

ACNE

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1 - introduction

The Acne is a much frequent illness that reaches millions of people in Brazil. Although the Acne is not an illness to involve life risk, it provokes important alterations of psychological and physical stamp. Has several causes and presentations. The treatments are diverse and they exist efficient medicines that however need so much care in his use. In this section, the Naturale Clinic prepared texts that will help to understand what the Acne is, and his treatment options. However we remember ,that the medicines and treatments here referred do part of a medical universe of treatment of the acne. Don't use these information for self-medication that can be dangerous for health. Look for a physician that will know how to guide the best for your case, with the best result and safety.

Navigating for this section you will find detailed information on the treatment of the Acne and their sequels (marks) especially prepared for Naturale Clinic's medical staff

The Acne is an illness with several causes and presentations that affect the sebaceous follicles of the skin. The sebaceous follicles are very small reentrances of the skin, where the sebum are produced (oiliness) and also the hair. It is the more common illness of the skin, being considered that in Brazil reaches about 10.000.000 of people. Little importance was given to his treatment, in more recent years, then , due to growing concern with the human aesthetics, it took the international industries and research to elaborates and to develop new and efficient products.

Attention!!!

Attention: The medicines and procedures here referred do part of a medical universe of treatment of the acne. Don't use these information for self-mediciation that can be dangerous for health. Seek a physician that will know how to guide the best for you case with the best results and safety.

2 - Causes

The Acne is caused by alteration in 4 main factors

- The sebum production

- Alteration of the cells of the follicle
- Action of the bacterium *Propionibacterium Acnes*
- Inflammation of the hair-sebaceous follicle.

In the puberty it happens an increase of the production of hormones called "androgens". These androgens cause the increase of the hair-sebaceous follicles, and increase in the sebum production in the face, shoulders, lap and backs. Also happens a larger desquamation of cells of the follicle. The combination of desquamated cells and sebum forms a cork that covers the exit of the follicle. This cork is the blackhead. This occluded follicle facilitates the action of bacteria, *Propionibacterium Acnes*, that uses the sebum as food source. The action of this bacterium liberates products that inflame the follicle. The action of these factors, bacteria, sebum, inflammation, takes to the emergence in the several ways of Acne, as pustulant and closed blackheads, pustules and nodules.

2 - Beginnings of the Treatment

It should be treated the 4 main factors. To prevent and to treat scars and stains, and to prevent the recurrences. It should be chosen the medicines to have the best result and smaller index of complications. The treatment should be proportional to the extension of the problem. In the lightest cases, medicines in topical creams can correct the problem, while in the most severe the need of association of orally medicines exists. Important to point out that the Acne is a chronic problem, and even after his improvement, a maintenance treatment should be performed, to offer preventive and curative measures so that the result stays indefinitely.

To obtain success in the Treatment is necessary a careful evaluation for the medical professional, that will identify the several factors involved in each patient's specific case and can choose the best treatment in a personalized way. Each patient need a different treatment in agreement with the conclusion of the medical consultation. The severity of the acne will determine the treatment. Lighter cases can be controlled with simpler measures and more serious cases will need more complex measures. The age, the Skin (dry type, oily or mixed), other existent skin conditions, motivation and the patient's concern with the problem, lifestyle, menstrual alterations, emergence of abnormal pilosity in women are factors that should be considered by the physician in the identification of the causes. The use of cosmetics for the skin and hair, medicines, some specific types of birth-control pills, vitamin B12, habit of traumatizing the follicles should also be considered. Associates to the 4 main factors are important points to be considered by the physician in the patient's evaluation with Acne, to determine the best treatment.

3 - the Treatments with Medicines

The medicines include topical products (creams) and of systemic use (orally). The agents for the treatment owe, separately, or together, they be effective for all the 4 responsible factors for the Acne. It should be made a selection of the best medicines

available. The patient should not make self-medication. We will use the scientific names of the products here, because, always, a physician should be consulted for the correct prescription of these drugs, that can cause problems if they are not used appropriately.

The products that eliminate oiliness and blackheads (comedones)

Topical Tretinoine (trans retinoic acid)

The cream with Tretinoine is effective in the elimination of the blackheads (comedones) already existent. also normalizes the cells of the wall interns of the follicles. Avoids the formation of new blackheads. They reduce then the inflammation in the follicles. Action is slow, could be necessary some months of treatment to observe important improvement of skin aspect. It can be used associated to other agents, with Benzoyl peroxide and topical antibacterials. Has side effects as erythema (redness), skin drought and descamation. It is quite imperative not to take Sun during the treatment with Tretinoine, because of the sensibility of the skin to the sun, when that product is used. In the first weeks of treatment it can worsen the aspect, having later gets better aspect. The patient knowing about this possibility will accept these alterations better not abandoning the treatment.

Orally IsoTretinoine

Isotretinoine (13 cis retinoic acid). It is a derived of the A vitamin that is effective in all the 4 factors that provoke Acne. However, his use involves risks, and careful medical attendance, being reserved for the most serious cases and always prescribed with medical criterion. It is a teratogenic substance, what means that if there is pregnancy during use, it can happen malformations in the fetus.

b - The Products that Act Against the Bacteria

Benzoyl Peroxide

Benzoyl peroxide has action on P. Acnes, the bacterium associated to the acne. It can be used in creams, in several concentrations and associate to the other medicines. P. Acnes, doesn't grow well in presence of oxygen, and Benzoyl Peroxide alters the follicle, generating an ambiance no favorable for this bacterium to grow.

The Antibiotics

The clindamycin , the erithromycin, the sulfacetamide and the salicylic acid are substances that also has action on P. Acnes, reducing population in the skin. However, with the lingering use can provoke resistance. The antibiotic should be used during a phase of the treatment, and before developing resistance, another measured need to be introduced. The eritromicine, the tetracycline, the doxicilyn and the mynocicline are antibiotic systemic (orally), that are effective against P. Acnes. They can be used in the treatment, always with the medical professional's orientation.

New technologies

Treatments of the lesions with Laser can substitute the antibiotic :

The application of a laser with spectrum of specific light, kills the bacteria of the skin, performing the same effect of the antibiotics. The Laser helps the treatment a lot, considering that the bacteria associated with the ACNE are being more and more resistant to the conventional treatments

New phenol peelings help to improve the complications as the acne scars.

New medicines anti-acne

Retinoids

Others derived and presentations of the retinoic acid are being developed, as the adapalene, the tazatorene, Retin A Micro and the polymerized cream of Tretinoine. tries to obtain less side effects with equal, or better, action

Adapalene

It is an acid synthetic with retinoic activity . Has a chemical structure different from the retinoic acid, but a similar action. It is observed a better action anti comedones, better anti-inflammatory action and smaller prevalence of undesirable effects.

Tazarotene

It is a synthetic retinoid , that penetrates quickly in the skin and then is converted in the substance active. Seems to present less side effects than the retinoic acid, but with comparable effectiveness.

retin-a micro gel

Retin Micro, is the Tretinoine in a new prepared that uses the technology of presentation of medicines in microsferes. The intention is to liberate the product more slowly inside of the skin, then reducing the side effects.

The Polimerized Cream of Tretinoine is the retinoic acid associated with a polymer, the poliprepolímero i. 2 (PP-2). The intention is to liberate the product on the area where he is more efficient, increasing the positive effect and reducing the undesirable effects.

Other topical products

Azelaic Acid

It was used initially for treatment of stains of the skin. It is also effective for treatment of the rosacea. has antibacterial action, and demonstrated to have a positive action in the treatment of the Acne.

New sulfacetamide formulations

The sodic sulfacetamide has action against the bacteria of the skin. It has already been used for some time. Usually associated with the biosulfur. New preparations without the biosulfur are showing good action and with less side effects.

Association of Clindamycin and benzoyl peroxide

This association has shown efficient in the treatment of the acne.

New oral hormones

The hormones are used in the treatment of the acne, when it happens ovarian dysfunction with excess of production of androgens, as in the polycystic ovaries. A new hormonal association, associating oral contraceptive, and hormones (Ortho tri-Cyclen), has specifically been used for the treatment of the acne.

The Technique of Treatment on the Naturale Clinic

The success for the treatment of the acne requests careful evaluation and specific indication of treatment for each patient, respecting their individualities. The appropriate agent antiacne is selected then, and the attendance will determine the efficiency and the need of change the strategy. It is important to determine the severity of the acne as light, average or serious, and the predominance of lesions. However, an program is a general strategy that can be used, seeking in wide sense to obtain a rationalization of procedures. Although other techniques and approaches are accepted equally, the Naturale Clinic, developed a method that applies with good results in their patients.

Clinic Naturale - Program of Treatment of the Acne

Treatment of the Acne

We considered four treatment phases

Phase 1

Evaluation, Cleaning and antibiotic

The Case is evaluated by the physician and they are prescribed antibiotic systemic, creamsto cleaning the skin and the aestheticist 's work is indicated for mechanical cleaning of blackheads.

Phase 2

Inhibition of the sebum production

The use of creams and medicines that inhibit the sebum production are suitable. The medicines are applied locally or orally, depending on the severity of the problem.

Phase 3

Treatment of the complications

Scars and stains are treated, with the use of peelings, Subcision and with Fillers.

Phase 4

Maintenance

Attendance of the case, with preventive measures and reintroduction of therapeutics when necessary.

Treatment of the acne sequels - Stains and scars

Subcision and Fillers

The Technique of Subcision and Fillers to acne scars, is based on the liberation of the scar, of the fibroses that are under the skin, with very fine needles. The space is filled with fillers substances , improving the aspect of the lesion.

The procedure can be made at the clinic, not demanding internment or day hospital.

Lighteners

A treatment with Lighteners is performed to reduce stains provoked by the acne.

Peelings

Peelings of phenol healthy utilized for stains and scars more superficialis

Bioplasty

Bioplasty is used for the advanced cases of acne sequels, when the whole sustentation of the skin is attacked, appearing a process of laxity and loss of definition of the jaw. The Bioplasty can improve the aspect of laxity, returning the facial outlines.