

## A Review: Acne Vulgaris And Garlic

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**ABSTRACT:** Acne Vulgaris, also known as acne. Acne is a common skin condition affecting people world wide. This chronic inflammatory condition of the skin affects the pilosebaceous glands. Various natural agents are used to get relief from the acnes. Allium Sativum L. is one of the natural agent widely used to treat acne. Along with the antiacne activity garlic also possesses the other medicinal values like the anticancer, antiviral, antidiabetic, antifungal etc.

**KEYWORDS:** Acne, Nodules, Allium Sativum

### I. INTRODUCTION

Acne Vulgaris, also known as acne. Acne is a common skin condition affecting people world wide. This chronic inflammatory condition of the skin affects the pilosebaceous glands [3]. Acne causes negative psychological and social effects on the quality of life of patients. Acne results in scarring as well as post-inflammatory hyperpigmentation, which create impact on quality of life. Symptoms of AV like depression, leading to a lower quality of life in patients. Psychological comorbidities, including depression and anxiety, have been associated with AV.[3]

### II. EPIDEMIOLOGY

By the end of 2026, people affected by acne in India is may reach 23 million. It affects about 90% of people during teenage years and it may appear in adulthood. About 20% people have moderate and severe acne cases. Acne rates are low in rural areas. It is more common in females as compared to males[1].

### III. SIGNS AND SYMPTOMS OF ACNE

Includes papules, seborrhea (increased oil-sebum secretion), comedones, nodules (large papules), pustules and scarring.[1]

### IV. ETIOLOGY

Acne develops because of blockage of follicles, hyperkeratinization and also keratin plug formation and sebum. Increased androgen production leads to sebaceous glands enlargement and sebum production is increased. Microcomedo may enlarge and form an open or closed comedo. Clogging of sebaceous glands with sebum, naturally occurring oil and dead skin cells results in the formaton of comedones.[1] Propionibacterium acne bacterias causes immflamation.[6]



Fig. 1: Acnes

### V. PATHOGENESIS

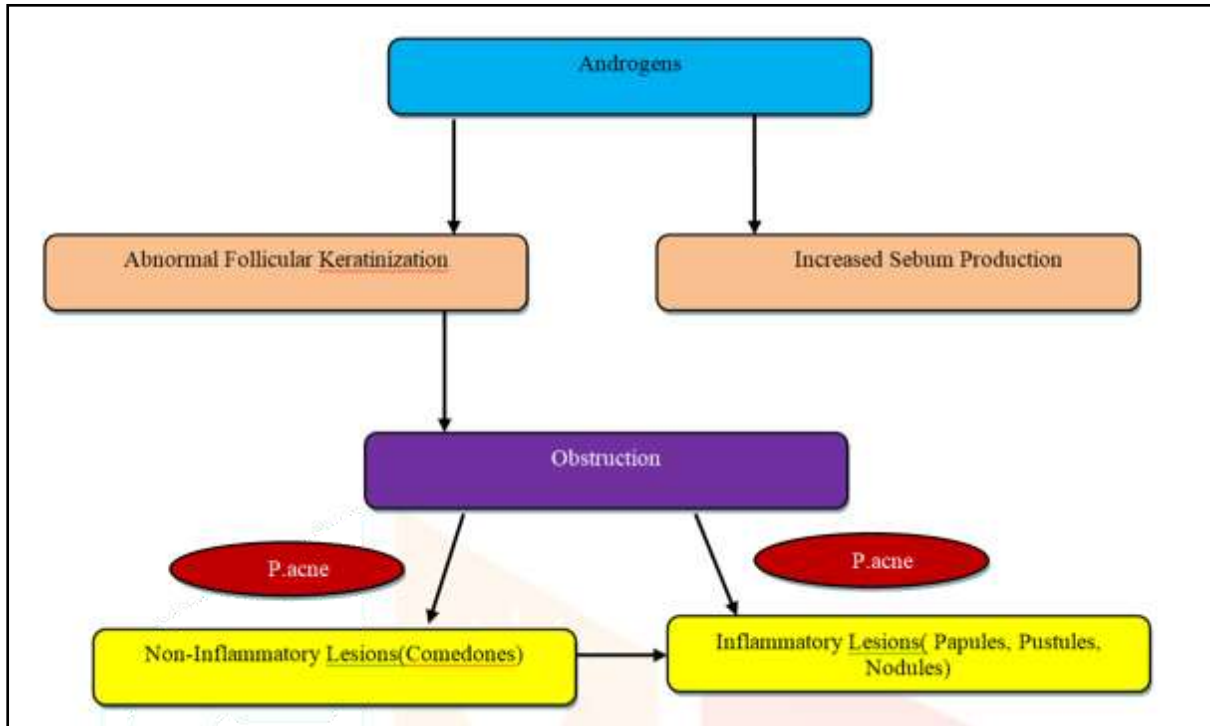


Fig. 2: Acne Pathogenesis

### VI. CLASSIFICATION OF ACNE VULGARIS

Table 1: Types Of Acne

Sr. no	Type	Description
1	Papules	Red, inflamed bumps on skin and have no head i. papule.
2	Whiteheads	Completely blocked pores because of trapped oil, bacteria, dead skin.
3	Blackheads	Partially blocked pores leads to the black heads. Trapped oil, bacteria, dead skin drains to surface leads to the blackheads.
4	Pustules	Most common type of lesion appear as inflamed red circle. Circle may be white or yellow.
5	Nodules	Hard bumps under skin. May be large and may last for months.

### VII. GARLIC

Garlic (*Allium Sativum*) is the herbal drug with strong antifungal, antibacterial, antimicrobial activity and antiviral belonging to Alliaceae family. The name garlic have originated from the Celtic word 'all' that means pungent.[3][4]

Kingdom: Plantae  
 Phylum: Tracheophyta

Class: Liliopsida  
 Order: Asparagales  
 Family: Alliaceae  
 Species: *Allium Stadium*



Fig 3: *Alliums Sativum L.*

### VIII. CHEMICAL CONSTITUENTS

Garlic contains upto 33 sulfur compounds in it, enzymes, amino acids, minerals like selenium. The sulfur compounds are giving garlic's pungent odor and also many of its medicinal effects. One of the active compounds, allicin (diallyl thiosulfinate or diallyl disulfide) which shows antiacne effect, exist in garlic when it is crushed or cut; injury to the garlic bulb activates the enzyme allinase, which further metabolizes alliin to allicin. Allicin has antimicrobial effects against many of the viruses, bacteria, parasites and fungi. [5] It also contains amino acids in it like lysine, arginine, histidine, aspartic acid threonine, glutamine, proline, glycine, alanine, cysteine, valine, methionine, isoleucine, leucine, tryptophan and phenylalanine.[5]

### IX. VARIOUS MEDICINAL ROLES OF GARLIC

1. Antibacterial- Garlic exhibit a wide spectrum of antibacterial activity against Gram-negative as well as gram positive bacteria including species of *Escherichia*, *Staphylococcus*, *Streptococcus*, *Klebsiella*, *Proteus*, *Bacillus*, and *Clostridium*.
2. Antifungal- Ajoene is an active compound found in garlic which plays a great role as topical antifungal agent.
3. Antihypertensive- garlic has Blood pressure reducing properties. It is linked to its hydrogen sulphide production and allicin content from alliin and the enzyme allinase which has angiotensin II inhibiting and vasodilating activity.
4. Wound Healing
5. Antidiabetic- Based on report of WHO, garlic can be used for helping treatment of hyperglycemia.
6. Anticancer
7. Anticancer

### X. CONCLUSION

This review highlights the pathology of acne vulgaris skin disease which affects the

pilosebaceous glands. Acne can affect a person's quality of life, mood and self-esteem. Various types of treatments are there for the acne. The treatments are synthetic as well as natural. The one of the most effective herbal medicinal agent is garlic. Allicin produced in the garlic gives the antiacne effect.

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