageing phenotypes. HA stimulates restoration of the dermis by increasing the amount of collagen (through fibroblast stimulation in the skin), which promotes improved water retention to volumise the skin at various levels. This reduces the visible signs of ageing, such as fine lines and loose skin.

The effect of the accumulation of free radicals, and the inhibition of several metabolic processes must be kept in mind, as these factors promote skin ageing and lead to the hyposynthesis of collagen and elastin. However, the use of "pure HA" may not reduce many of these causes of ageing.

Therefore, sodium succinate acts with HA to synergistically provide a pronounced antioxidant effect, actively blocking free radicals and stimulating the sluggish metabolic processes in the skin. The effects on the metabolic processes include strengthening cellular respiration, normalising ion transport, increasing protein synthesis and increasing energy production through the stimulation of the Krebs cycle in mitochondria. This all translates to the restoration of cells, an increase in skin elasticity, firmness and tightness, improved colour and texture of the face, as well as a reduction in the signs of ageing and fatigue.

Study findings

Objective studies have found increased skin tightness, reduced sagging and moisturised skin. Once treated with monocomponent HA products, increased skin elasticity was observed; whereas in skin treated with an HA product that included sodium succinate (such as Hyalual), a significant improvement in overall skin quality was seen, with an increase in turgor and elasticity, and improved hydration and skin tone. Interestingly, accelerated healing of skin biopsy sites was also observed after treatment with Hyalual.

A recent study showed that Hyalual has a more noticeable impact in comparison to monocomponent HA products. Semi-quantitative histological analysis of skin biopsies in all patients confirmed the greater influence of Hyalual on the structure of the dermis and capillary network of the skin. The number of fibroblasts was shown to increase by 300% with Hyalual (versus a 200% increase shown with products containing only HA). Furthermore, an increase of up to 100% above baseline amino acid levels was seen as well.

When compared to dermal rollers, Hyalual exhibits an improvement over the mechanical stimulation seen with this treatment, enhancing both non-scar-tissue collagen as well as scar tissue collagen.

Patients injected by the author have reported improved results in the firmness, hydration and texture of the skin, as well as a significant improvement in the appearance of stretch marks. It is noteworthy that these patients confirmed the study findings mentioned above, and preferred the results seen on the areas treated with Hyalual.

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