

Fibroblast Therapy

The
First
Step
to
Skin
Renewal

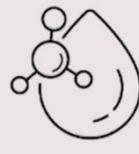


WHY IS OUR SKIN AGING



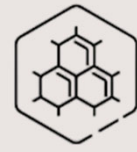
ELASTIN FIBER

The key to skin elasticity, allowing the skin to bounce back and stay tight. When elastin fibers degrade or weaken, the skin loses its resilience, leading to fine lines and sagging.



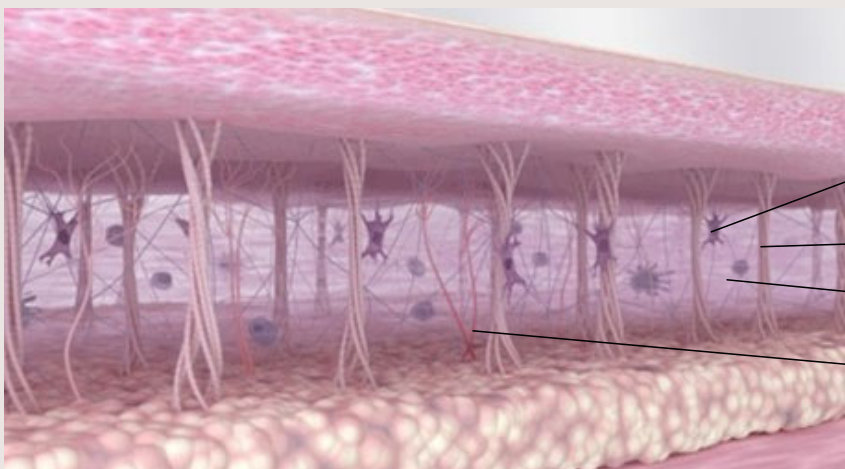
HYALURONIC ACID

The skin's natural moisture barrier, capable of locking in large amounts of water to keep the skin hydrated and plump. As hyaluronic acid decreases, the skin becomes dry, dull, and loses its youthful fullness.



COLLAGEN

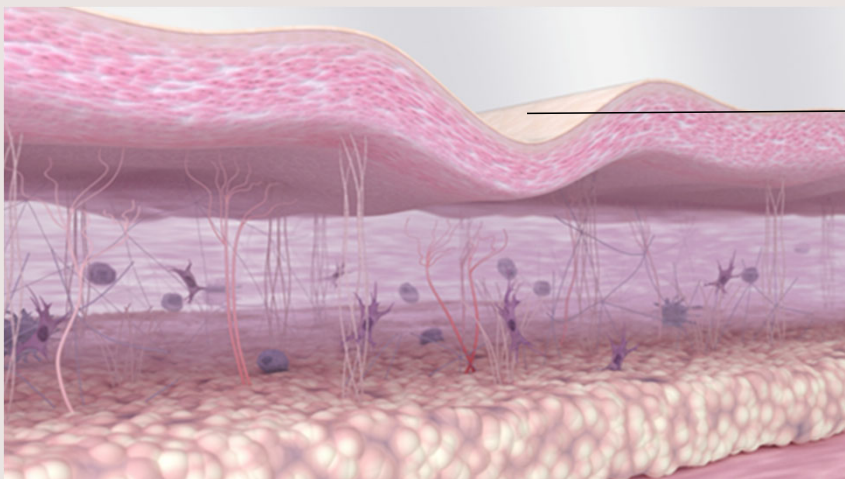
The structural support of the skin, keeping the skin firm and lifted. As collagen declines with age, the skin begins to sag, lose firmness, and develop wrinkles.



YOUNG SKIN

The State of Youthful Skin

Young skin is rich in collagen, elastin, and hyaluronic acid, which help maintain its elasticity, plumpness, and hydration, resulting in a smooth and radiant appearance.



AGING SKIN

Changes in Aging Skin

As we age, collagen and elastin degrade, and hyaluronic acid levels decrease, causing the skin to lose its firmness and moisture, leading to wrinkles, sagging, and dryness.

Causes and Effects of Skin Aging

Skin aging is primarily caused by natural aging, UV exposure, environmental pollution, and lifestyle factors, all of which accelerate the breakdown of collagen and elastin, weakening the skin's structure and reducing its elasticity. Additionally, the decline in hyaluronic acid diminishes the skin's ability to retain moisture, resulting in dryness and deeper wrinkles. Over time, these changes accumulate, leading to sagging, fine lines, and dullness, ultimately affecting the skin's overall texture and youthful appearance.



WHAT ARE FIBROBLASTS

The Key to Youthful Skin: Fibroblasts

Fibroblasts (also known as fibrocytes) are the primary cells in the dermis responsible for producing and secreting collagen, elastin, and hyaluronic acid. These essential components form the skin's structural foundation, keeping it firm, elastic, and hydrated. Simply put, if you want youthful, supple skin, fibroblasts are the key!

Young Skin vs. Aging Skin

Young Skin:

Active fibroblasts continuously produce collagen and extracellular matrix, keeping the skin plump, elastic, and smooth. Even when damaged, youthful skin can repair itself quickly—like how a baby's skin heals effortlessly.

Aging Skin:

Over time, UV exposure, dryness, environmental stress, and aging cause fibroblast activity and numbers to decline. This leads to reduced collagen, elastin, and hyaluronic acid production, resulting in wrinkles, sagging, and loss of elasticity.

Functions of Fibroblasts



Collagen → Provides structural support, keeping the skin firm and lifted



Elastin Fiber → Maintains skin's elasticity, preventing sagging and fine lines



Hyaluronic Acid → Retains moisture, ensuring a hydrated and radiant complexion

Additionally, fibroblasts play a crucial role in wound healing by rapidly migrating to damaged areas and producing collagen to repair injured skin.

Why Are Fibroblasts Important?

When fibroblast activity declines, skin renewal slows down, collagen depletes faster, and signs of aging—wrinkles, sagging, and dryness—become more apparent. Therefore, maintaining fibroblast vitality is essential for anti-aging and skin regeneration.

Beyond daily skincare, fibroblast therapy in regenerative medicine is emerging as an advanced solution. This treatment involves culturing a patient's own fibroblasts and reinjecting them into the skin, stimulating collagen production and restoring youthful skin from within.

Fibroblasts are the foundation of youthful skin—keeping them active is the key to long-lasting beauty!



FIBROBLAST TREATMENT IN HELENE

STEP 1 - CONSULTATION

First, you will be given a checklist to fill out and the doctor will explain about fibroblast therapy. Based on the materials you brought with you; we will tailor a treatment.



STEP 2 - TISSUE COLLECT

We will collect blood and about 5 mm skin tissue from the skin behind the ears. The required time is around 20 minutes, under local anesthesia. After harvesting the cells, the nurse will dress the wound and give you medication.

STEP 3 - CELL CULTURE IN HELENE CPC

CULTURE (Time: around 8 weeks)

Perform cell culture for 8 weeks using HELENE MEDIUM. From the beginning, we have consistently used a non-animal culture medium (animal-free).



SELECTION

Utilizing the autoMACS[®] Pro Separator fully automated magnetic cell separator to select fibroblasts.



CONFIRM NUMBERS

The number of cells is measured using the Countess[®] II FL Automatic cell counter.



SURVIVAL RATE CHECK

We use the Patented AI Image Cell Activity Identification System. to check cell activity and survival rates.

PRESERVATION

Tissue sample is stored in a dedicated tank containing liquid nitrogen at minus 196°C. This allows for long-term storage.



STEP 4 - TREATMENT

Before the procedure, the staff will explain the examination results, confirm the treatment details, and present the fibroblasts. To ensure optimal cell activity, please visit the clinic on the specified date and time. Fibroblasts are injected subcutaneously into the targeted area, with the procedure taking approximately 30 minutes to 1 hour. During the treatment, the doctor will carefully monitor the injection site.



Q&A

Q1. What are the effects of fibroblast therapy?

This treatment helps improve wrinkles, sagging, dark circles, skin firmness, and hydration, restoring the youthful feel of your skin. It is particularly effective for fine wrinkles (so-called "crepey skin").

Q2. Does the treatment work better for younger people?

Age is not a determining factor. This treatment is suitable for people of all ages.

Q3. How soon can I see the results?

Results vary by individual, but most people start noticing improvements 1 to 3 months after the cell transplantation.

Q4. How long do the effects last?

The transplanted cells are said to be effective for about 6 months to 1 year, though results may vary from person to person.

Q5. How much skin is collected for the procedure?

A small skin sample (about 5mm, the size of a rice grain) is taken from behind the ear.

Q6. Why is the skin taken from behind the ear?

The skin behind the ear is less exposed to UV damage and environmental stress, meaning it ages more slowly and remains in a youthful state longer than facial skin.

Q7. How much fibroblast solution is needed for transplantation?

For a full-face treatment, 100 - 300 million cells can be administered. The doctor will recommend the appropriate quantity and frequency based on the patient's specific condition.

Q8. Are there any side effects?

Since the treatment uses your own cells, there are little risks of rejection or major side effects. However, minor redness, pain, swelling, or bruising may occur due to the fine needle used for transplantation. Swelling and bruising usually subside within 1 to 2 weeks. Additionally, some people may have an allergic reaction to the anesthetic used during skin collection or transplantation.

Q9. Can I combine this treatment with other cosmetic procedures?

Yes, it can be combined with other cosmetic treatments. Rejuvenating the dermis with fibroblast therapy first can enhance the effects of other treatments that target the epidermis. However, certain procedures may interfere with fibroblast cell retention, so it is recommended to consult with your doctor beforehand.

