

AFTERIMAGE

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This special edition of AFTER IMAGE is being written in response to the many questions you are asking regarding the treatments available for improving the appearance of your skin.

Those of us fortunate enough to live in sunny southern California are particularly vulnerable to the damaging rays of the sun. Of course, the best way to minimize the damage is the stay out of the sun - but that's not an option for most of us. The improvements made in sunscreens in recent years will make a difference for those who are faithful in their use. For anyone who is currently concerned about the fine lines, wrinkles or discoloration of their skin, there are procedures we perform in the office that produce excellent results with minimal discomfort.

As always, my staff and I are happy to answer any questions you might have about this or any subject related to plastic and reconstructive surgery.

Please call me with any questions or comments at (949) 650-2345.



Best regards,

A handwritten signature in cursive that reads "David Benvenuti MD".

David Benvenuti, M.D.

The beautiful golden tan, the bronze body strikingly contrasted by blonde hair or light clothing...the epitome of beauty and health...envied by those with a paler complexion. That was yesterday. Over the years, those gorgeous tans have resulted in wrinkled, sagging skin at best and severe damage or skin cancer at worst. Today, aware of the dangers and undesirable consequences of overexposure to the sun, the pale complexion has replaced the tanned look as the status of beauty and good health.

The aging process is inevitable. It is a fact of life. We know now, though, that overexposure to the sun's UVA and UVB rays may accelerate it. This is known as "photoaging." Unlike the normal aging process, however, skin changes associated with photoaging can be minimized and, with the proper precautions, even prevented.

Although the sun can be a real villain, especially to our skin, avid sun worshippers need not fear being confined indoors or covering up like a mummy before venturing out. Manufacturers have made significant improvements to sunscreens, and they are an exceptionally effective preventive measure. To slow the process of aging, always use a sunscreen of at least SPF-15, applied 30 minutes prior to exposure. It should be reapplied if you are perspiring or swimming. People with light complexions are at a higher risk of severe damage from photoaging than are those with a darker complexion, and should take greater precautions.

Unfortunately, our knowledge of the dangers of overexposure to the sun's UV rays came too late for many sun worshippers. While innocently enjoying the rays for 10, 20, or 30 plus years, they now face sagging, prematurely aged skin and sometimes even more severe effects. In addition, pigment alteration (uneven or changed skin color) and vascular changes may have occurred.

Today, research has found that some changes associated with photoaging may actually be reversible. There are a number of very effective procedures available that can renew the skin and return it to a more youthful appearance. As a society, we are living longer. We have become aware of the importance of keeping our body healthy through good nutrition and exercise. Proper skin care treatments are a perfect complement to maintaining our desired health and appearance.

Treatments are available for photoaging as well as a variety of other skin problems, and can be performed right in the doctor's office. Some of the options include chemical peels, dermabrasion and topical preparations. Chemical peels can produce desirable results used alone, and are also a valuable aid when utilized in conjunction with aesthetic facial surgery. Considering the individual patient's needs and expectations, the doctor can make recommendations as to which procedure will be the most beneficial and produce the most positive results.

CHEMICAL PEELS

Chemical peels have become popular in the last few years. They answer a need for improvement of fine wrinkles and sun damage with short recovery times and lower costs. The types of chemical solutions used are alpha hydroxyacids (glycolic and lactic acids), retinoic acid (Retin A), trichloroacetic acid (TCA) and phenol, in order of increasing strength. The best treatment can be determined after Dr. Benvenuti evaluates a patient's skin color, texture and thickness.

The skin has five layers. Each type of chemical goes to a different depth (see Fig. 1).

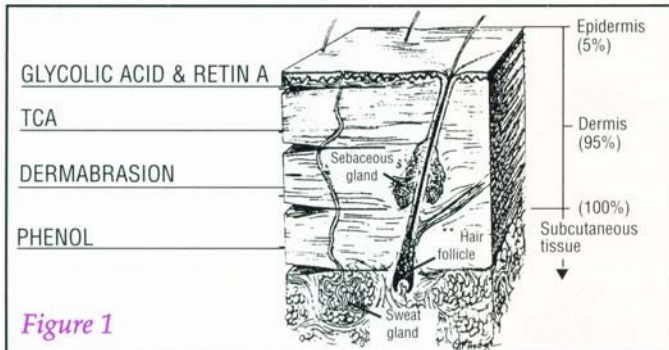


Figure 1

ALPHA HYDROXYACIDS

Although the use of glycolic (fruit) acid and lactic acid in over-the-counter skin care products have mushroomed in the last few years, the usage of these products is not new. Sour milk (lactic acid) was used in ancient Egypt and spoiled wine (tartaric acid) was used by French royalty during the 1700's to improve skin texture.

BEFORE



AFTER



Glycolic Acid Peels

The popularity of glycolic acid today is due to its success in helping to achieve a softer, smoother, blemish free skin. Besides being a recognized treatment for fine wrinkles and photoaging, it has proven to be highly effective in treating many kinds of skin problems such as the excessive roughness and scaliness associated with dry skin. It has also proven highly effective in the treatment of keratoses, a pre-cancerous condition caused by overexposure to the sun and it is recommended for melasma, the brown spots that often appear on the face during pregnancy or menopause. It is also recognized as an effective treatment for acne.

These acids work by disrupting the adhesiveness between the cells of the skin, thereby accelerating the normal shedding of the outer skin layers. In addition, they cause inflammation (redness) of the skin and may increase the formation of collagen, the building blocks of the skin.

The alpha acids are useful in the treatment of dry skin, keratosis (thickened patches of skin) and sun damaged skin. To achieve improvements in fine wrinkles and aging spots, the treatment, which is left on the face for only a few minutes, is done in six phases, one week apart in our office. No anesthesia is needed for this procedure. Some redness and scaling of the skin may occur, however, makeup can be worn while the patient is undergoing the course of treatment.

RETINOIC ACID

Retin A, which is chemically related to Vitamin A, is stronger than the alpha acids and often is used in conjunction with them. Frequently used in the treatment of acne, many studies have shown that the use of 0.1 % of the cream increases the formation of collagen.

Treatment usually begins with lower doses (0.05% or 0.025%) applied every night after washing the face with mild soap. Only a small amount (about the size of a pea) is used. In people with sensitive skin, the cream should be applied every other night. Moisturizers and a sun block of at least SPF 30 are essential for anyone using Retin A.

Side effects are scaling, dryness and a slight redness that usually goes away.

TRICHLOROACETIC ACID

When using TCA, concentrations must be varied according to the skin type of the patient and the regions of the body being treated. Because the skin on the eyelids, chest, arms and back of the hand and on people with naturally thin or mature skin is more sensitive, special care must be taken. The concentration of the TCA, technique of application and pre-treatment with Retin A, all affect the depth of the peel. (Retin A enhances the TCA effects.)

For example, concentrations vary from 25% for eyelid skin and the skin of mature patients to 40% for thicker skinned individuals and less sensitive parts of the face and body. The pre-treatment with Retin A and hydroquinone (bleaching cream) is very important and takes two to four weeks.

TCA leaves a light frost on the skin when first applied, with a general redness appearing after approximately 15 minutes. This becomes a darkened layer of dead skin (similar to the result of a light burn from an iron) which peels off within three or four days, leaving an improved skin texture.

Moisturizers (bacitracin ointment) should be used during the course of the peel. After the peel is complete, lubricating creams are recommended. It is important, however, not to use any lotions containing alcohol, as they may irritate the new skin.

BEFORE



AFTER



TCA peel; lower eyelids

Deeper TCA peels, with concentrations of 30-40% acid can be used to benefit a person with sallow, sun damaged skin. Initially, after the treatment, the skin develops a ruddy appearance. This deeper treatment usually requires five to fifteen minutes of sedation to complete the regimen for the entire face. Nitrous oxide (laughing gas) can be used when only the lower eyelids are being treated.

Improvement can be seen in the reduction of fine, small lines; the softening of large pores, smoothness of texture and the lightening of pigmentation. In addition to fair-skinned individuals, patients with dark skin find this a successful procedure.

DERMABRASION

While chemical peels have proven to be very effective in countering the effects of photoaging and restoring the skin to a more youthful texture and appearance, some skin damage may require dermabrasion.

In dermabrasion the skin is sanded down to the mid to deep dermis layers with a diamond bur. This procedure usually goes deeper than the TCA peels and is useful in removing facial wrinkles (especially those around the mouth), acne scars and localized pigmentation spots. The skin regrows from the cells in the hair follicles and sweat glands, therefore areas without these structures, the eyelids, neck, inner arms, and back, are not good candidates for dermabrasion.

The face, however, does heal well after this procedure. The more superficial the dermabrasion, the faster the skin heals. Surgeons adept at the procedure can obtain the maximum result and depth with minimal skin problems.

Dermabrasion is a preferred treatment when compared with the effect of deep phenol acid peels because

BEFORE



AFTER



the depth of treatment is controlled slowly, with microscopic eye magnification. The pigment layers of the skin are minimally affected.

In treating acne, the dermabrasion completely removes shallow pits and makes deep ones less obvious because the skin contracts after the sanding and decreases the "shadow" of the pit. Frequently acne scars improve further after a second or third treatment. Deep ice-pick scars may respond better to punch-type biopsies.

The procedure can be performed with local anesthesia for small areas; however, most large dermabrasions require sedation or general anesthesia. After the procedure, the skin is very red and weepy (similar to a scraped knee). Most patients choose to "hibernate" for the next five to seven days.

Depending on the depth of penetration desired, the area will be allowed to dry so a scab will form, giving a deeper penetration. If a lighter penetration is desired, the patient will apply bacitracin ointment.

After the scabs fall off, it takes from four to twelve weeks for the skin to turn from bright red to pink to normal. Most patients' skin looks normal in four to six weeks. In any case, camouflage makeup can be used after the skin is dry.

BEFORE



AFTER



Perioral Dermabrasion

PHENOL

Phenol-croton peels, the acid face peels that were popular in Hollywood until the 1980s and virtually abandoned after the development of laser skin resurfacing, are making a comeback. An eight-year study of 134 patients by retired plastic surgeon Gregory Hetter was presented at the recent annual ASAPS meeting in Orlando. Hetter achieved results judged at least equal to those of CO2 laser resurfacing by adding in varying concentrations of croton oil, which is derived from a tropical plant. Phenol-croton oil can be used to resurface the full face or just one area—say, the upper lip—without leaving lines of demarcation or giving an unnatural porcelain appearance (the problem with the early peels). The mixture is better for lighter skinned patients with fine wrinkles, blotchiness, or irregular pigmentation, but can be used cautiously on those with darker skin. And as with the CO2 laser, the first several days post-procedure aren't pretty. Anesthesia and long-acting pain blockers are required. A mild phenol-croton peel, says Hetter, will heal in seven to eight days (though redness can persist for four to five weeks) and can be repeated every three years.

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QUESTIONS & ANSWERS

Q. Am I a candidate for dermabrasion or chemical peel?

A. If the area you want treated is around the mouth, dermabrasion is most effective. Also, acne scars respond better to dermabrasion. The remainder of the face can be treated with either procedure.

Q. Is it painful?

A. For dermabrasion, burning occurs within the first 24 hours until the scab forms. Chemical peels burn for about 5 to 20 minutes after the procedure.

Q. How much recovery time do I need?

A. Both peels and dermabrasion require 5 to 7 days of recovery.

Q. Is it covered by insurance?

A. No. Both dermabrasion and chemical peels are considered cosmetic in nature.



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Q. How long will the results last?

A. The results of dermabrasion and chemical peels relate directly to the amount of sun damage and the depth of the wrinkle.

Q. Is anesthesia used?

A. Most often chemical peels and dermabrasion are performed with sedation or general anesthesia. Spot treatments, or under the eyes, can be performed under local anesthesia.

Q. Will it change the pigmentation of my skin?

A. Both dermabrasion and chemical peel can be used to change and lighten the pigment of the skin if deeply applied. Otherwise, they minimally change skin pigmentation. If a person gets sun exposure on newly treated skin, it can frequently darken the skin. This can be treated, however, with skin bleaching agents.

Q. Is this treatment effective for men's skin?

A. Yes.

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