

# KNOW Homoeopathy Journal

Bi-Annual, Indexed, Double Blind, Peer-Reviewed, Research Scholarly Online Journal in Field of Homoeopathy

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Title: Systematic review on role of hormones in acne vulgaris with its homoeopathic approach

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## ABSTRACT

*“An inflammatory chronic disorder of pilo-sebaceous follicles, occur usually in both sexes among teenagers and young adults. Patient of acne vulgaris suffer with a burden of psychological change, vastly affecting their lifestyle leading to low-spirits, anxiety and depression, affecting their quality of life. Development of acne is due to Propionibacterium, which is one of the common factors, believe to play an important role in inflammatory or non-inflammatory lesions; manifested usually in various forms vary from person to person. Severity of acne may depend upon the depth or intensity of inflammation. There are various stages of acne from the formation till resolution. It is characterized as seborrhea, comedones, papule, pustule, nodule or cystic lesions. Chronic inflammation of acne with painful nodular phase may be responsible for development of scarring or pigmentation. Acne vulgaris usually occur on face (cheeks, chin or on forehead). Sebum excretion is affected by various hormones present in human body; various studies and clinical observations have confirmed the role of hormones in the pathophysiology of acne. Homoeopathy use holistic approach in treatment of acne vulgaris therefore various rubrics are used to differentiate each case of acne on basis of pathology, and individualistic character of the person affected with acne vulgaris.”*

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*Keywords: Pilosebaceous unit, Homoeopathy, Post-acne scarring, Hormones*

## INTRODUCTION

Acne is a hormonal disorder occurring predominantly among teenagers or in young adults.<sup>[1]</sup> It affects more than 85% of adolescents and two-third of adults aged 18 years and older. Female population is more affected<sup>[3]</sup>

Acne is basically a functional disturbance in the body.<sup>[2]</sup> Acne is a bacterial colonization of duct, whereas they release inflammatory mediator<sup>[2]</sup>. Principally, acne occurs due to disorder of pilosebaceous unit and may become severe rarely with presence of any systemic- disorder.<sup>[2]</sup> This disorder is manifested by various stages as an inflammatory lesion of papules, pustule, cysts or nodules.<sup>[1]</sup>

## AETIOLOGY<sup>[2][8]</sup>

It occurs due to hypersensitivity in hormones mainly in androgens (Sebotrophic hormone) or progesterone.<sup>[2]</sup> Increasing activity of Hormone causes excessive sebum production and Breakdown product of keratin further giving rise to inflammatory lesion.<sup>[2]</sup>

- Hormonal (Primary triggering factor) Hormones implicated in the pathogenesis of acne vulgaris i.e. hyperandrogenism.
- Androgen- It increases the activity of sebaceous gland, leading to sebum secretion. Hypersensitivity of androgen causing the presence of hyperkeratosis.  
(Ovaries in female or adrenal cortex secrete androgens).
- Progesterone- It helps to reduce the activity of the sebaceous gland, but during menses or premenstrual flare disturbed the secretion of sebum secretion.
- Estrogen- Estrogen control the sebum secretion by giving negative feedback to pituitary gland, whereas disturbance in estrogen level results the cause.
- Insulin- Increased level of insulin or IGF-1 caused increased production of sebum, it also increases the androgen secretion.
- Adrenocortical Hormone– It synthesizes hormone androgen for secretion of sebum from gland.

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- Pituitary Hormone-Important role in the production of sebum from sebaceous gland by the direct action of pituitary over adrenal gland.

## Differential Diagnosis<sup>[4]</sup>

1-Acne conglobate

2-Acnefulminace

3-Folliculitis

4-Rosacea

5-Tuberous-sclerosis

6-Sebaceous Hyperplasia.

## PATHOGENESIS

Ailment of acne is IGF-1 mediated disease or androgen hormone is mainly responsible for the disease development.<sup>[8]</sup> Androgen hormone affecting the barrier of epidermal layer of skin may cause its DNA synthesis, leading the condition HYPERKERATOSIS.<sup>[8]</sup> This condition affecting the sebaceous gland which are blocked by keratin proliferation having increase secretion of sebum.<sup>[5]</sup> Later various stages are produced.<sup>[5]</sup>

Now the microorganisms or Bacteria (PROPIONOBACTERIUM) affecting on the skin causing inflammation which result in COMEDONES, divided into-

1-OPEN- COMEDONES– Small papule with central black keratin plug.<sup>[7]</sup>

2-CLOSED- COMEDONES– Small papule open type.<sup>[7]</sup>

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Figure 1- COMEDONES- BLACKHEADS OR WHITEHEADS<sup>[10]</sup>



Figure 2- PAPULES OR PUSTULE<sup>[10]</sup>



Figure 3- NODULES/ CYSTS<sup>[10]</sup>

Acne vulgaris was graded by Indian authors, using a simple grading system, which classifies acne vulgaris into four grades as follows<sup>[11]</sup>

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- Grade 1: Comedones, occasional papules.
- Grade 2: Papules, Comedones, few pustules.
- Grade 3: Predominant pustule, nodules, abscesses.
- Grade 4: Mainly cysts, abscesses, widespread scarring

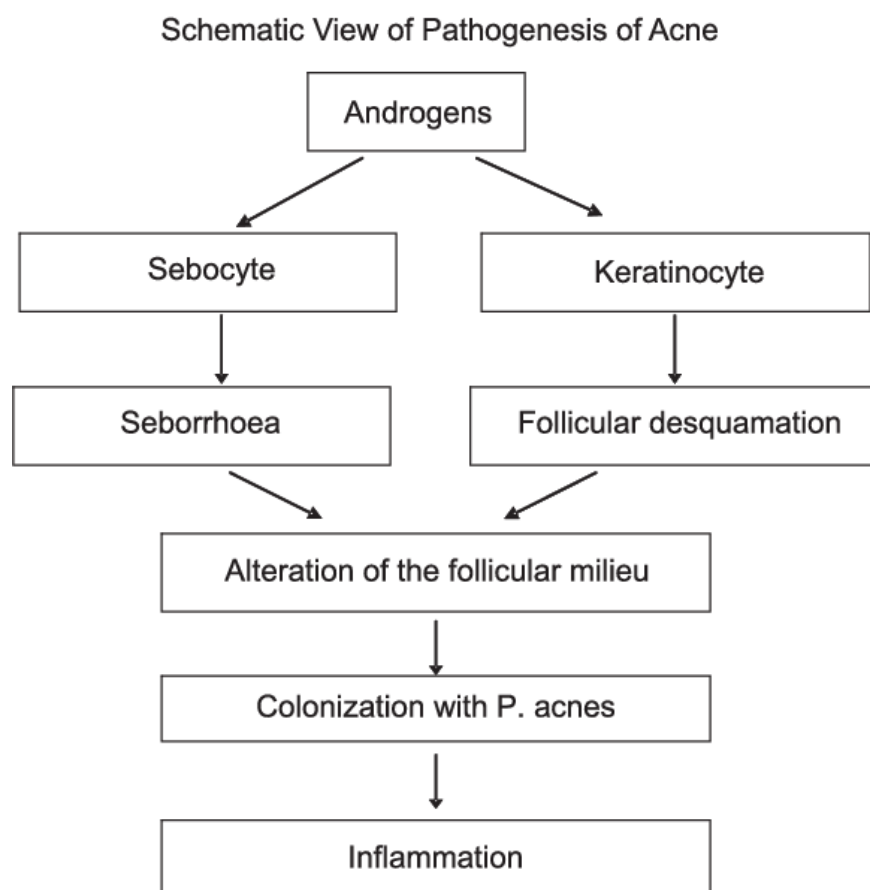


Figure 4- Pathogenesis of Acne<sup>[9]</sup>

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## CLINICAL FEATURES

Lesions of acne have various inflammatory changes, severity of acne is mainly depending upon the intensity and depth of the inflammatory reaction or it depends upon individuals own.<sup>[5]</sup> Acne Vulgaris is a hereditary formation, some families are prone for acne.<sup>[6]</sup>

- Seborrhea (Greasy skin)<sup>[4]</sup>
- Conglobate acne (cyst or more likely inflammatory nodule)<sup>[4]</sup>
- Acne fulminance (involve in systemic inflammation)<sup>[4]</sup>
- Acne- exoreic (effect of scratching or picking)<sup>[4]</sup>



Figure 5- comedones with post inflammatory hyperpigmentation<sup>[11]</sup>

## RUBRICS FROM DIFFERENT REPERTORIES-

### SYNTHESIS REPERTORY<sup>[12]</sup>

Skin – Eruptions- acne.

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Skin – COMEDONES (Face- Eruptions-Comedones)

Skin- Eruptions Papule

Skin- Eruption-Pustule

Skin Cysts (Generals-Tumors-cystic)

## **MURPHY REPERTORY.**<sup>[13]</sup>

Skin-Eruptions

Skin-Comedones(Face-Abscess)

Skin-Eruption-Papular

Skin-Eruption-Pustule

Skin-Nodules, skin:

## **BOGER-BOENNINGHAUSEN REPERTORY.**<sup>[14]</sup>

Skin and Exterior Body-Eruptions- Acne

Skin and Exterior Body-Eruptions-Comedones

Skin and Exterior Body-Pimples, Papule

Skin and Exterior Body-Eruption- Pustule

Skin and Exterior Body-Nodes (Bumps, Protuberance etc)

## **KENT REPERTORY.**<sup>[15]</sup>

Skin- Eruptions

Skin-Comedones

Skin-Eruption-Papular

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Skin-Eruption- Pustule

Skin- Induration, Nodules (skin- Nodosities. (Induration)

## HOMOEOPATHIC APPROACH

Individualized homoeopathy is useful in the treatment of acne.<sup>[3]</sup> Value of individualization is higher among people who suffer from hormonal, inflammatory or genetic changes.<sup>[3]</sup> Out of hundreds of remedies only one remedy is used as similimum according to the individuality of a person in a mild or gentle way and are effective among all ages<sup>[3]</sup>.

As given in aphorism no. (19 to 21) in **Organon Of Medicine** i.e.; knowledge of medicine, it is an evident that medicine could never cure disease of an individual if they do not possess the power which altered the dearrangement of health<sup>[16]</sup>

The word individualization signifies an individual's reaction towards a stimuli<sup>[16]</sup>. Every individual possess their own way to react, that reflected outwardly, it is an important peculiar symptom that helps to understand an individual during treatment<sup>[16]</sup>. Process requires attention, patience, or alertness of the physician<sup>[16]</sup>

A predominant miasm involved in the cases of skin is **Psora**, which means ITCH or some skin eruption, following condition of the skin disease may reflect to other miasms too.<sup>[16]</sup> Contribution of individualization helps in fruitful outcome in the field of homoeopathy<sup>[16]</sup>

It has been an effective treatment for a patient suffer from a chronic state of skin disease<sup>[16]</sup> its hard to deal with the condition of acne because sometimes its impact can be life long, so individualization helps to find out the way to treat the individuals to its whole extent<sup>[16]</sup> Grading and lesion counting are the two common measures for measuring the severity of acne vulgaris.<sup>[17]</sup>



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## • POST ACNE SCARRING OR HYPERPIGMENTATION.<sup>[18]</sup>

Post acne scarring occurs when skin is stretched or loss of skin tissue through disintegration is predominantly founded after disruption of abscess formation.<sup>[18]</sup>

Inflammatory lesions with longer duration being observed among individuals significantly followed with distensible deep scars.<sup>[18]</sup> Overproduction of Melanin or damage to the blood vessels observed into post inflammatory hyperpigmentation (erythema worse), or there is also loss of collagen or extra tissue from skin.<sup>[18]</sup>

## CONCLUSION

Study on elaborating the dermatological changes of the skin with the contrasting management or hormonal causes of acne vulgaris with the post acne scarring or hyperpigmentation to a pace of rubric for treatment of this ailment. This could be a ray of hope for signifying its importance.

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