

MICRODERMABRASION

Recommendations



Before your treatment:

- Discontinue use of depilatories or waxing or any products or treatments that may irritate the skin for 1-2 weeks prior to your treatment.
- Discontinue sun exposure or use of tanning booths at least 14 days prior to your treatment (we recommend this practice is discontinued altogether).
- Discontinue use of any topical retinoids for at least 3-5 days prior to your treatment.
This may include: tretinoin, Retin-A®, Renova®, Differin®, Tazorac®, Avage®, EpiDuo™, Ziana®).
- History of herpes or cold sores may require an anti-viral prescription prior to treatment.
- Some medications or supplements may increase sensitivity. Consult your physician.
- Please avoid any laser or electrolysis treatments (of any kind) at least 7 days prior to your treatment; unless otherwise recommended by your aesthetician.

It is your responsibility to notify our office of any changes to your health history or medications since your last appointment.

After your treatment:

- Your skin may have a slight rosy glow for approximately 24-48 hours. It may also have a "wind-burn" sensation if your skin is extremely sensitive. This can be more common in the colder/dryer months and gentle/calming products may be necessary to help with the sensation.
- Please use all gentle and benign products for the next 3-5 days after your treatment or until you feel as though you are no longer sensitive to your home care products.
- Cleanse and moisturize your skin twice daily along with any recommended home care products.
- It is recommended that other topical, over-the-counter medications or alpha hydroxy acids not be applied to the skin 1-2 days' post procedure, as they may cause irritation.
- Discontinue use of any topical retinoids for at least 3 days to 3 weeks after to your treatment or longer based on your sensitivity and % of product.
**This may include: tretinoin, Retin-A®, Renova®, Differin®, Tazorac®, Avage®, EpiDuo™, Ziana®).*
- Avoid direct sun exposure for 1-2 days after your treatment.
- Use a sunscreen every day that blocks both UVA and UVB rays, preferably one containing a SPF of 30 or higher (we recommend wearing a sunscreen everyday).
- Do not go tanning for at least 2 weeks' post-procedure. This practice should be discontinued due to the increased risk of skin cancer and signs of aging.
- DO NOT pick or pull any loosening or peeling skin. This could potentially cause scarring or Hyperpigmentation.
- Do not have electrolysis, facial waxing and/or depilatories for approximately 1-2 weeks.

THE HISTORY OF MICRODERMABRASION

The concept of abrading the skin, or removing the upper layers, for skin rejuvenation dates back as far as 1500 BC when Egyptian physicians used a type of sandpaper to smooth scars.

More recently, in the early 1900s in Germany, Kromayer used rotating wheels and rasps to remove the upper layers of the skin. Because these instruments were human-powered, they weren't handy to use and therefore not used very often.

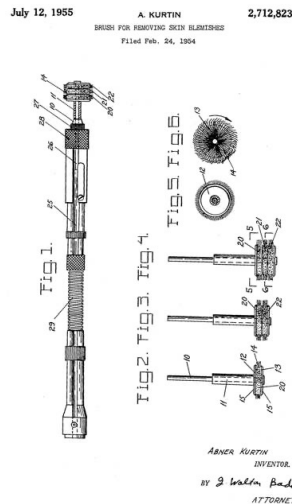
In the mid-1950s, motorized wire brushes replaced their human-powered predecessors and the use of **dermabrasion** became more common place.

There were many problems with dermabrasion, including:

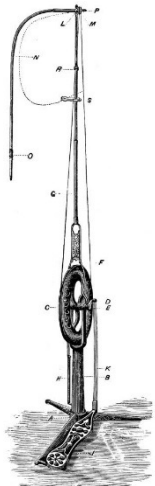
- Pain: the procedure had to be performed with anesthesia
- Long downtime: the top layers of the skin had to heal back in and this took weeks
- Scarring: Even though dermabrasion was used to treat scarring, it often caused scars to develop
- Wound care: Taking care of the bared skin was a lengthy and difficult process
- Infection: The risk of infection with abraded skin was high
- Danger to the practitioner: The abraded skin particles were aerosolized exposing the practitioner and staff to possible infection



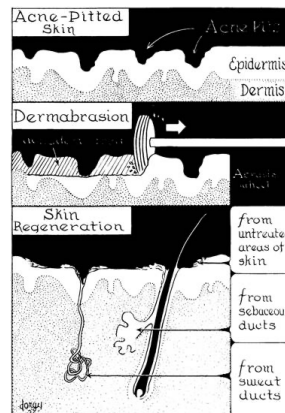
Ernst Franz Ludwig Kromayer [1862-1933].



1955 Drawings of the wire brushes



1876 A foot-powered dental drill.



1960 before and after dermabrasion



Dental burs. (used for cutting hard tissues - tooth or bone)

MODERN ABRASION OF THE SKIN

Men and women have always wanted to **erase** certain superficial skin imperfections by **smoothing the surface of their skin**.

This smoothing corresponds to **an abrasion** and the abrasion techniques of today can be:

- **Mechanical:** microdermabrasion
- **Chemicals:** medical peels
- **Thermal:** laser

MODERN MICRODERMABRASION

In response to the risks of dermabrasion, the first microdermabrasion machine was developed in 1985 in Italy by Drs. Mattioli and Brutto. This first machine was a «closed-loop» system, meaning the skin that was abraded was returned to a «dirty» container in the machine instead of being aerosolized – using small aluminium oxide crystals. From 1986 the machines became available in the rest of Europe where they were used by aestheticians and beauty therapists. After arriving in the United States in 1997, they began to be used in beauty salons when the American Food & Drug Authority (FDA) gave them Class I exempt status in 1998.

Which has the following implications:

- Machines can be sold without any demonstration of clinical efficacy.
- Machines can be operated without medical supervision.

The introduction of cheaper microdermabrasion machines in recent times means that they have now become a relatively common appliance used in the beauty industry.

Microdermabrasion is a popular cosmetic procedure because it works on both the outer layer of the skin (called the epidermis) as well as the deep layer of the skin (the dermis).

How the 2 Types of Microdermabrasion work

Crystal vs. Diamond-Tip

There are two basic types of microdermabrasion—crystal microdermabrasion and diamond microdermabrasion. They both offer similar benefits, but the process between the two is slightly different.

How Crystal Microdermabrasion Works

Crystal microdermabrasion, sometimes called microcrystal dermabrasion, is the form of microdermabrasion that originally came to the United States from Europe. And it's still the most popular type of microdermabrasion.

During a treatment, super-fine crystals are sent from a receptacle on the microdermabrasion machine, through a tube, and to a glass or stainless steel wand. Via the wand, the crystals are sprayed over the skin (think of it as gentle, controlled sandblasting for your skin).

The crystals and exfoliated skin particles are simultaneously vacuumed away through the same wand. Used crystals are sent to a second receptacle on the machine, and are discarded after every procedure. Don't worry; they aren't reused.

Aluminum oxide (corundum) crystals are typically used because they are nearly as hard as diamonds. Magnesium oxide, sodium bicarbonate (baking soda), and even sodium chloride (salt) crystals are sometimes used as well.

ALUMINUM OXIDE (corundum crystals)

Chemical name: Al_2O_3

Sourced from nature as ore

Ruby and sapphire are composed of 90% corundum

Only diamond is harder than corundum

Excellent abrasion quality

Perfect for microdermabrasion

How Diamond-Tip Microdermabrasion Works

Diamond-tip microdermabrasion is a newer procedure, but one that quickly gained popularity as a crystal-free microdermabrasion option.

Instead of using crystals to exfoliate the skin, a wand with a diamond-encrusted tip is passed over the skin.

The diamond tip abrades the skin and, like the crystal version, the exfoliated particles are then vacuumed away through the same wand.

So, to continue the analogy, if crystal microdermabrasion is like sandblasting the skin, diamond-tip microdermabrasion is like using sandpaper.

Diamond-tip microdermabrasion is a bit cleaner, simply because there are no stray gritty crystals left behind on the skin. And some say it's a bit safer because there are no crystals to accidentally get into the eyes. But if your technician is skilled and careful, this really isn't an issue.

Some people prefer diamond microdermabrasion because of the lack of crystals. Breathing in aluminum oxide crystals can be irritating, and can cause short-term breathing problems for very sensitive people.

Because the microdermabrasion wand forms a closed-loop system, the crystals are generally being suctioned back into the machine and not spraying out into the air to be inhaled. Good practitioners limit their clients' exposure to the crystals, so don't let this scare you away from having a treatment done.

Effects

Both forms of microdermabrasion work similarly. The skin is deeply exfoliated by the crystals or the diamond tip, so it feels softer and smoother immediately after treatment. The exfoliation also helps reduce the formation of comedones and brightens the complexion.

The suction aspect of the treatment is as vital as the exfoliation itself (it isn't just helpful in sucking away exfoliated skin.) Called *negative pressure* in pro-speak, the suction stimulates the dermis, causing a remodeling process to occur.

Microdermabrasion triggers a wound response in the skin. As the skin repairs itself, it becomes thicker, smoother, more elastic, and looks healthier as a result.

Results

- Restores radiance to the skin
- Remove dead cells
- Tighten dilated ostiums
- Accelerates cell regeneration and repair
- Stimulates the production of collagen and elastin
- Increases dermal density
- Improve age spots (hyperpigmentation)
- Lessen the appearance of stretch marks
- Reduce fine lines and wrinkles
- Reduces scars left by acne

The depth of the abrasion

- The depth of the abrasion and the intensity of the suction depend on the time spent on the skin site.
- To obtain a simple (superficial) microdermabrasion, all you need is a quick and simple scan of the skin. We reach the stratum corneum. This is made up of 18 to 23 layers of dehydrated and flat cells (corneocytes). A temporary erythema may be noted and the effect obtained is that of stimulation (e.g. treatment of fine lines)
**The dermis is quickly reached on thin skin by keeping the hand piece stationary on a fixed point.*
- To get a deeper microdermabrasion we made several sweeps and select a more abrasive diamond tip or more suction. The treatment reaches the keratinocytes and it produces a more important erythema. This depth is used for the treatment of stretch marks, blemishes and scars with atrophic skin
- In practice, different manipulations can alternate, add up or complement each other to obtain the desired abrasion-suction effect.

Slow movements produce a deeper micro-exfoliation while fast movements produce a lighter micro-exfoliation.

How does the client prepare for microdermabrasion?

- Discontinue use of any and all exfoliating agents 7 days prior to your microdermabrasion.
- Do not wax the week prior to a microdermabrasion.
- Discontinue use of NSAIDS (Nonsteroidal anti-inflammatory drugs) 7 days prior to service.
- Avoid contact with the sun for 7-14 days prior to treatment. Avoid scheduling an appointment if you are red or burned for 14 days.

PLUS, REFER TO RECOMMENDATIONS SHEET

What are the post-microdermabrasion effects?

Any discomfort experienced as part of microdermabrasion is usually short-lived. This can include redness and swelling, which should subside within a few hours (24 to 48 hours). Later, you can expect the skin to be flaky and dry for several days.

Additional **microdermabrasion risks** include:

- Bruising, which can occur from the suction and may last several days.
- Your skin will be more sensitive to sun exposure. Be sure to use sunscreen, especially immediately following a microdermabrasion session.

Contraindication to a microdermabrasion treatment

1. You Have Moderate to Severe Inflammatory Acne

Although microdermabrasion can help improve mild acne breakouts and **comedonal acne**, it's not the treatment of choice for **inflammatory acne**. The procedure can make inflamed, raw skin even rawer and inflamed. You also risk spreading the infection. Plus, it hurts when it's done over inflamed pimples!

Microdermabrasion doesn't do much to help improve more serious cases of acne anyway. For that, you would need a medication that you use more consistently, every day.

Once your acne is fairly well controlled, and not as inflamed, you can then have your microdermabrasion treatment. It may even help lighten those discolored spots left after pimples heal.

2. You Have Rosacea

If you have **rosacea**, your skin is sensitive. Microdermabrasion can make the redness and puffiness of rosacea even worse. You definitely don't want to have a treatment done during a breakout.

But even if your skin is currently looking pretty good, a microdermabrasion treatment can cause flare-up rosacea.

3. You're in the Midst of a Cold Sore Breakout

Those little lesions are painful, so you probably wouldn't want someone messing with your face anyway. But not only could doing microdermabrasion around that cold sore make the breakout worse, but there is also a possibility that your technician could spread it to other areas of the face.

It's best to wait until you're completely healed before having your treatment done. Most estheticians will not work on you while you have an active herpes infection anyway, for safety reasons.

And if you're prone to cold sores, let your technician know. Microdermabrasion can trigger a breakout.

4. You Have a Rash, Wound, or Other Skin Irritation

Don't expect microdermabrasion to clear up a rash. An esthetician should not do microdermabrasion across any rash or broken skin. Microdermabrasion can't be done with eczema, psoriasis, ringworm, or any other rash, whether you know what has caused it or not.

5. You're Using Topical Retinoids

Generally speaking, using **topical retinoids** is a **NO NO** for performing a microdermabrasion treatment, at least at the salon. Most estheticians, especially if you are a new client and they have not worked on your skin before, will not perform microdermabrasion if you're using a topical retinoid.

But, dermatologist may have a different skincare plan. Sometimes topical retinoids are prescribed along with microdermabrasion for very specific reasons.

So, if your dermatologist has this treatment plan, it's OK and only a dermatologist should do this procedure.

6. People who have taken the acne medicine isotretinoin (Accutane) in the past 6 months

May need to wait before having microdermabrasion. They have an increased risk of complications such as scarring.

OTHER CONDITIONS:

- Moles
- Mucous
- The pubis
- Nipples
- Diabetics
- People take blood thinners including aspirin
- Infectious lesions
- HIV carrier

How often can we do microdermabrasion?

This depends entirely on the skin type;

- For oily skin every 8 days
- For normal skin every 10 days
- For alipic, dehydrated and sensitive skin every 15 days

For maintenance purposes, we recommend every 4 weeks. The cells naturally turn every 28 days.

MANUAL TECHNIQUE

