Restoring Facial Volume: How Fat cell grafting Enhances Facelift and Eyelid Surgery

What is fat cell grafting (fat transfer)?

Fat grafting restores lost facial volume by transferring your own fat to areas of the face that have thinned or hollowed with age. It's commonly combined with facelifts or eyelid (blepharoplasty) surgery for a natural, youthful result.

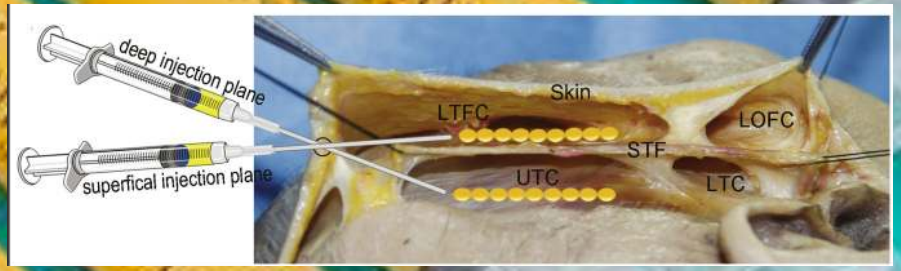
How is the procedure done?

Fat is harvested by gentle liposuction from areas like the outer thighs or lower tummy. After that, the fat is purified by centrifugation or filtration. Using cannulas, small amounts are placed in multiple tissue layers using a precise micro-droplet technique for smooth, natural results.

A centrifuge is used to prepare fat for grafting

Fat after preparation (circled)

Prepared fat ready for grafting



Blunt canula being used for grafting

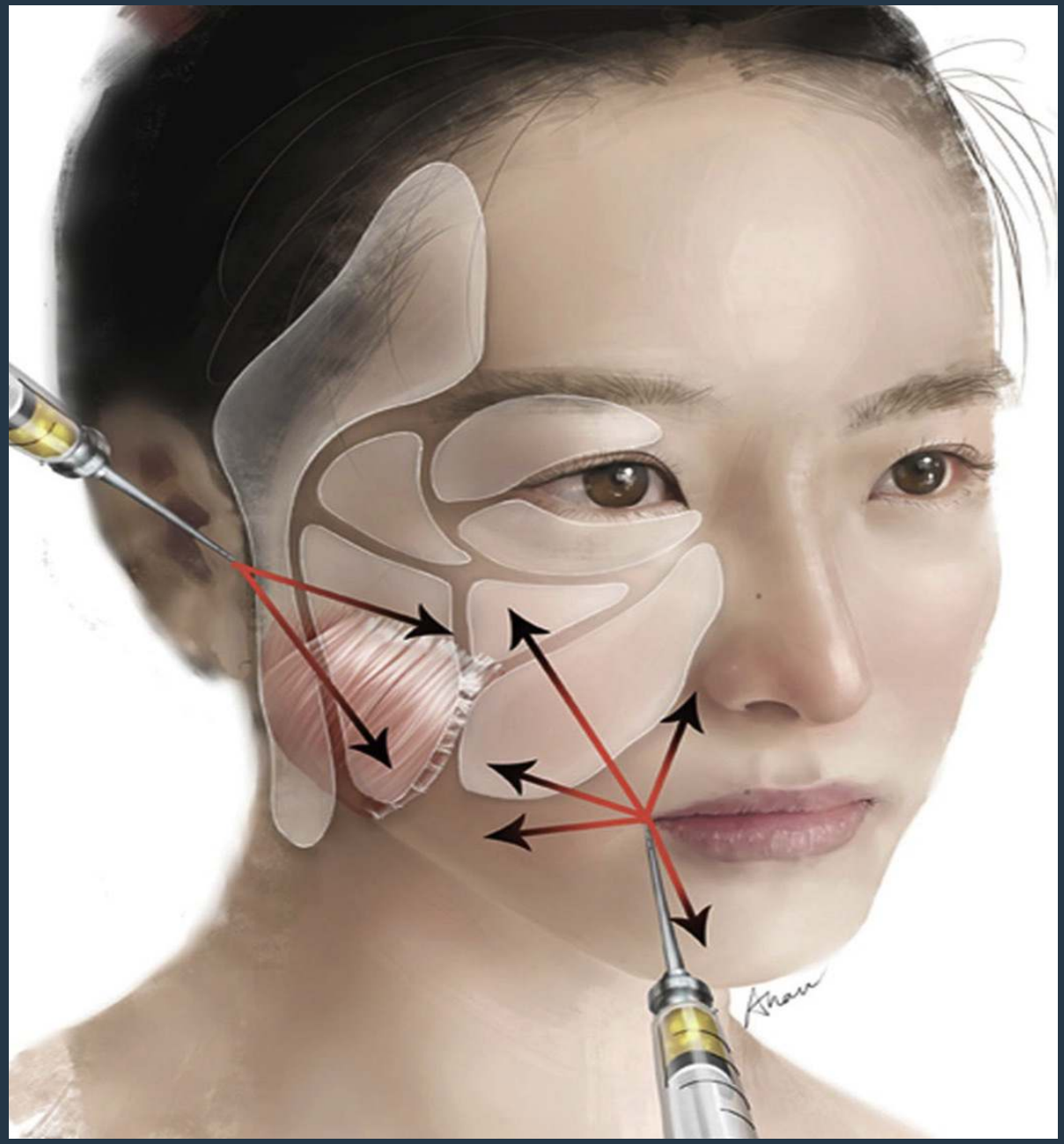
What areas of the face are commonly treated?

Cheeks & midface – restores youthful fullness

Tear troughs – softens under-eye hollows

Temples – corrects hollowing

Jawline – smooths contours and defines structure



Why combine it with facelift or eyelid surgery?

1.Facelift: Lifts and tightens sagging skin, but it doesn't replace lost volume. Fat grafting fills out sunken cheeks, temples, and jawline for smoother, more youthful contours.

2.Blepharoplasty: Removes excess skin and fat from the eyelids. Fat transfer can restore volume to hollow eyelids or soften tear troughs, avoiding a "sunken" look.

3.Tissue Quality Improvement: Fat contains stem cells that improve skin quality, texture, and elasticity overtime.

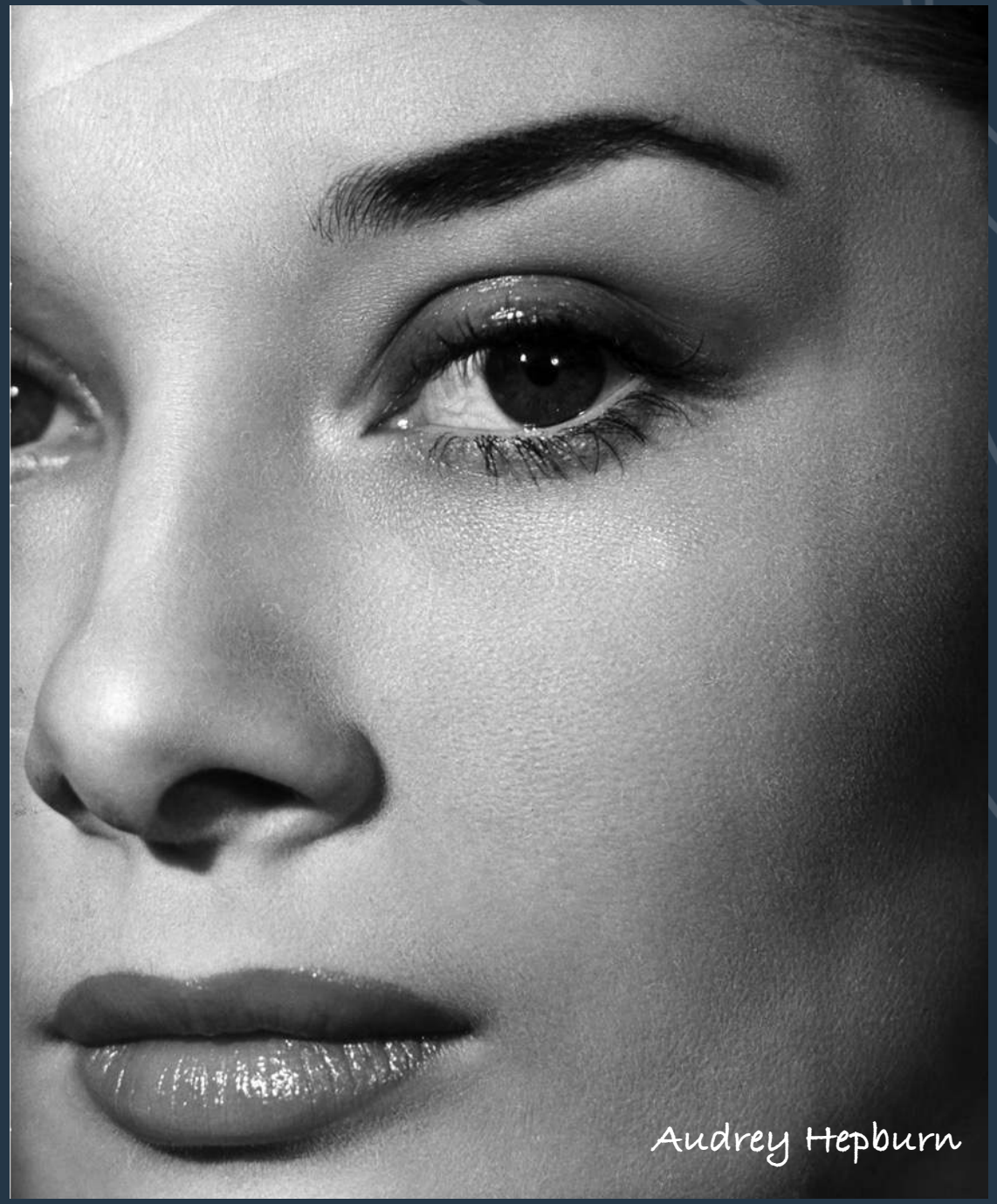
Can I have fat transfer if I already have dermal fillers in the same area?

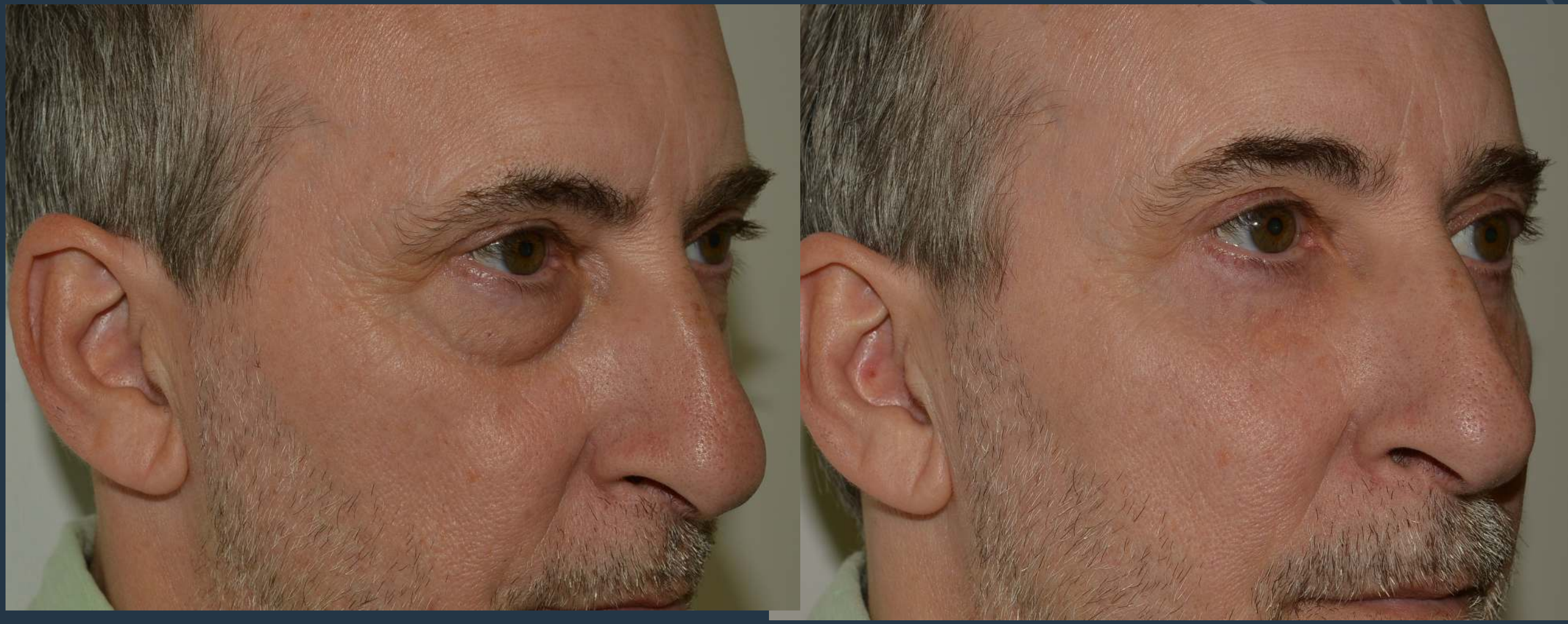
If you have previously had hyaluronic acid (HA) fillers under the eyes or in the cheeks, we usually recommend dissolving these before fat transfer. Filler can remain in the tissues for a long time and may affect how the fat settles. Removing the filler first helps create the best foundation for the fat cells to integrate and gives smoother, more predictable results. Dissolving is done with a simple enzyme injection, and we normally allow a few weeks before proceeding with fat transfer.

Fat cell grafting combined with face neck lift

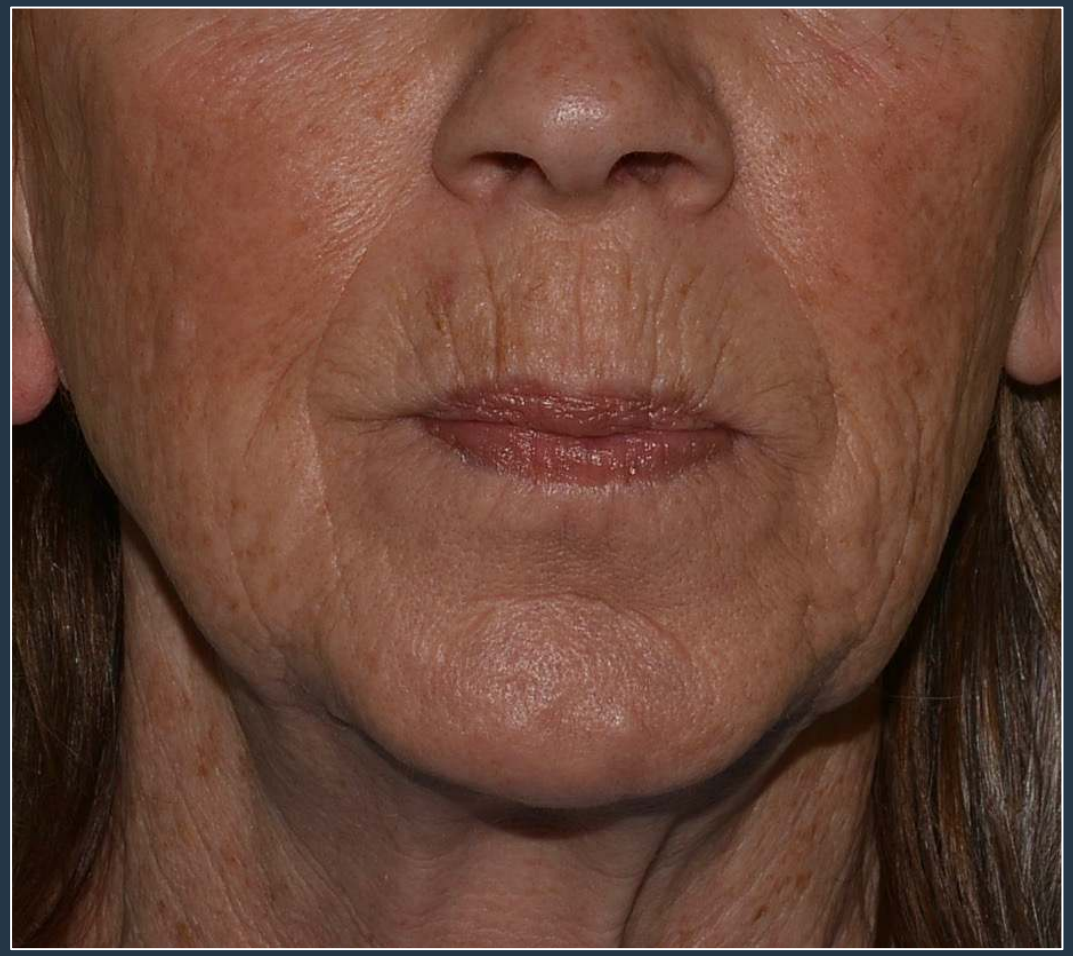
Fat cell grafting combined with facelift

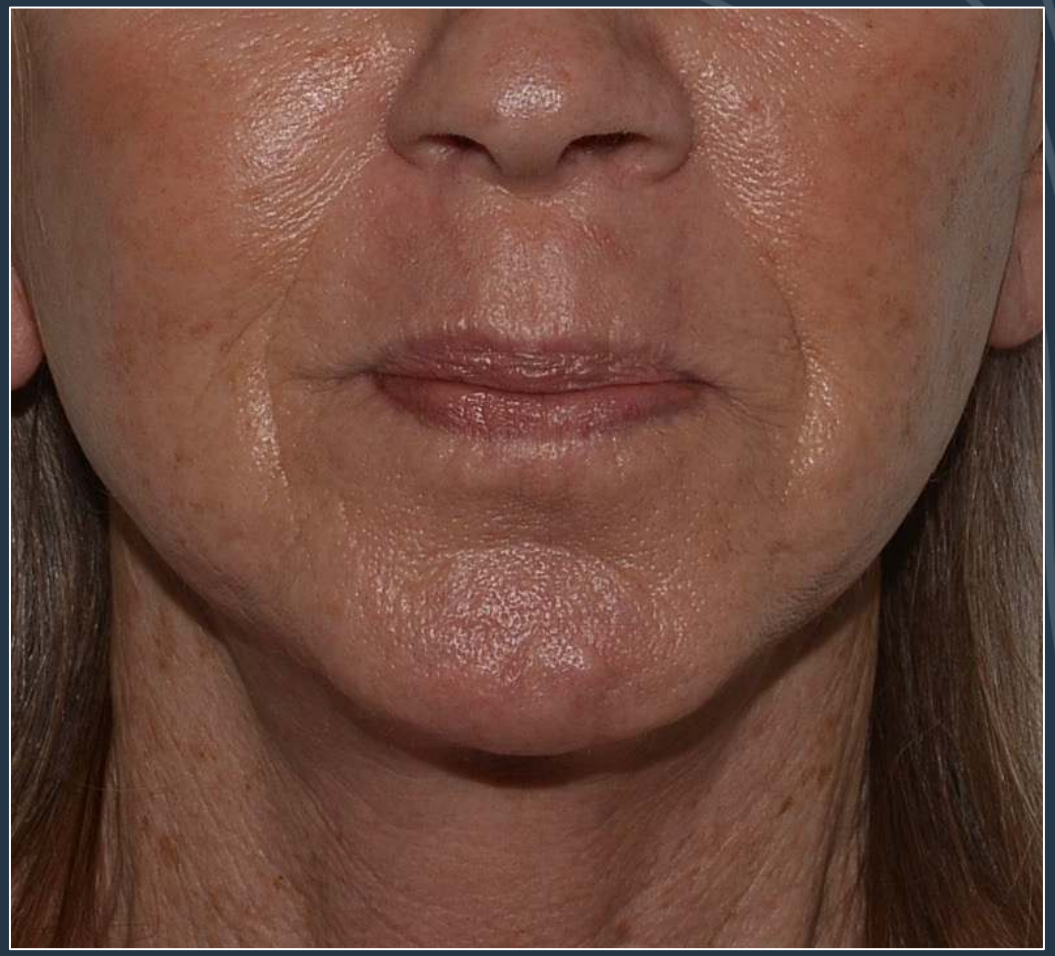
A hallmark of classic beauty lies in the smooth, uninterrupted flow of facial contours—from the lower eyelid to the midface and beyond. Fat grafting helps restore this natural harmony by softening hollows and blending transitions, creating a rested, seamless appearance without sharp demarcation.



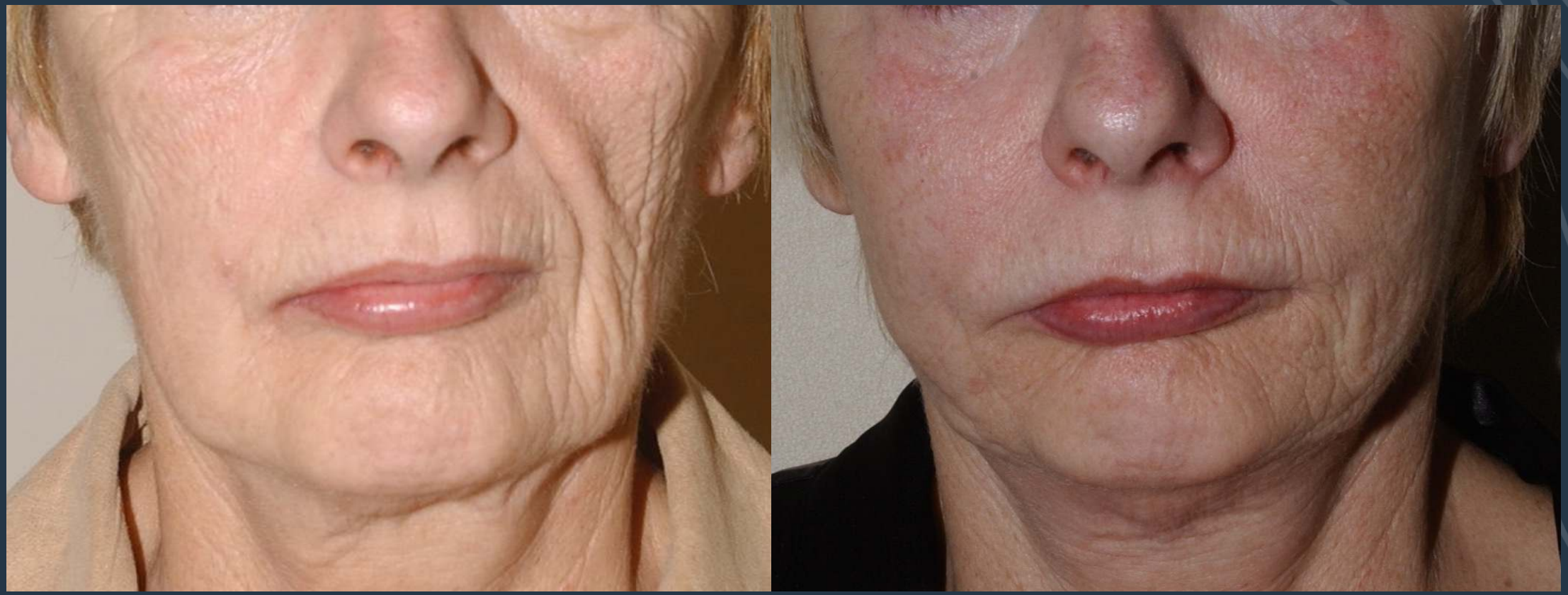


Fat cell grafting combined with eye bag removal





Restoration of mid and lower facial volume and symmetry by fat cell grafting combined with lower face neck lift. The upper lip lines were reduced by laser resurfacing



Face lift combined with fat cell grafting with greater emphasis on restoring left cheek volume.
The result was refined by an additional session of fat grafting carried out at 6 months under local anaesthesia

What's the recovery like?

Expect **swelling and bruising** for 1–2 weeks.

Remember that temporary overcorrection is common to account for expected resorption

When combined with a facelift or eyelid surgery, it may add minimal additional recovery time

Results may take 3-6 months to stabilize

How long do results last?

Fat transfer can offer **long-lasting volume restoration**. On average, **40–70%** of the fat survives permanently..

Are touch-ups or repeat grafting covered by the initial cost?

it's important to understand that the body's response to grafted fat can vary from person to person. For this reason, some patients may benefit from a secondary touch-up or repeat grafting procedure to achieve optimal symmetry or volume restoration.

This would typically be performed as a separate procedure, often under local anaesthetic, and would carry an additional cost. We will assess your results during follow-up visits and, if necessary, discuss whether a minor revision would enhance your outcome.

Is it safe?

Yes. Because the procedure uses your own fat, there's no risk of allergic reaction. Our surgical team uses meticulous technique and safety protocols to minimise the risks of infection, asymmetry, or irregularities. Serious complications like fat embolism are **extremely rare**.

Will I look overfilled or unnatural?

No. Our aim is subtle, natural rejuvenation. Fat is placed in small amounts and layered to mimic natural volume. The target is a refreshed, not "done," appearance.

Are there alternatives to fat transfer?

Yes—such as synthetic dermal fillers—but fat grafting offers the added benefits of using your own tissue, improving skin quality (due to stem cells in fat), and often longer-lasting effects.

How Does Fat Grafting Compare to Other Facial Treatments?

Patients often ask how **fat grafting** stacks up against other popular facial treatments like fillers, or surgery. Here's a simple comparison to help you understand the differences:

Feature	Fat Grafting	HA Fillers	Facelift Surgery
Adds Volume	✅ Yes	✅ Yes	❌ No
Lifts Tissue	🔸 Mild	🔸 Mild	✅ Strong
Skin Benefits	✅ Possible	🔸 Hydration	❌ None
Longevity	✅ Long-Term	🔸 Temporary	✅ Long-Term
Invasiveness	Moderate (no cuts)	Low (injections)	High (surgery)

Who is a good candidate?

You may be a candidate if you:

Want natural, long-term volume restoration

Have sufficient donor fat

Are in good health and **don’t smoke**

Understand the gradual healing process

Have realistic expectations

Are there situations where fat grafting may be less predictable or effective?

Yes, there are certain factors that can make fat grafting results less reliable or the graft take lower than expected:

I've had facial surgery before—does that affect results?
Previous surgery, especially in the area being treated, can affect how well the graft takes due to changes in tissue quality or blood supply.

What if I've had problems with fillers in the past?
A history of filler-related complications may indicate a more reactive or delicate tissue environment, which could influence healing.

Does smoking make a difference?
Yes. Smoking significantly reduces blood supply and oxygen delivery to tissues, which can lower graft survival.

Is my skin too thin for fat grafting?
Very thin skin with little subcutaneous tissue may not hold the graft well or may lead to visible irregularities.

What if I'm expecting dramatic results?
Patients with very high or unrealistic expectations may find the results subtle or may require more than one session to achieve their goals.

How much fat is taken for facial fat grafting, and will it improve the contour of the donor site?

Only a small amount of fat is needed for facial volume restoration—usually around 30–50 cc. The most common areas we take fat from are the outer thighs or lower abdomen. Some patients hope this will also help reduce unwanted fat in those areas, but the amount removed is too small to make a noticeable difference in contour. The goal is to carefully harvest high-quality fat with minimal impact on the appearance of the donor site.

Are some areas of the face more delicate or challenging for fat grafting?

Yes, certain areas—like the lower eyelids (tear troughs) and midface—require particular care during fat grafting. These regions are anatomically complex and more sensitive to volume changes, so the procedure demands a high level of precision.

What are the challenges and potential risks with fat grafting in the under-eye and midface area?

Fat grafting in the periorbital (around the eyes) and midface regions can offer natural and long-lasting results, but there are also specific considerations patients should be aware of:

Irregularities or lumpiness due to uneven fat placement or movement during healing
Swelling or prolonged puffiness, especially in the lower eyelid area
Infection which may compromise graft survival
Visibility of the graft under thin or translucent skin
Fat overcorrection or under correction, sometimes requiring touch-up procedures
Cyst formation.
Risk of asymmetry if the graft take differs between sides
Delayed healing or contour changes, particularly in areas with prior surgery or poor skin tone

How do you reduce the risks?

We prioritise safety through:

Conservative fat volume

Skilled technique with blunt cannulas

Prophylactic antibiotics

Experienced surgical hands with deep knowledge of facial anatomy

Is there a risk of embolism with fat grafting?

If fat is inadvertently injected into blood vessels, tiny pieces of fat enter the bloodstream, potentially causing blockages. It is one of the most serious potential complications of periorbital (around the eye socket) fat grafting. It can lead to visual impairment.

It is a very rare complication that can occur in between 1 in 10,000 to 1 in 100,000 cases. To put that in perspective, it's about as likely as getting struck by lightning. The risk is extremely low—but it is still something patients should be informed about.

To minimize this risk, the procedure is performed using low-pressure, slow injection techniques, only blunt cannulas are used in appropriate anatomical planes. The injection is always done with full visualization and awareness of vascular landmarks

Will the results from fat grafting last forever?

Fat grafting can offer long-lasting results, but like all natural tissues, it isn't entirely predictable over time. Some fat cells will survive permanently, while others may be reabsorbed by the body in the first few months.

Do fat grafts change over time?

Yes. Just like your natural fat, grafted fat can evolve slowly over time. This is part of the natural aging process and isn't usually sudden or dramatic.

What happens to fat grafts as I age?

The grafted fat will age along with the rest of your face. However, it may respond slightly differently than surrounding tissue—especially in areas where skin is thin or movement is frequent.

Will changes in my weight affect the results?

Yes. Because fat grafts are made from your own living tissue, significant weight gain or loss can change the size or appearance of the grafted areas. Keeping a stable weight helps maintain consistent results.

Aftercare for a **small-volume fat harvest (≈30–50 cc)** from the **upper outer thighs (typical in females)** or **lower abdomen (typical in males)**

The small puncture site is kept clean and dry with a simple dressing for the two days, then routine washing is usually fine. Compression garment over the donor area is not necessary. Expect bruising and tenderness for several days and some swelling/firmness that can take a few weeks to settle. Encourage gentle walking from day 1, good hydration, and simple analgesia (typically paracetamol ± an anti-inflammatory such as Ibuprofen))

Common donor-site risks are usually minor and self-limiting: bruising, swelling, soreness, and temporary numbness or altered sensation. Less commonly, patients can develop a seroma (a small fluid pocket) or a hematoma, which may need review and occasionally aspiration/drainage, and there can be contour irregularity. Rare but important complications include infection (increasing redness, warmth, pain, fever or discharge) and, very uncommonly, thromboembolic events in higher-risk patients. Patients should be advised to seek prompt assessment for rapidly increasing swelling, severe pain, spreading redness/fever, and persistent fluid collection

Disclaimer:

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