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REVIEW ARTICLE

ACNE VULGARIS AND ITS HOMOEOPATHIC MANAGEMENT: A REVIEW

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Abstract

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Acne vulgaris is one of the prevalent skin conditions affecting individuals in their adolescence though common in adolescence but also seen in the adult phase of life too. It mainly affects the pilosebaceous unit and causes pigmentation scar formations and and possesses а psychological impact that is often underestimated. Homoeopathy adopts a holistic approach in the treatment of the disease condition considering the individual as sick rather than different organs or tissues to be sick. It heals the patient quickly, gently, and safely considering the patient's physical, mental and emotional complaints. This article reviews the general aspects of acne vulgaris along with its homoeopathic management.

INTRODUCTION

Acne (acne vulgaris) is a common dermatological disorder affecting the adolescent population throughout the ages. The word acne vulgaris (Vulgaris means common) was first used by Fuchs in 1840, and is still being used 1; is a disorder in which the hair follicles develop obstructing horny plugs (comedones), as a result which inflammation of later develops around the obstructed follicles,

causing tissue destruction and scar formation 2 . It is a chronic inflammatory disease of the Pilo-sebaceous follicles and generally affects the areas of skin with the densest population of sebaceous follicles generally face, chest, and back are affected and occasionally one can see the lesion on the buttocks, breast, or only on the back 3 .

It has been estimated that its global prevalence (for all ages) is 9.38% and is the eighth most common skin disease, the prevalence of acne, in different countries and among different age groups varies, with estimated range from 35% to nearly 100% of adolescents having acne at some point⁴. Although acne is considered to be a condition primarily seen in the pubertal and adolescent age groups with female predominance however it has also been observed in adulthood and late adulthood too in both genders, acne persisting beyond the age of 25 years is considered adult acne, these are either persist form the adolescence or its beginning is in late adulthood however different studies indicates occurrence that higher of persistent acne with female predominance^{5,6}.

Pathophysiology

The pathogenesis of acne involves multiple factors, along with cytokines genetics and environmental factors also play a major role. The interplay of four factors leads to the development of acne viz. Excess sebum production, Follicular plugging with sebum and keratinocytes, Colonization of follicles by Cutibacterium acnes (formerly Propionibacterium acnes; a normal human anaerobe), Release of multiple inflammatory mediators. Inflammation is the main component in the pathogenesis of acne. The activation of keratinocyte proliferation is thought to be triggered by increased activity of the proinflammatory cytokine, interleukin (IL)-1

which is seen before the beginning of hyperproliferation around the uninvolved follicles. Toll-like receptors are a subtype of pattern recognition receptors (PRRs) that can activate innate immune responses and few of them plays a specific role in the pathogenesis of acne. Propionibacterium acnes, a Gram-positive anaerobic bacteria normally found in the sebaceous follicle, plays an important role, both directly and indirectly, in development the of inflammatory acne. Excessive sebum production along with alteration in its lipid composition and changes in (decrease oxidant/antioxidant ratio in Vitamin E levels) are important factors in pathogenesis. puberty, its At sebum production is increased by multiple factors including androgens, corticotropinreleasing hormone, vitamin D, and insulinlike growth factor-1 (IGF-1)^{7,8}. Besides these different studies highlights the involvement of factors such as genetics higher occurrences in twins and family members: ethnicity; dietaryhigher incidences in intake of high glycemic index food, chocolate, high-fat food items, and milk; personal factors- high BMI, smoking, alcohol intake, personal hygiene, use of cosmetics and stress- these factors exacerbate the severity of the lesions along with its production 4,6,7 . Variations in hormones -testosterone and 5α-Dihydrotestosterone $(5\alpha$ -DHT), vitamin

level, and some disorders such as PCOD, etc. were also associated 8 .

CLINICAL PRESENTATION

Clinically, lesions observed in acne were comedones, papules, pustules, nodules, and cysts. These may be further classified as non-inflammatory: comedones and inflammatory: papules, pustules, nodules, and cysts. Comedones whiteheads or blackheads. appear as Whiteheads (closed comedones) are 1 to 3 mm in diameter in size flesh-colored or whitish palpable lesions; blackheads (open comedones) are similar in appearance but with a dark center, Papules and pustules are red lesions with a size of 2 to 5 mm in diameter. Papules are relatively deep. Pustules are more superficial. Nodules are larger, deeper, and more solid than papules and resemble inflamed epidermoid cysts, although they lack true cystic structure. Cysts are suppurative nodules ⁹. In the post-adolescence period acne can be divided into two groups - persistent acne: continuation of acne from adolescence into adult life and late-onset acne is defined as acne that first appears after the age of 25 years ¹⁰.

Acne vulgaris must be differentiated from other forms of lesions such as rosacea, acne conglobata, acne excoriee, acneiform eruptions, acne inversus (Hidradenitis suppurativa), adenoma sebaceum, drug-induced acne, bacterial folliculitis, etc⁸.

Investigation And Assessment

Acne is primarily diagnosed clinically but its polymorphic nature and varied extent of involvement make it difficult to evaluate its severity. The two commonly used measures for measuring the severity of acne vulgaris are grading and lesion counting. It was graded by Indian authors, using a simple grading system, which classifies acne vulgaris into four grades-

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

No grading system has been accepted universally^{9,11}. Investigations are rarely required for its diagnosis, history physical examination can and help determine if there is an underlying cause of the acne, such as an exacerbating medication or endocrinologic abnormality causing hyperandrogenism (e.g., polycystic ovarian syndrome) these and menstrual irregularities other require investigation. associated If there is cutaneous virilism or other features of androgen-secreting tumors, further endocrine investigation and assessment are warranted¹² assessment of acne lesion is very challenging, grading and lesion counting are two methods used for this Leeds technique, Global acne purpose. system (GAGS), Investigator grading Global Assessment of acne (IGA), and Cardiff Acne Disability Index (CADI) are a few of them 11,13 .

Complications And Treatment

most common complication The experienced is some degree of scar formation extent of which varies with the severity of acne. Different forms of scar were Ice pick scars Rolling scars Boxcar scars and Papular scars. Besides physical disfigurement psychological implication of acne is severe and often underestimated. It has a great impact on the quality of life of the individual with consequences such as self-esteem, depression, poor anxiety, altered social interactions, body image alterations, embarrassment, anger, lowered academic performance, and unemployment 8,10 . It has been found in a study on the impact of acne on quality of life that there is a positive correlation between acne severity and CADI scores (R=0.51), which that as the severity of acne implies worsens, the QOL impairment increases ¹⁴. The treatment of acne vulgaris, as the conventional medicine. is theoretically designed to target one or more of the pathogenic pathways involved in the

development of AV lesions, it involves the application of different varieties of topical and systemic agents for the reduction in sebum production, comedone formation, inflammation, and bacterial counts and at normalizing keratinization. The selection of treatment is generally based on severity. Commonly, topical tretinoin for comedones, topical retinoid alone or with a topical antibiotic, benzoyl peroxide or both for mild inflammatory acne, oral antibiotic plus topical therapy for mild acne, oral isotretinoin for severe acne, and intralesional triamcinolone for cystic acne are recommended $^{8.9}$.

Homoeopathic Approach And Scope

Homoeopathy is а system of medicine introduced by Dr. C. F. S. Hahnemann, is based on the law of similar and considers the patient as a whole rather than any particular organ or tissue to be diseased. Dr. Hahnemann says, in the introduction to Organon of Medicine, for without the most minute individualization, homoeopathy is not conceivable ¹⁵, every individual is characterized by some unique features which serve to denote that particular individual from other individuals belonging to the same class or group ¹⁶. Homoeopathic treatment involves selecting a treatment according to the symptoms of each individual precise 17 patient Acne vulgaris though considered an only disease of the outer covering i.e., the skin of a human being but affects the patient at all levels of health (mental, emotional, and physical) and needed to be addressed similarly.

Homoeopathic treatment unlike any other treatment modalities treats the patients gently and with minimal or no after-effects.

Research studies with homoeopathic intervention have been done in this regard and have also established the scope of the homoeopathic mode of treatment in acne vulgaris. Some of the studies include- a pilot study on 400 acne patients with a placebo control group of 30 acne cases with only single oral homoeopathic medicine (either 'Sulphur or 'Tuberculinum') was used orally without any local application, shows significant improvements in 387 (96.75%) cases within 6 months of treatment 18 . In another study on 36 participants at the end of three months maximum participants had significant improvement (mean difference = 19.778, t (35) = 17.616, p < .001) with 24 (66.7%) cases showing more than 75 percent improvement in GAGS score also significant (p < .001) improvement in all the four domains of ACNE-QoL has been observed ¹⁹. A study on patients attending the outpatient clinic of a state homeopathic dispensary for 6 months shows significant improvement in QoL in terms of GAGS and CADI scores ²⁰. An open-label,

uncontrolled, prospective study showed significant changes in the severity of acne measured using GAGS and QoL measured through the acne-QoL questionnaire on 102 patients (11-30 age group) having acne vulgaris for more than 03 months. QoL and acne status improved significantly (p<0.0001) after treatment as assessed by acne-QoL and GAGS respectively ²¹; various other studies²²⁻²⁶ signify the scope of individual also homoeopathic treatment in acne vulgaris.

The rapeutics

The selection of medicine for acne vulgaris should be based on the totality of symptoms as in every other disease condition, some indications of homoeopathic medicine for acne vulgaris are as follows ^{27,28}:

Ambra Grisea: Tickling and itching titillation in the face, with eruption of pimples; the same in the forehead, and in the region of the whiskers.

Antimonium Crudum.: Pimples, pustules, and boils on face. Yellow crusted eruption on cheeks and chin. Sallow and haggard. Granular eruptions, yellow as honey, on the skin of the face. Eruption, like conoid chicken-pox, on the face and on the nose. Pimples on the upper lip.

Belladonna: Eruption of red pimples on the temples, in the corners of the mouth, and on the chin. Purulent and scabby pimples, chiefly on the cheeks and on the nose.

Berberis aquifolium: Pimply, dry, rough, scaly. Eruption on scalp extending to face and neck. Acne. Blotches and pimples. Clears the complexion.

Calcarea phosphorica: Coppery face full of pimples. Acne in the face; red pimples, filled with a yellowish pus, with shooting pains on being touched.

Calcarea sulphurica: Pimples and pustules on the face. Many little matterless pimples under the hair, bleeding when scratched.

Carbo vegetabilis: Red pimples on the face (in young persons). Eruptions, like tetters, on the chin, and on the commissures of the lips.

Clematis erecta: Moist eruption on the face, preceded by stinging pain. Purulent pimples on the chin.

Conium: Eruptions of pimples on the forehead. Dryness and exfoliation of the lips. Pimples, like those in scabies, which become scurfy.

Croton tiglium: Inflammation of the face and of the nose; swelling of the face; eruption of pimples. Pustular eruption, especially on face and genitals, with fearful itching, followed by painful burning

Eugenia jambos: Acne, simple and indurated. The pimples are painful for

some distance around. Acne rosacea. Nausea, better smoking. Comedones

Graphites: Itching pimples. Eruption on the face, in appearance as if the skin were raw. Scabs and moist pimples on the face. Sensation of cobweb.

Indium metallicum: Painful suppurating pimples. Corners of mouth cracked and sore

Juglans regia: Comedones and acne of the face. Crusta lactea, with soreness around ears. Itching and eruptions of small red pustules. Scalp red, and itches violently at night.

Kalium arsenicosum: Dry, scaly, wilted. Acne; pustules worse during menses. Acne, appearance like that in early stage of variola.

bromatum: Kalium Acne of face. pustules. Itching; worse on chest. shoulders, and face. Acne; on face in fleshy people of gross habit. voung Papular rash. Acne simplex and indurata; bluish red, pustular, < on face and chest; esp. in lymphatic constitutions.

Kalium carbonicum: Eruption of pimples on face, with swelling and redness of cheeks. Tearing stitches in cheeks. Pimples on eyebrows.

Ledum palustre: Red pimples on forehead and cheeks; stinging when touched. Crusty eruption around nose and mouth. **Natrum muriaticum**: Greasy, oily, especially on hairy parts. Dry eruptions, especially on margin of hairy scalp and bends of joints. Itching and eruption of pimples on face and forehead.

Nux vomica: Acne; skin red and blotchy. Pimples in face from the excessive use of spirituous liquors. Small, purulent pimples round lips and chin.

Phosphoricum acidum: Face pale, wan, with (lustreless) hollow eyes surrounded by a blue circle, and pointed nose. Pimples and scabs on red part of lips. Violent burning pain in r. lower lip, persisting when moving it. Pimples on chin. Eruption of pimples with burning pain, or pain as from excoriation.

Sulphur: Eruption of pimples on face and on forehead.—Itching and moist tetters over whole face, chiefly above nose, round eyes, and in eyelids; small white vesicles in groups and forming scabs.

Thuja: Greasy skin of face. Eruption of pimples on lips and chin. Eruptions only on covered parts.

CONCLUSION

Acne vulgaris is one of the commonest conditions and is considered to only affect the skin of the individual by the conventional school of medicine and hence treated by topical agents along with antibiotics but as per the organon of medicine, these are none other than the external manifestation of the internal derangement of the vital force and needed to be treated by understanding the affected individual (on mental, emotional and physical levels) in its whole extent.

REFERENCES

- NF. Mahmood, AR. Shipman. The age-old problem of acne. International Journal of Women's Dermatology 2017;3: 71–6.
- Marks R, Motely R. Roxburgh's Common Skin Diseases. 18th Edition. New York: CRC Press; 2011.p.159-81
- Gupta R, Manchanda RK. Textbook of Dermatology for Homoeopaths. 4th Edition. New Delhi: B. Jain Publishers Pvt Ltd; 2011. p. 121- 25
- Heng AHS, Chew FT. Systematic review of the epidemiology of acne vulgaris. Sci Rep. 2020 ;10(1):5754. DOI: 10.1038/s41598-020-62715-3.
- Khunger N, Kumar C. A clinicoepidemiological study of adult acne: Is it different from adolescent acne? . Indian J Dermatol Venereol Leprol 2012; 78:335-41.
- Budamakuntla et al. Acne in Indian population: An epidemiological study evaluating multiple factors. IP Indian Journal of Clinical and Experimental Dermatology 2020;6(3):237–42

- Bhat YJ, Latief I, Hassan I. Update on etiopathogenesis and treatment of Acne. Indian J Dermatol Venereol Leprol 2017; 83:298-306.
- Mohiuddin A K. A Comprehensive Review of Acne Vulgaris. J Clin Pharm 2019; 1(1) :17-45.
- 9. <u>https://www.msdmanuals.com/en-</u> in/professional/dermatologic-<u>disorders/acne-and-related-</u> <u>disorders/acne-vulgaris</u>
- 10. Sharma R, Dewan D. An Overview on Adult Acne, Its Pathogenesis, Clinical Presentation, Treatment and Scope in Homoeopathy.Homoeopathic Links 2021;34(4):291–99
- Adityan B, Kumari R, Thappa D
 M. Scoring systems in acne vulgaris. Indian J Dermatol Venereol Leprol 2009; 75:323-26.
- Schofield OMV, Rees JL. Skin Diseases. In: Colledge NR, Walker BR, Ralston SH. (eds.) Davidson's Principles & Practice of Medicine.
 21st Edition. Edinburgh, UK: Churchill Livingstone Elsevier.
 2010; p.1268
- 13. Alsulaimani et al. Severity of Acne Vulgaris: Comparison of Two Assessment Methods Clinical, Cosmetic and Investigational Dermatology 2020;13: 711–16

- 14. Hosthota A, Bondade S,
 Basavaraja V. Impact of Acne
 Vulgaris on Quality of Life and
 Self-esteem Cutis. 2016; 98:121-24
- 15. Hahnemann S, Dudgeon R.E,
 Boericke W (Trans). Organon of
 Medicine. 5th & 6th Ed. combined,
 New Delhi: B Jain Publisher Pvt.
 Ltd. 2009; p.4
- Sarkar B.K. Hahnemann's Organon of Medicine with An Introduction and Commentary on the Text. 14th Ed. Delhi: Birla publication Pvt. Ltd..2014; p.435
- 17. Das E. Understanding the Principles of Homeopathy on A Research Perspective. J
 Complement Med Alt Healthcare. 2019; 9(2): 1-4
- 18. Shraddhamayananda S, Pradhan AK. Significant improvements of acne after treatment with homeopathic medicines. Clin Med Invest. 2016;1(03):1–3
- Deeksha, Singh A.K., Role of Homoeopathic Medicines in Cases of Acne Vulgaris. TUJ. Homo & Medi.Sci. 2020;3(4):19-29
- 20. Sharma R, Manchanda R K. Homeopathic Treatment of Acne Vulgaris: An Open, Single-Arm, Non-Comparative Study Homoeopathic Links 2020;33(4):272–82.

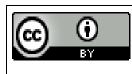
- 21. Patil JD, Shah JN, Dole SM, Jadhav AB. Role of crossrepertorized, individualized homoeopathic treatment in cases of Acne Vulgaris. International Journal of Research and Analytical Reviews 2018;5 (3):836-40
- 22. Sharma S, Devi R. Effectiveness of homoeopathic medicines in cases of acne vulgaris in adolescence – a randomized controlled trial. World Journal of Pharmaceutical Research 2019;8(7):1853-63
- 23. Parikh NP. Prospective study of homoeopathic management of acne vulgaris in teenagers. International Journal of Homoeopathic Sciences. 2019;3(01):11–14
- 24. Miglani A, Manchanda RK. Azadirachta indica in treatment of acne vulgaris–an open-label observational study. Indian Journal of Research in Homoeopathy. 2014;8(04):218–23

- 25. Miglani A, Manchanda RK. Observational study of Arctium lappa in the treatment of acne vulgaris. Homeopathy 2014;103(03):203–07
- 26. Miglani A, Manchanda RK. Prospective, non-randomized, open-label study of homeopathic Zingiber officinale (ginger) in the treatment of acne vulgaris. Focus Altern Complement Ther 2014;19(04):191–97
- 27. Clarke J H. A Dictionary of Practical Material Medica. Accessed June 19, 2022, from <u>http://www.homeoint.org/clarke/h.</u> htm
- 28. Boericke W. Homoeopathic Materia Medica. Accessed June 19, 2022, from <u>http://www.homeoint.org/books/bo</u> <u>ericmm/s.htm</u>

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