

Acne Vulgaris (Pimples)

Acne or pimples is a common skin condition, usually occurring at the age of puberty. The skin lesions consist of blackheads, whiteheads, and sometimes deeper boil-like lesions called nodules or cysts. The disease varies in severity and disease may continue beyond teen years often up to 25-35 years.

What causes acne ?

There are four factors which cause acne

1. Increased male hormones at puberty
2. When hormone levels increase, the activity of sebum (oils) producing glands increases..
3. The bacteria called propionibacteria on the skin increase in activity and alter these oils to produce substances that cause acne.
4. The hair follicle, the site of acne may get plugged with dead skin cells. Sebum and bacteria may accumulate and cause pimples.

What are the types of acne ?

These include blackheads, whiteheads (comedones), the larger papules (pimples) and later, pustules and large cysts. Scars occur after papules, pustules and cysts. A **blackhead** occurs when the trapped sebum and bacteria reaches the surface of the skin and opens up.

When does acne clear itself?

Though acne is common in puberty, 20% of patients may have it till 30 or even 35 years of age. In some people, acne may start after 25 or 30, after pregnancy or any other hormonal imbalance. Certain drugs such as hormones, steroids etc also can precipitate acne at any age.

Why should acne be treated?

Though acne is considered physiological, the lesions may heal with formation of different types of scars which may be permanent and often need expensive treatments. Hence all cases should be taken seriously and treated. Do not wait thinking that can will go by itself!! Also, over the counter preparations rarely can treat acne effectively. So contact your dermatologist early.

How is acne treated?

Consult your doctor early. Treatment depends on the type and severity of the acne and hence varies from patient to patient. Follow the doctor's instructions. Always treatment of acne is in weeks and not in days. So be regular in follow up.

What are topical acne medications ?

They consist of peeling agents (sulphur), topical antibiotics (erythromycin, clindamycin, benzoyl peroxides) and topical vitamin A, (Retino A). Some lotions or creams may make the skin red or flaky but usually this effect is temporary. Go back to see your doctor if the lotions or creams cause excessive redness and itchiness. Do not squeeze or scratch pimples.

What are the oral treatments”?

For acne not responding to local creams, the following treatments are available:

1. Oral antibiotics such as tetracyclins, erythromycins, azithromycin are used. Note that these antibiotics are safe, and can be used for long periods of time.
2. Oral hormones: Drugs containing oestrogens, antiandrogens are useful in girls who have acne with excessive hair and menstrual abnormalities.
3. For severe acne, isotretinoin(a drug related vitamin A) is very useful. This drug not only clears acne even in most severe cases, but also may prevent acne.
4. Note that these drugs will have to be taken for several weeks or even months.

Can 'diet' cause acne ?

There is no concrete evidence that food causes acne. Following the strictest diet will not by itself clear your acne. On the other hand, a few people find that their acne seem to worsen when they eat certain foods, particularly chocolates, fried food and chillies. These people should avoid the foods that clearly aggravate their acne. However this should be done on proper evidence, and not on a whim.

How should I clean my face ?

Remove surface oil from the face by washing with soap and water or with medicated cleansers. There is no need to use special soaps. Ordinary toilet soaps will do. Wash frequently when the face is oily, about three times a day. Continue washing even when you acne is cured. Do not wash with harsh soaps or brushes.

Can I use cosmetics when I have acne ?

Avoid oily and greasy cosmetics. Use water-based, oil-free cosmetics sparingly. You can use eyeliners, eyeshadows and lipsticks.

What if I have severe cystic acne ?

Do not despair. A new oral drug, isotretinoin, is available for the treatment of severe cystic acne. This medication can cause side effects and should be taken under the supervision of a dermatologist. This is an excellent drug which decreases the activity of sebaceous gland, clear obstruction and decrease bacteria. It not clears acne, but also prevents acne in future , and improves the texture of skin. It is therefore a complete drug for acne, and in many cases a "CURE".

Can acne be cured?

The new drug Isotretinoin can prevent acne for prolonged periods offering a near cure.

Is there any new treatment for acne?Is there a NONDRUG treatment?

There are new machines for treating acne-lasers and machine called Light and heat energy machine. These are effective in healing lesions quickly without any drug therapy.

Can acne be cleared quickly in days?

Normally drugs take 2-3 weeks for clearing lesions .The new machine mentioned above can clear pimples within 3-5 days.

Acne scars

Why do acne (pimples) lead to scars?

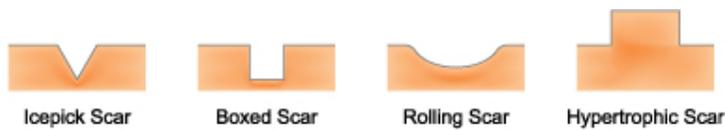
Acne or pimples are caused by obstruction of hair follicle on face, chest, and back, wit accumulation of an oily secretion called secreted by sebaceous glands. This leads to proliferation of bacteria , and inflammation. The inflammation if not treated early can lead to damage to hair follicle and surrounding skin, which in turn leads to scars.

Can acne scars be prevented?

Yes, proper treatment of acne can prevent scars.

Can you describe the different types of scarring?

Just as acne is of different types, acne scar is also of types. Scars can be either depressed or raised.



Icepick: Looks like an ice pick has been pressed into the skin. It is generally small , but can be shallow or deep.

Boxcar: Looks somewhat like a chicken pox scar with more rounded edges. It can be small or large in diameter, is fairly deep.

Rolling: Looks like a smooth indentation in the skin. These scars can be deep or shallow, but are generally shallower.

Macules: These are most common on the back, chest and arms. They are small areas of hairless scar tissue that will initially be red but will usually fade to pale ivory within 1-2 years. They can be raised (hypertrophic) or indented (atrophic).

Hypertrophic scars - are scars that are raised above the skin surface but remain within the boundaries of the original injury.

Understanding this is important as each type of scar needs different treatment.

Can I get rid of my scarring through the use of topical solutions alone?

For scarring, creams and ointments do not have a significant effect . However, they can help lessen scars if used in the healing stage. They also help in decreasing pigmentation and improving texture of skin. They can add to the effect of the cosmetic treatments and there by provide a maintenance effect. These treatments include creams containing retinoic acid, glycolic acid, vitamin C, hydroquinone, sunscreens , moisturizers etc.

How can I get rid of my red marks / hyperpigmentation / brown marks / dark marks?

There are several different approaches to help this process. Drugs containing Retinoic acid, Hydroquinone, Alpha Hydroxy Acid etc are useful. In addition sunscreens, creams containing vitamin C , Kogic acid are also useful.

What are the different cosmetic skin treatments for acne scars?

There are different types of cosmetic treatments for different scars:

- 1. Microdermabrasion
- 2. Chemical peeling and TCA CROSS
- 3. Laser reurfacing
- 4. Filler injections and dermal graft
- 5. Fat transfer
- 6. Subcision

What is Microdermabrasion? How does it reduce the appearance of scarring?

Microdemabrasion is machine which uses alluminium oxide crystals which are rubbed on the skin using a machine under suction .It is very safe and easy, Lunch time procedure and patient can go back to work immediately-so it is a lunch time treatment .However, Microdermabrasion cannot penetrate the skin deeply enough to

affect the appearance of moderate to deep scarring. It is a slow method of exfoliation, and it is possible to reduce very shallow scarring by repeating this procedure in a series of several treatments(6-8-10). It is repeated once a week and is ideal for south Indian skin as it does not produce any pigmentation .

What are chemical peels?

Peels are used to resurface skin chemically .There are three types of peels:

- A) superficial peel using glycolic acid peel
- B) medium depth peel -Uses trichloroacetic acid
- C) deep peels using phenol

Superficial peels are suitable for south Indian skin. They use acids such as glycolic acid, salicylic acid, azelaic acid etc. They are also called fruit acid peels as they are present in fruits. They are safe and useful for superficial scars, may produce redness for 3-5 days. They need to be repeated 2-3 times at interval of 3 weeks. They are usually done on weekends and hence called weekend peel

What is the difference between ablative and non-ablative lasers?

Ablation means: "To remove by erosion, melting, evaporation, or vaporization."

Ablative lasers are much more invasive than non-ablative lasers. Ablative lasers are not recommended for use on darker skin colours as the healing time is long

Examples of ablative lasers: CO₂,- Erbium: Yag

Non ablative lasers do not remove layers of skin, but instead penetrate through the skin in an attempt to stimulate collagen growth from underneath the surface of the skin. Recently Non-ablative radiofrequency machines have become popular .

Q: Will ablative lasers (CO₂ or Erbium) reduce the appearance of my scarring?

A: It is possible that it will reduce the appearance of your scarring but it is expensive, has a significant amount of healing, absence from work for few weeks and possible risk of new scarring and pigmentation. Hence this is not suitable for most Indian patients.

Q: What are the different types of non-ablative machines and how can they reduce scarring?

A: There are several different types of non-ablative lasers such as Long pulse Nd yag laser, erbium Yag laser etc . Recently a nonablative radiofrequency machine using radiofrequency waves has also become available and is used in our clinic. They act by stimulating production of new collagen within dermis without affecting outer layer. However, these are new machines and hence are undergoing evaluation.

What is dermabrasion?

- Dermabrasion is a method of treating acne scars, pockmarks, some surgical scars, or minor irregularities of the skin's surface.
- An electrical machine is used by a dermatologist to remove the top layers of skin to give a more even contour to the surface of the skin.
- If defects are minor, only one dermabrasion will be needed. Several abrasions may be required if defects are deep and extensive, as in deep acne scars.
- After the introduction of laser this method is not generally used nowadays

What are the disadvantages of dermabrasion?

- Needs admission
- Extensive bandaging
- Avoidance of sun for 4-6 weeks
- Prolonged healing time of several weeks

- Not suitable for working people
- May produce pigmentation if sunlight is not avoided for 3 months

Q: What is subcision? Will it improve my scars?

A: Subcision is a method whereby using a special "Nokor" needle, the fibres which are pulling the scar tissue inwards is broken underneath the surface of the skin. It is best suited for "rolling" scars that are "bound down" by fibres. Bound down scar tissue looks smoother when the skin adjacent to the scar is pulled tight. *It needs to be done once in 3 weeks, and repeated 2-3 times. It is good method of treatment done in combination with other treatments. It is done under local anaesthesia and may produce some swelling lasting for 2-3 days. Hence it is done during weekends.*

Q: What are injectable fillers and how can they reduce the appearance of scarring?

For depressed scars, there are filler substances which contain hyaluronic acid, the natural substance of dermis (inner part of skin) to be injected in to the skin. This lifts the depressed skin thereby correcting the defect. It is very effective, safe and gives immediate results. However the effect of these fillers is temporary lasting for 1- 5 years (depending on the type of filler used). They also are expensive costing between 10,000-25000 Rs

What is Dermal Grafting?

Dermal grafting is a procedure whereby the inner part (called dermis) is grafted. The doctor removes skin from a different part of your body (usually from behind the back or ear) , separates the inner layer and then places it into the scar. Ice picks are often treated this way. It is an alternative for fillers, is cheaper, but needs a simple operation with dressings for 2-3 days.

Q: What is the TCA CROSS Method?

It is a method of application Trichloroacetic acid in the deep pits, under pressure to chemically remodel the scar, without affecting the outer layer. It is an excellent method to improve particularly ice pick scars or deep pits in skin. It produces mild brownish discolouration of scars for 2-3 days and hence is a weekend treatment.

Q: What is Punch Elevation, replacement and Excision?

Punch elevation is a treatment which lifts depressed scar by using a round instrument called punch. Punch replacement is a technique in which a small round piece of skin is grafted in to round pits. Punch Excision is a procedure whereby the Punch is used to "punch out" the scar and then suture the remaining skin together. These are used for small round scars and are weekend treatments.

Q: What is the treatment for raised scar?

This is called hypertrophic scarring. It can be treated with steroid injections in to scar. In some cases of soft raised dome shaped scars, the raised edges can be resurfaced by radiofrequency or laser machines. This is also weekend treatment done under local anaesthesia.

Q: Is it okay for me to treat my scars while I am on Accutane?

A: No, it is suggested that you wait at least 6 months to a year to treat your scars after taking Accutane. Some individuals have reported that they seem to scar more easily while taking Accutane.

What can plastic surgery(Surgical Scar Revision -) do for acne scars?

Surgical scar revision is a method of removing a scar and rejoining the normal skin in a less obvious fashion. The surgical removal of scars is best suited for wide or long scars, those in prominent places, or scars that have healed in a particular pattern or shape. Wide scars can often be cut out and closed, resulting in a thinner scar, and long scars can be made shorter. A technique of irregular or staggered incision lines, rather than straight-line incisions, to form a broken-line scar that is much more difficult to recognize may be used. Sometimes, a scar's direction can be changed so that all or part of the scar that crosses a natural wrinkle or line falls into the wrinkle, making it less noticeable. These are called Z plasty, M plast and Y plasty. It is important to note that the scars can only be improved , not removed by this treatment.

Any surgical correction needs an operation suturing and dressings with healing time of few weeks. Hence, with several new treatments and machine being available, surgical correction is needed only for few scars and only rarely.

Summary:

- It is important to understand that the objective of treating scars is to improve them- not to make them disappear completely
- Treatment depends on the type of scar, and motivation of the patient.
- Patient cooperation is important.
- Treatments are repetitive and will last for several weeks.
- Most treatments are lunch time and weekend treatments, with no down time. No absence from work is needed
- Once treated scars don't recur unless pimples recur