

Bio-remodelling of the face and neck

BY DALVI HUMZAH

Profilo® is a unique hybrid complex of high molecular weight, 1100-1400kDal (long chain) H-HA and low molecular weight, 80-100kDal (short chain) L-HA pure hyaluronic acid. A proprietary process of thermal relaxation and hydrogen cross bonding produces a hybrid stabilised complex that has rheological and bio-remodelling properties unlike that of cross-linked hyaluronic acid. This product has a specific characteristic, in that it has the ability to spread through tissues with relative ease, with reference to its $\tan \delta$ of 1.36 (fluid) compared to a soft crosslinked hyaluron filler that typically has a $\tan \delta$ of 0.53 (gel). Both in vitro and in vivo studies have demonstrated that this complex has bio-remodelling properties on multiple cellular elements in the tissues including activation of fibroblasts, keratinocytes, adipocyte stem cells and recently effects on myocytes and osteocyte stem cells.

Profilo® is indicated for bio-remodelling of the face and neck; it is provided in a 2ml syringe comprising a complex of 32mg H-HA and 32mg L-HA providing a compound that has 64mg hyaluronic acid in 2mls. For treatment of the face, the spreading properties of Profilo® are utilised and the procedure is performed using a five bio-aesthetic point (BAP) injection technique.

Technique

The specific points are marked (Figure 1).

The skin is cleaned with an antiseptic solution (NatraSan) and under aseptic conditions using the 29G needle provided, 0.2ml of Profilo® is injected as a bolus deep dermally or subdermal (hypodermis). To ensure that the needle is either in the deep dermis or hypodermis, the skin is punctured at an angle of 10-30 degrees. When the product is injected into the deep dermis a blanching effect may be observed and the patient may experience some mild pain.

When injected into the hypodermis it is possible to 'windscreen wipe' the needle on the under surface of the dermis and a small subdermal swelling is observed.

The patient will also experience a stinging sensation as the 0.2ml bolus expands the tissue planes and the slightly different pH of the Profilo® is perceived by the body.

Following the injections, the area is left alone, occasionally gentle pressure may be applied to reduce the visible nodule.

The Profilo® spreads to cover an area with a diameter of approximately 2cm and any visible effects of the bolus resolve over the next few hours.

In most cases two treatments are performed one month apart, with more mature tissue or sun-damaged skin a third treatment a month later may be required. The biostimulation effects continue over a period of months and then a further treatment is required four to six months after the second injection.

Profilo® provides several beneficial effects that can be clinically observed. As expected with a large amount of hyaluronic acid being injected into the dermal / subdermal layer, this translates into an increased dermal hydration and decreased transepidermal water loss. With the cellular activation the increased collagen, elastin, extracellular matrix and neocollagenesis, results in an improvement in skin tone, elasticity and surface texture appearance. Many patients will see and feel the benefits of the treatment before the treatments are concluded.

The Profilo® five-point BAP technique is an easy and relatively safe procedure to perform with a high degree of patient satisfaction and outcome (Figures 2 and 3). Advanced use of this product involves administration with a cannula to the face and neck, and also combining the treatment with energy-based procedures to enhance outcomes and improve healing rates.

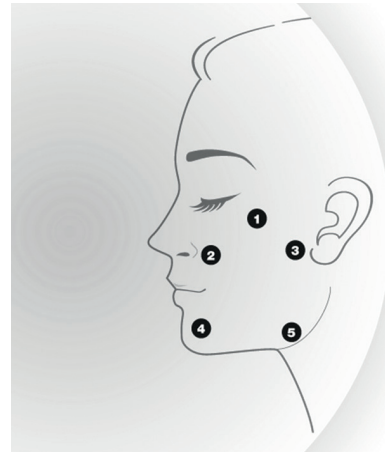


Figure 1: BioAesthetic points on face (BSA). For further explanation see video on The PMFA Journal website.



Figure 2: Pre treatment.



Figure 3: Post treatment.

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Declaration of competing interests: The author is an International Ambassador for IBSA and presents internationally on this product.