

Nesai Health

This study performs a targeted analysis of selected anatomical points to generate a comprehensive report. It enables the identification of the "snow pattern" ultrasound pattern, characteristic of permanent implants containing liquid silicone, as well as vacuolar patterns associated with resorbable materials such as hyaluronic acid. Additionally, it assesses the morphological and functional condition of the skin and subcutaneous tissue, providing detailed information on hypodermal architecture, regardless of the presence of foreign bodies or filler materials.

Patient Info

Historic Clinic Number: 6707 Age: 64 years Analysis Date: 18/05/2025 07:40



MARKED VIEWS





post_US_6707

Analyzed Images

Ultrasound images of the zones analyzed by the Nesai Health platform. Image analysis histogram for obtaining results.



LEP: Quantifies cutaneous hydration, inflammatory processes, solar elastosis, and collagen degeneration. The LEPs/LEPi ratio provides assessment of extracellular matrix density and integrity, serving as an objective marker for photoaging processes.

MEP: Quantifies protein synthesis and neofibrilogenesis - a process that remains active until approximately age 50 before gradually decreasing. Histologically, adult fibroblasts can reactivate secretory properties to compensate for age-related protein changes under physiological conditions.

HEP: Serves as an imaging marker for intrinsic aging processes. Quantifies mature collagen assembled into thick fibers that, with progressive aging, arrange parallel to tension forces in the deep dermis.



pre_US_6707

PHOTOAGING STUDY

The results presented in this report have been analyzed using our artificial intelligence system, trained on thousands of clinical images, and subsequently reviewed by a medical imaging specialist with expertise in facial ultrasound. This dual-layer evaluation is aimed at maximizing diagnostic accuracy and ensuring clinical excellence.

The report provides essential information to guide therapeutic decisions or subsequent interventions, helping to prevent actions that could lead to adverse effects. It also supports the assessment of individualized responses at each of the analyzed anatomical points.

We recommend reviewing the Doctor Notes section, where the specialist may have recorded relevant or atypical findings that warrant particular attention.

Sun-exposed image / pre-treatment - pre_US_6707	74
Non sun-exposed image / post-treatment - post_US_6707	91
Potential Rejuvenation	21.9%



NesAl Pro Analysis Results

This analysis provides a detailed statistical comparison with comprehensive examination of each band within the SLEB (Subepidermal Low Echogenicity Band) that we want to target or describe.

It offers measurements of dermis thickness, dermis area, collagen estimation, and photoaging range assessment.

Sun exposure causes most skin changes typically considered a normal part of aging. Over time, ultraviolet light damages skin fibers (elastin), generating increased elastosis or skin laxity. When these fibers are damaged, skin appearance loses its ability to return to its original state after stretching.

NesAl Health analysis allows for personalization of photoaging assessment based on the skin's defense capacity against solar damage. Age does not directly correlate with photoaging. With NesAl Health, photoaging can be detected before sun damage becomes evident, especially in younger individuals.

This knowledge is crucial for prevention strategies that will show benefits over the years. NesAl Health enables not only anticipatory care but also evidence-based prevention through quantified dermal imaging regardless of age, gender, or ethnicity.

Statistic			Difference
Total Pixels	31595	32594	999
LEP	1730	1749	19
MEP	19078	19251	173
HEP	1202	1258	56
Dermis Height (mm)	1.263	1.303	0.04
Average Echogenicity	74	90	16
Dermis Area (mm²)	29.708	30.69	0.982
LEPs ≈ SLEB	1725	1747	22

Comparison Statistics

pre_US_6707

post_US_6707

Dermis Area	LEPs over LEPi	Dermis Area	LEPs over LEPi
29.708	345.0	30.69 mm ²	873.5
mm ²	(1725 / 5)		(1747 / 2)
		Dermis Height	
Dermis Height		1.303 mm	

1.263 mm

ADDITIONAL INFORMATION

The presence of silicone is frequently associated with alterations in skin condition. Its detection should be considered a clinically significant finding and, at the same time, a source of reassurance for the patient, as it enables appropriate follow-up. The identification of a vacuolar pattern indicates the persistence of filler material at the evaluated site. Conversely, the absence of such a pattern in patients previously treated with resorbable fillers may reflect complete integration of the implant into the tissue, explaining its non-visualization on ultrasound. Assessment of skin condition allows for the detection of structural changes in the hypodermis, facilitating accurate and personalized monitoring of the treatment response. An altered hypodermal state signifies modifications in subcutaneous architecture. This finding should be interpreted within the clinical context by the attending physician to guide appropriate therapeutic decisions. Hypodermal changes observed after recent treatment may be considered expected. It is recommended to assess the patient's clinical status and consider repeating the ultrasound examination at a clinically appropriate interval.

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