

*Research Note***Layered Biorevitalization: the sandwich technique combined with  
Neauvia Hydro Deluxe for enhanced skin quality**Maurizio Cavallini<sup>1</sup><sup>1</sup>*O.U. of plastic surgery and dermatosurgery, CDI Hospital, Milan, Italy*

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## ABSTRACT

**Personalized treatment based on an innovative approach to physiological skin regeneration targets multiple mechanisms of aging. This strategy helps to effectively address aesthetic concerns and optimize therapeutic outcomes. This report presents preliminary observations on the clinical use of non-crosslinked hyaluronic acid enriched with glycine and L-proline for facial skin rejuvenation and regeneration. Aging is a complex, multilevel process that affects various layers of the skin. It involves both structural and functional changes in the epidermis, as well as in the superficial and deep dermis. These changes include decreased collagen and elastin production, reduced hydration, diminished fibroblast activity, and thinning of the extracellular matrix, all of which contribute to visible signs of aging such as laxity, fine lines, and volume loss. These findings support the use of personalized, multilayered biorevitalization in aesthetic practice.**

## CASE DESCRIPTION

This case involves a 52-year-old female patient with Fitzpatrick skin type II and clinically aged skin. A rejuvenation protocol using the "sandwich technique" with Neauvia Hydro Deluxe (2 ml per session) was applied in a split-face design to compare two different delivery methods.

The patient underwent two treatment sessions spaced one month apart. Both clinical and instrumental evaluations were performed to assess efficacy after one month from the second treatment session.

Left side (sandwich technique):

- 1 ml of Neauvia Hydro Deluxe was injected into the deep dermis using a 30G, 13 mm needle, and an additional 1 ml was administered into the superficial dermis using microneedling (depth: 0.2 mm).

Right side:

- 2 ml of the product was injected into the deep dermis using a 30G, 13 mm needle, without microneedling.

This approach allowed a direct intra-patient comparison between the combined (deep + superficial) "sandwich" method and deep needle injection alone.

## RESULTS

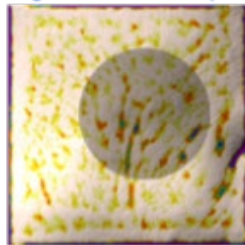
*Right side*

Right side – after 2 sessions: 2 ml Neauvia Hydro Deluxe, deep dermal injection with 30G, 13 mm needle (Fig. 1).

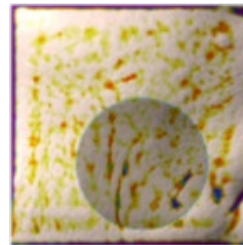


### Report Antera 3D

Rughe: Personalizzato (0,1 - 1,9 mm)



- Indice di dentellatura = 19,442



- Indice di dentellatura = 19,405

Selezione circolare:  
area = 743,1 mm<sup>2</sup>  
diametro = 30,8 mm

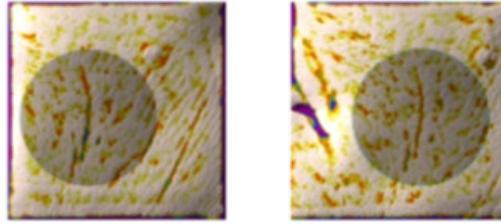
### *Left side (sandwich technique)*

Left side – after 2 sessions: 1 ml deep (needle) + 1 ml superficial (microneedling), Neauvia Hydro Deluxec (Fig. 2).



## Report Antera 3D

Rughe: Personalizzato (0.1 - 2 mm)



- Indice di dentellatura = 21,336

- Indice di dentellatura = 19,898

Selezione circolare:  
area = 985,5 mm<sup>2</sup>  
diametro = 35,5 mm

Clinically, the left side (treated with the sandwich technique) demonstrated more visible improvements in skin texture, hydration, and tone uniformity compared to the right side. The patient reported higher satisfaction and improved skin glow on the sandwich-treated side.

## CONCLUSIONS

The sandwich technique, combining superficial and deep dermal delivery, showed superior results in improving skin texture and overall antiaging effects compared to deep injections alone. This enhanced efficacy may be attributed to the simultaneous stimulation of both superficial and deep dermal fibroblasts, promoting a more comprehensive tissue remodeling response — or it may simply result from the microneedling technique itself. Further studies are needed to determine the exact mechanism. These preliminary results suggest that the sandwich technique with Neauvia Hydro Deluxe may offer a promising approach for optimizing facial rejuvenation protocols, warranting further clinical investigation. Further studies on a larger patient group are needed to confirm these preliminary results and standardize the protocol.

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