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Chemical Peel

Chemical peel uses a chemical solution to improve and smooth the texture of the facial skin by removing its damaged outer layers. It is helpful for those individuals with facial blemishes, wrinkles and uneven skin pigmentation. Phenol, trichloroacetic acid (TCA) and alphas hydroxy acids (AHAs) are used for this purpose. The precise formula used may be adjusted to meet each patient's needs. Although chemical peel may be performed in conjunction with a facelift, it is neither a substitute for such surgery, nor will it prevent or slow the aging process. This web site provides basic information about certain types of chemical peel treatments and the results you might expect. It won't answer all your questions, since a lot depends on your individual circumstances. Once you and your plastic surgeon have decided on a specific peel program, be sure to ask about any details that you do not understand.

Deciding if Chemical Peel Is Right for You

Chemical peel is most commonly performed for cosmetic reasons — to enhance your appearance and your self-confidence. Chemical peel also may remove pre-cancerous skin growths, soften acne facial scars and even control acne. In certain cases, health insurance may cover the peel procedure. Be sure to check your policy and contact your insurance company before the procedure is performed.

Alphas hydroxy acids (AHAs), such as glycolic, lactic or fruit acids, are the mildest of the peel formulas and produce light peels. These types of peels can provide smoother, brighter-looking skin for people who can't spare the time to recover from a phenol or TCA peel. AHA peels may be used to treat fine wrinkling, areas of dryness, uneven pigmentation and acne. Various concentrations of an AHA may be applied weekly or at longer intervals to obtain the best result. Your doctor will make this decision during your consultation and as the treatment proceeds. An alphas hydroxy acid, such as glycolic acid, also can be mixed with a facial wash or cream in lesser concentrations as part of a daily skin-care regimen to improve the skin's texture.

Trichloroacetic acid (TCA) can be used in many concentrations, but it is most commonly used for medium-depth peeling. Fine surface wrinkles, superficial blemishes and pigment problems are commonly treated with TCA. The results of TCA peel are usually less dramatic than and not as long-lasting as those of a phenol peel. In fact, more than one TCA peel may be needed to achieve the desired result. The recovery from a TCA peel is usually shorter than with a phenol peel.

Phenol is the strongest of the chemical solutions and produces a deep peel. It is used mainly to treat patients with coarse facial wrinkles, areas of blotchy or damaged skin caused by sun exposure, or pre-cancerous growths. Since phenol sometimes lightens the treated areas, your skin pigmentation may be a determining factor as to whether or not this is an appropriate treatment for you. Phenol is primarily used on the face; scarring may result if it's applied to the neck or other body areas.

All chemical peels carry some uncertainty and risk. Chemical peel is normally a safe procedure when it is performed by a qualified, experienced plastic surgeon. However, some unpredictability and risks, such as infection and scarring, while infrequent, are possible.

Chemical peel is especially useful for the fine wrinkles on cheeks, forehead, around the eyes and the vertical wrinkles around the mouth.

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AHA peels may cause stinging, redness, irritation and crusting. However, as the skin adjusts to the treatment regimen, these problems will subside.

With a TCA peel, your healed skin will be able to produce pigment as always; the peel will not bleach the skin. However, TCA-peel patients are advised to avoid sun exposure for several months after treatment to protect the newly formed layers of skin. Even though TCA is milder than phenol, it also may produce some unintended color changes in the skin.

With a phenol peel, the new skin frequently loses its ability to make pigment (that is, tan). This means that not only will the skin be lighter in color, but you'll always have to protect it from the sun. Phenol may pose a special risk for patients with a history of heart disease. It's important that you make your surgeon aware of any heart problems when your medical history is taken.

It also is possible that phenol will cause some undesired cosmetic results, such as uneven pigment changes. Certain modified phenol peels are gentler and may be preferred in some circumstances.

Peel Formulas at a Glance

Alphahydroxy Acids (AHAs)

Uses:

- Smooths rough, dry skin
- Improves texture of sun-damaged skin
- Aids in control of acne
- Can be mixed with bleaching agent to correct pigment problems
- Can be used as TCA pre-treatment

Considerations:

- A series of peels may be needed
- As with most peel treatments, sunblock use is recommended

Trichloroacetic Acid (TCA)

Uses:

- Smooths out fine surface wrinkles
- Removes superficial blemishes
- Corrects pigment problems

Considerations:

- Can be used on neck or other body areas
- May require pre-treatment with Retin-A or AHA creams
- Treatment takes only 10-15 minutes
- Preferred for darker-skinned patients
- Peel depth can be adjusted
- Repeat treatment may be needed to maintain results
- Sunblock must be used for several months
- Healing is usually quick, much quicker than with a phenol peel

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Phenol

Uses:

Corrects blotches caused by sun exposure, birth-control pills, aging
Smooths out coarse wrinkles
Removes pre-cancerous growths

Considerations:

Used on the face only
Not recommended for dark-skinned individuals
Procedure may pose risk for patients with heart problems
Full-face treatment may take one hour or more
Recovery may be slow - complete healing may take several months
May permanently remove facial freckles
Sun protection, including sunblock, must always be used
Results are dramatic and long-lasting
Permanent skin lightening and lines of demarcation may occur

Planning for a Chemical Peel

In some states, no medical degree is required to perform a chemical peel — even the strongest phenol peels. Many states have laws that permit non-physicians to administer certain peel solutions, but regulate the strengths that they are permitted to apply. You should be warned that phenol and TCA peels have been offered by inadequately trained practitioners claiming “miracle techniques” to rejuvenate the skin.

It is very important that you find a physician who has adequate training and experience in skin resurfacing. Your plastic surgeon may offer you a choice of peel techniques or suggest a combination of peels to obtain the best result for you.

During your initial consultation, it is important that you discuss your expectations with your plastic surgeon. Don't hesitate to ask any questions or express any concerns that you may have. Expect your plastic surgeon to explain the planned procedure in detail, including its risks and benefits, the recovery period, and the costs. If you have a history of herpes, you should inform your physician prior to the procedure. Remember, chemical peel treatments usually are not covered by medical insurance unless they are performed for medically related problems.

Preparing for Your Chemical Peel

Your plastic surgeon will instruct you on how to prepare for your peel treatment.

Sometimes Retin A — a prescription medication derived from Vitamin A — is used to pre-treat the skin. This thins out the skin's surface layer, allowing the TCA solution to penetrate more deeply and evenly. If your skin won't tolerate Retin-A pre-treatment, an AHA cream may be used instead. Hydroquinone, a bleaching agent, is sometimes used in conjunction with Retin-A or AHA pre-treatment, especially if you have blotchy skin areas or pigmentation problems. You may have to spend a month or more in the pre-treatment phase before the doctor will schedule your actual peel.

You will need to arrange for someone to drive you home and help you out for a day or two if you are having a phenol or deeper TCA peel. You probably won't need any extra assistance if you're having an AHA peel or superficial TCA peel.

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Where Your Peel Will Be Performed

Most chemical peels may be safely performed in a plastic surgeon's office, office-based surgical facility or outpatient surgical center. Your plastic surgeon may want you to stay overnight in a facility or hospital if other cosmetic procedures are performed simultaneously.

Types of Anesthesia

Anesthesia isn't required for phenol or TCA peels because the chemical solution acts as an anesthetic. However, sedation may be used before and during the procedure to relax you and keep you comfortable.

No anesthesia is needed for AHA peels since they cause only a slight stinging sensation during application.



The Peel

AHA Peels/Treatments: Your doctor will apply the AHA solution to your cleansed facial skin, a process that usually takes no more than 10 minutes. No "after-peel" ointment or covering is required. Depending on the strength of the peel, periodic treatments may be necessary until the desired effects are achieved.

For some patients, the application of an AHA-based face wash or cream, once or twice a day at home, will be sufficient to accomplish the desired goal. Your plastic surgeon may add Retin-A or a bleaching agent to your at-home treatment schedule. After several weeks of at-home use, your doctor will examine your skin to determine if your regimen needs adjustment.

Phenol and TCA Peels: Typically, the skin is first thoroughly cleansed. Then, the surgeon will carefully apply the phenol or TCA solution. You may feel a stinging sensation as the peel solution is applied, but this feeling will quickly pass.

A full-face TCA peel usually takes no more than 15 minutes. Two or more TCA peels may be needed to obtain the desired result, and those may be spaced out over several months. Mild TCA peels may be repeated as often as every month.

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If phenol solution has been used, your plastic surgeon may coat the treated area with petroleum jelly or a waterproof adhesive tape. With lighter peels, no covering is necessary.

A full-face phenol peel generally takes one or two hours to perform, while a phenol peel to a smaller facial region (perhaps the skin above the upper lip) may take only 10 or 15 minutes. A single treatment usually suffices.

The chemical solution can be applied to the entire face, or to a specific area - for example, around the mouth - sometimes in conjunction with a facelift.

At the end of a phenol peel, a thick layer of petroleum jelly may be applied to the treated area.

A protective crust may be allowed to form over the new skin. When it's removed, the skin underneath will be a bright pink.

After Your Treatment

After an AHA peel, it is common to experience some temporary flaking or scaling, redness, and dryness of the skin. However, these conditions will disappear as the skin adjusts to treatment.

After a phenol or TCA peel, your doctor may prescribe a mild pain medication to relieve any tingling or throbbing you may feel. If tape was used to cover your face, it will be removed after a day or two. A crust or scab will form on the treated area. To help your face heal properly, it is essential that you follow your doctor's specific post-operative instructions.

A TCA peel may also cause significant swelling depending on the strength of the peel used.

If you've had a phenol peel, your face may become quite swollen. Your eyes may even be swollen shut temporarily. You will need someone to help care for you for a day or two. You may also be limited to a liquid diet and advised not to talk very much during the first few days of recovery.

Getting Back to Normal

With an AHA peel, the temporary redness, flaking and dryness that you experience will not prevent you from working or engaging in your normal activities. A fresher and improved skin texture will result with continued AHA treatments. Remember, protecting your skin from the sun is also important following these mild acid peels. Ask your doctor to recommend a sunblock with adequate UVA and UVB protection and use it every day.

With a TCA peel, the moderate discomfort and mild swelling you may experience will subside within the first week. In about a week to 10 days, your new skin will be apparent, and you should be healed sufficiently to return to your normal activities. It is best to avoid sun exposure unless you are adequately protected.

After healing, the skin is lighter in color, tighter, smoother and younger looking.

With a phenol peel, new skin will begin to form in about seven to 10 days. Your face will be very red at first, gradually fading to a pinkish color over the following weeks to months. During this time, it is especially important that you use a sunblock or blotchy, irregular skin coloring may result.

About two weeks after treatment, you may return to work and resume some of your normal activities. Your skin will be healed enough for you to wear makeup.

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Your New Look

Improvements from AHA peels may be very subtle at first. You may detect a healthier glow to your skin. With continued treatments, you will notice a general improvement in the texture of your skin.

The results of a TCA peel are usually not as long-lasting as those of phenol peel. However, your skin will be noticeably smoother and fresher-looking.

If you're planning a phenol peel, you can expect dramatic improvement in the surface of your skin—fewer fine wrinkles, fewer blemishes, and more even-toned skin. Your results will be long-lasting, although not immune to the effects of aging and sun exposure.