

# DERMABRASION FOR FACIAL SCARS AND WRINKLES

Many people are concerned about scars on their faces. Many things can be done to improve their appearance. First of all, there are several types of scars:

1. Icepick scars, which may be caused by acne, look like holes poked in the cheeks with an icepick. These scars may be shallow or deep and have sharp, squared-off edges.
2. Saucer-shaped or thumbprint scars, which may also be caused by acne, are larger in diameter and have soft, rounded edges.
3. Chicken-pox scars may have either soft or sharp edges.
4. Linear scars produced by lacerations or surgery.
5. Irregular scars from acne or trauma, such as burns.

The treatment or combination of treatments depends upon the type of scars present. Actually, some of these treatments may be used for things other than scars such as: tattoos, freckles or "liver spots", certain types of birthmarks, aged skin (wrinkles or smile or frown lines), numerous keratoses or sun-damaged skin.

## Dermabrasion

Dermabrasion, sometimes called surgical planing or sanding, is an office procedure in which the skin is frozen hard with an anesthetic spray after which levels of skin are removed by a rotating diamond wheel. This procedure is most frequently done to treat scars due to acne, chicken-pox, or accidents. It also may be used to treat wrinkling and tattoos. The degree of improvement depends upon the type of scarring present. Graphically speaking dermabrasion takes the tops off the "hill" so that the "valleys" (scars) are less deep. It is best for raised irregularities, wrinkles, shallow icepick or irregular scars. It may improve by as much as eighty to one hundred percent, but it improves deep icepick, irregular or saucer-shaped scars only forty to sixty percent. The sharp edges of chicken-pox and other scars may be changed to soft edges. Although dermabrasion produces an improvement in the skin, it is not realistic to expect "perfect" skin. The face will not look twelve years old again. I do a deep dermabrasion, so that only one treatment is typically sufficient. In a few cases in which scarring is severe, a second or third planing may be necessary. Repeat dermabrasions may be performed while there is still active acne, but it is best to quiet down the acne as much as possible. Needless to say, not all patients are equally satisfied with the same results. Whereas some patients are extremely pleased, others are disappointed with the same objective improvement.

Dermabrasion is done in the office. Before surgery, the patient is given a sedative to take some of the edge off of the discomfort, but the patient is not put to sleep. Local anesthetic is injected at several sites to temporarily block the facial nerves. The face is then frozen with a spray, and that freezing is all the patient feels. The dermabrasion is then performed with an abrasive diamond wheel. The procedure itself takes about an hour, but the patient is usually in the office from 1 1/2 to 2 hours. Afterward, the face is bandaged, and the patient is sent home. **Because of the use of a sedative and the bandaging, someone else should take the patient to and from the office.**

Following the procedure, the patient is given medications to reduce the swelling, hasten healing and stop any discomfort. Most patients do not require anything stronger than aspirin or Tylenol. The patient is asked to return daily during the first week, so that the bandages can be changed. The bandages are left off at the end of the first week except for trips to and from the office. The face is usually completely healed after the first week, after which time the patient can go back to work or school. They may wear makeup after the 5th or 6th day. Instructions about shampooing, makeup and general care will be explained in printed, post-op instructions given to the patient before the procedure is performed.

The dermabrased skin remains pink for six to twelve weeks. During this time, it is necessary to avoid exposure of this "baby" skin to the sun or wind, otherwise irregular pigmentation may result. Despite all precautions, darker-skinned individuals may develop some irregular pigmentation after dermabrasion, but

the pigmentation can be controlled with a bleaching agent. Sunscreens should be worn after dermabrasions.

What is the cost?

Since a hospitalization and a general anesthetic are not required, it is much less expensive than a surgery performed in a hospital.

**Chemical Peel**

Chemical peel or chemosurgery is a surgical procedure done in the office in which a chemical of varying concentration is painted over the face. Various amounts or coatings of the chemical are applied to achieve the desired level of peeling. The chemical, once applied, kills the top layer of skin. A special tape may be used with it to cover the skin and is left on for 48 hours. When the tape is removed, the dead skin is removed and the face temporarily has a scraped or burned appearance. Chemical peels may be done for any of the conditions listed above, but since they do not extend as deeply as a dermabrasion into the skin, they will not help the deeper acne scars as much. However, they are especially beneficial for the treatment of small wrinkles, aged skin, irregularities of texture and abnormal pigmentation. Chemical peels will tighten the skin and clear a generally "muddy" complexion. Since this procedure is not as deep a dermabrasion, the face heals faster, and is usually completely healed with new skin within six to seven days, although it may remain pink for several weeks. The same precautions must be taken regarding sun-exposure after a dermabrasion.

Mini-procedures, such as a small area of the face, eyelids, or around the mouth may require only one or two days of absence from work or social functions.

What is the cost?

Since this procedure is not as involved, the cost is about 50% that of a dermabrasion.

**Collagen Implant**

A highly purified collagen material can be injected into the skin to raise depressed areas. This is especially good for saucer-shaped acne scars, furrows between the eyebrows, depressions left after surgery or after infection, skin contour problems (from aging or loss of tissue), and deep smile or frown lines. The implant fills in the depression and raises the skin to the level of the surrounding tissue. The potential recipient must be tested first for allergy to collagen. The one month later the injections are begun. The treatments average three to five in number and must be given at least two weeks apart. Touch-up treatments may be needed at yearly intervals.

What is the cost?

Since the product has only one manufacturer, it is fairly expensive. The collagen implant, however, costs less than surgery, in addition to being helpful in cases that cannot usually be improved with surgery.

**Punch Grafts**

Dermabrasion will not remove the entire scar of the deeper "icepick" variety. It is suggested that these smaller but deeper "holes" be removed with a punch graft instead of or before dermabrasion. In this procedure an instrument is used to punch out the scars, producing a circular hole from 2mm to 4mm. A similar punch of skin is removed from behind the ear and placed into the hole left by the excised scar. The resulting graft then heals flush with the surrounding skin. Occasionally there is a small ring left around the graft, but this blemish disappears completely after dermabrasion. There are no stitches involved, and the grafts heal in about seven to ten days.

What is the cost?

Punch grafts are very expensive, compared with the cost of the alternative, excision and suturing (stitches), or with that of a second and third dermabrasion

**Excision and Suturing**

Occasionally a patient has such large, deep, and/or irregular scars that none of the above treatments will improve them. In those cases the best treatment may be to excise them; that is, to cut them out and close

the skin with stitches. The stitches are usually placed under the skin or if not, they are removed early enough that they do not leave marks. The resulting scar is usually just a line. If dermabrasion is done afterward, the scar may become imperceptible.

What is the cost?

The cost depends upon the size and the work involved. In general the cost is less per scar if more than one is excised at one time.