



DEEPER CHEMICAL PEELS

What is chemical peeling?

Chemical peeling is exactly what it says - peeling of the skin using a chemical. In this clinic, we use Trichloroacetic acid (TCA) as it is fairly gentle, effective and safe. A chemical peel removes the outer layers of the skin. This 'freshens' the skin, removes some sunspots and rough scaly patches, and reduces freckles and irregular pigmentation. It also reduces fine wrinkles. There is some evidence that it may reduce the risk of skin cancer. It is safest and most effective on the face. Hands can be peeled but the risks of scarring are higher and the results less predictable.

What is the history of chemical peeling?

Cleopatra and the ancient Romans used various food acids to peel their skin. In the early 1900's, European and American women underwent 'non-medical' peels in salons with secret formulas, which were probably mild acids. In the early 1950's, the phenol peel was developed; this was a fierce, deep peel that could remove years of wrinkles, but also gave peeling a reputation for complications - pigmentation, de-pigmentation (whitening), scarring and even abnormal heart rhythms due to absorption of the chemicals. TCA, being a more gentle acid, has made a comeback in popularity because although it will not make a 50-year-old look 25 again, it rejuvenates the skin without the risk of serious side-effects.

How does it work?

TCA is painted on the skin, causing a mild acid burn to the top layers, ie. those most sun-damaged. As these layers peel off over the next week or so, new fresh unblemished skin forms from the deeper germinal layers. Chemical peeling stimulates the growth of healthy new skin cells in place of tired old sun-damaged skin. This process is to be sharply contrasted with sunburn, which removes the outer layers of skin but causes UV damage to germinal cells, thereby compounding the aging process and risk of skin cancer.

Who should have a chemical peel? And who shouldn't?

No one needs a chemical peel but many people may benefit from the procedure.

- 1 Fine wrinkling can be reduced, though deeper lines will remain (some of which can be reduced or removed with a laser).
- 2 Most brown marks and pigmentation can be removed or lessened, especially age and 'liver' spots (lentiginos). However, pigment changes can be caused by a peel in people prone to this complication due to their skin type. Those known to develop brown discoloration after injury such as a mild burn should have a test area peeled first before undergoing a full face chemical peel.
- 3 Scaly patches and rough skin (keratoses) can be removed. Very thick keratoses may need additional laser treatment for complete eradication.
- 4 Skin that is thin and fragile, eg. sun-damaged bald scalp skin - can be significantly rejuvenated.

Chemical peeling:

- ...**is not** a substitute for a face-lift. It does not tighten sagging skin
- ...**will not** remove broken capillaries - these need to be treated with a laser
-**does not** help acne scarring. Laser resurfacing is the treatment of choice for this

For those who wish to continue to sun-worship, forget about chemical peeling. All of the benefits of peeling will be rapidly lost by UV light exposure from any source.



Are there any complications?

Scarring can occur with strong acids or phenol peel, but is almost unknown with TCA alone. The most common causes of scarring are infection and pulling the skin off before it is ready. Both are avoidable. Cold sores can be activated in those prone to this problem. Anti-viral medication is used for such patients. Increased pigmentation can occur, and resolves with time. It can be largely prevented with use of sunscreen for three months after the peel.

What is the procedure?

Firstly, the skin is thoroughly cleansed with acetone. The TCA is then painted onto the face until the skin whitens. At this stage it burns, so a cold pack and a cooling fan are used until the stinging abates. This takes 5-10 minutes. The face is treated one area at a time. Patients who find it too uncomfortable may have some intravenous mild anaesthetic (Midazolam), but then may not drive a car for the rest of that day.

The skin will go red and a little swollen over the next 24 hours. Once the initial burning has worn off, it is not painful but feels tight, like a mudpack on the face. Over the next few days, the skin dries and looks like brownish leather. Vaseline should be applied several times a day to prevent cracking.