

## Acne in Adolescents

Acne is one of the most common problems in adolescent teens affecting nearly seventeen million people in the United States. Acne is nothing but a disorder involving sebaceous glands and hair follicles. Acne results from the clogging of sebaceous glands leading to the formation of pimples and cysts. The condition usually begins with the onset of puberty. Going by the facts, as teens attain puberty the androgens also called male sex hormones are produced in high number leading to sebaceous glands becoming over active which results in sebum being produced in high proportions.

Sebum, which is nothing but oil is produced by sebaceous glands which travel to the skin surface through hair follicles. But, skin cells block the follicles which results in oil also being blocked. When these hair follicles are blocked it results in the development of skin bacteria known as *Propionibacterium Acnes* within the follicles which in turn results in swelling of the skin called Acne. If the hair follicles are partially blocked it results in blackheads. If the follicles are completely blocked they result in whiteheads. But if these plugged follicles are not treated they ultimately burst causing the oil, bacteria and skin cells to spill all over the skin resulting in irritation and formation of pimples. Acne can be shallow as well as deep in various individuals depending on the nature of skin and amount of oil produced.

There can be various causes why Acne forms. Apart from rising hormone levels due to puberty it can also be attributed to certain other factors like intake of drugs which contain lithium, barbiturates and corticosteroids. Acne can also be caused due to excess grease and oil in the scalp, due to cooking oil and use of some cosmetics can actually alleviate the acne problem. Acne problem many times is inherited also. Acne problem is worsened if the pimples are squeezed or scrubbed too hard.

Acne can form at any place of the body but they most commonly form in the areas where there sebaceous glands are present in high proportions like face, chest, shoulders, neck and upper back. The symptoms may differ from person to person but commonly seen symptoms are: formation of blackheads, whiteheads, lesions filled with pus and which are very painful and lastly nodules. One may get confused sometimes as symptoms of acne may be like some other skin condition and it is always advised to consult a doctor in this scenario.

There are lots of treatments available today to treat acne. The primary goal of the treatment is to reduce scars and better appearance. There are various treatments and the doctor decides which specific treatment you need based on: the extent of acne problem, age, medical history, overall health, tolerance to

specific medications and procedures, expectations and last but not the least what patients prefer.

Treatment of acne is classified into topical and systemic drug therapies which are given based on extent of severity. In some instances the combination of both the methods might be the way to go for acne treatment. Topical medication is nothing but creams, gels, lotions, solutions etc. prescribed to patients for acne treatment. Some of the examples of topical medication are: Benzoyl Peroxide which kills the Propionibacterium Acnes bacteria, antibiotics helps in stopping or slowing down the growth of the bacteria and also reduces inflammation, Tretinoin helps in stopping the formation of new acne lesions and Adapalene reduces formation of comedo.

Systemic drug therapies involve prescription of systemic antibiotics primarily for the treatment of acne problem which is moderate to severe in nature. The examples of antibiotics prescribed are Doxycycline, erythromycin and tetracycline. In some cases an oral drug called Isotretinoin is prescribed for teenagers with severe acne problem which shrinks down the sebaceous glands that produce oil. The results are pretty good and almost ninety percent of the adolescents have success with this oral drug. But the drug has some serious side-affects and thus it is very important that one consults a doctor before use.

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