

About Face!

Clarifying Treatment Options for Facial Anti-Aging

Skin is comprised of three layers:

- * Epidermis – the outermost layer
- * Dermis – the middle layer
- * Subcutaneous layer – the innermost layer

The cells of the epidermis cover and protect you. Specialized cells promote continual regeneration of the skin. The epidermis has no blood supply, so its health and appearance depend on nutrients that filter from the dermis and its blood vessels.

The dermis contains collagen, nerve endings, blood vessels, and oil and sweat glands. The collagen in the dermis gives structure to the skin, and provides the infrastructure for elastin and hyaluronic acid to be retained. Elastin is responsible for the skin's elasticity and hyaluronic acid retains moisture. More collagen in the dermis enables more elastin and hyaluronic acid to be present.

The subcutaneous layer is made up mostly of fat which keeps you warm, and absorbs shocks.

Beneath the skin are muscles and bones. The facial bones support the muscle and the skin, giving shape and support to the face. Facial muscles attach directly to the skin, unlike in other areas of the body. This results in more movement of the skin as you move the muscles of your face.

As facial aging progresses, more lines and wrinkles appear and deepen over time. Skin continues to change in texture and color, and begins to sag. These processes continue throughout life. They are a result of the aging of the skin, the reduction in collagen and the underlying structures such as bones.

The goal of facial rejuvenation is to achieve a natural-looking, youthful enhancement. Advancements in the science and development of new treatments provide a greater breadth of options to counter the visible signs of aging. Non-invasive treatments are now available that can be administered in a visit to the doctor and result in no down time afterwards. The effectiveness of each treatment will vary and it is important to discuss expectations with your doctor.

Facial rejuvenation treatments are classified in three categories:

- Injectables which can fill lines, smooth wrinkles, and replace collagen as well as gradually “relax” overactive muscles.
- Resurfacing, which changes the surface of the skin
- Surgery, which can lift sagging skin, remove excess fat, and fill hollows.

INJECTABLES

Injectables include a broad range of substances which are administered by injection. Three of the most common types are toxins, traditional fillers and a new class of collagen replacers. Their main usage is for the treatment of lines, wrinkles and folds, as well as hollowing and volume loss. Selection and results depend on age, category, and the particular substance being injected.

Toxins

Botulinum toxin is an injectable agent that temporarily relaxes or paralyzes muscles, smoothing frown lines. Only lines caused by muscle contractions will be affected by botulinum toxin injections. Since the affected muscles no longer contract, there are limited areas of the face where this can be used. The most common locations for treatment are in the upper third of the face — on the frown line, crows' feet, and on the forehead lines.

Botulinum toxin is injected directly into the muscle, and anesthesia is not necessary. The toxin takes three to five days to take effect and lasts three to four months. Repeat treatment may be necessary after three to six months. When the effect begins to wear off, you will notice your wrinkles beginning to return. Side effects include redness, swelling, and bruising at the injection site.

Potential side effects for dermal injectables

As with all medical procedures that involve injection through the skin, there are certain risks and restrictions associated with the use of injectable facial dermal products. You should not use a product if you have a history of allergy to any of its ingredients. For some products, skin tests will be necessary to determine if you are allergic to the product. You should not use these products if you have an infection at the injection site. The most common side effects following an injection procedure include localized pain, tenderness, redness, bleeding and bruising. In addition, there may be other risks associated with a particular type of injectable that you should discuss with your doctor to fully understand these risks.

Traditional Fillers

Traditional fillers are soft substances, liquids or gels which can be injected into the skin to improve the appearance of fine lines and wrinkles, plump lips, fill out cheek hollows, and repair other facial imperfections. They work by filling out the space below the wrinkles, replacing lost fat. These fillers are typically used in the middle to lower face.

Traditional fillers can be injected into the dermis or subcutaneous layer of the skin, depending on the filler and treatment goal.

Traditional fillers can be natural or synthetic. Natural fillers may contain human or animal collagen, or animal hyaluronic acid. Most traditional fillers are broken down by the body over time and thus are temporary. Depending on the substance injected, you may be required to have a skin test prior to being treated. Optimal results may require several injections. Effects may last three to six months depending upon the type of filler used. After the filler degrades, a new round of treatment will be required to maintain the desired results. Side effects include redness, swelling, and bruising at injection site, bumps or nodules.

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Collagen Replacers

A new type of injectable collagen replacement diminishes the signs of aging by smoothing facial wrinkles, lines, and folds. The gradual replacement of lost collagen achieves a natural looking enhancement.

Collagen replacers are injected into the dermis or subcutaneous layer, filling the spaces where collagen has been lost. The newly-produced collagen provides a structural framework to hold hyaluronic acid and elastin and helps restore the dermis. Hyaluronic acid attracts water molecules to the dermis and restores skin moisture. Elastin provides elasticity and helps the skin stretch.

While collagen replacers can offer a subtle, gradual effect that can last up to two years, some instead offer a more immediate effect but last only six months. Side effects include redness, swelling, and bruising at injection site, bumps or nodules.

RESURFACING

Resurfacing techniques, including chemical peels, microdermabrasion, and laser resurfacing, modify the surface of the skin to address the effects of sun damage, correcting fine lines, irregular pigmentation and blemishes; common resurfacing techniques include:

- **Chemical Peels**
 - Acid is applied to the facial skin. Skin is sloughed off, and new growth is promoted.
 - Treats fine lines, wrinkles, pigmentation; skin looks younger and fresher but may take multiple treatments.
 - Side effects include redness, burning, pain.
- **Microdermabrasion**
 - Outer layer of skin is blasted off using fine crystals.
 - Treats fine lines, wrinkles, pigmentation abnormalities; skin looks younger and fresher and pigmentation is smoothed out. However, may take several treatments to attain desired results.
 - Side effects include redness, burning, pain.
- **Laser resurfacing**
 - Non-ablative lasers allow doctors to pinpoint areas to change, and using light, act upon the dermis.
 - Minimizes lines and wrinkles, tighten skin, spur collagen growth; may require several treatments to attain desired results.
 - Side effects include redness, stinging at treatment site.

Potential side effects for resurfacing treatments

Resurfacing of the skin involves an alteration of the top layers of the skin and there are certain side effects that could occur following the procedure that you should be aware, for example, you may have burning, discomfort, itching, tingling, swelling, redness, scarring, sensitivity to the sun, abnormal skin color changes, and a flare-up of cold sores and fever blisters. With chemical peels and dermabrasion, you may also see temporary whiteheads and infection. With laser

resurfacing, the laser heat may cause burns. In addition, there may be other risks associated with a particular type of resurfacing that you should discuss with your doctor to fully understand these risks.

SURGICAL TECHNIQUES

Surgery includes a wide range of procedures from lifts to liposuction to fat transfer. The treatments address a range of desired outcomes. Three of the most popular surgeries are full facial lifts, facial liposuction, and facial fat transfer.

Treatment outcomes and side effects as well as recovery time depend on the surgery and technique. It also depends on general health, behaviors, and other factors. It is important to discuss surgery, expectations, and desired outcomes in detail with your doctor as outcomes will vary.

- **Facial liposuction**
 - Removes fat from face, particularly fat which has migrated. Helps to reduce/ eliminate jowls and wattle.
 - Recovery can take several days.
 - Side effects include bruising, swelling, numbness, soreness, tenderness.
- **Face lift**
 - Firms and tightens skin, reduces loose and sagging skin including wrinkles, creases, lines and jowls.
 - Recovery can take 10 to 14 days.
 - Side effects include bruising, swelling, numbness and tenderness. Potential injury to facial nerves.
- **Fat transfer**
 - Surgically move fat from part of the body to the face to treat thinness and volume loss, wrinkles and folds on lower part of face.
 - Recovery can take 10-14 days
 - Side effects can include bruising, swelling, and potential lumpiness.

Potential side effects for facial surgery

As with all surgical procedures, there are certain side effects and restrictions following the procedure that you should be aware of, for example, you may have temporary bruising, swelling, soreness, numbness, and infection. Additionally, there may be lumpiness or asymmetry or scarring. With a face lift, there could be nerve injury that control facial muscles or feeling (temporary or permanent). There may be other risks associated with a particular type of surgery and the anesthesia used that you should discuss with your doctor to fully understand these risks.

For more information, please visit www.agingwithbeauty.com .