

ACNE AND ITS AYURVEDIC MANAGEMENT

Shinde Kalyani Ramchandra

V. R. Borakhade

Kayachikitsa Department, Yashwant Ayurved College, Pgt & Rc, Kodoli, Maharashtra, India

ABSTRACT

Acne is an inflammation of the pilosebaceous units of certain body area (face, trunk, rarely buttocks) that occurs most frequently in adolescence and manifest itself as comedones (comedonal acne), papulopustules (papulopustular acne) or nodules and cysts (nodulo cystic acne and acne conglobata) pitted depressed or hypertrophic scars may follow all types but especially nodulocystic acne and acne conglobata. It can be correlated with *Yauvana pidika* in *Ayurveda*. The diseases in which the *pitika* are developed especially on the face of young persons (adolescents) are known as *Yauvana Pidika (Tarunyapitika)*. *Yauvana Pidika* is very commonly observed disease, which has been described as *kshudra roga* in classics. It is also called as *Tarunya pitika & Mukh dushika*. Various Systemic and local treatment are indicated in *Ayurveda* that help to cure Acne and also to regain the lost beauty and revive the personality.

Key words :- Acne, Comedones ,*Yauvana pidika*, *Kshudra roga*.

INTRODUCTION

Acne vulgaris is a disease of the pilosebaceous follicle characterized by non-inflammatory (open and closed comedones) and inflammatory lesions (papules, pustules, and nodules). Its pathogenesis is multifactorial - the interplay of hormonal, bacterial, and immunological (inflammatory) factors results in the formation of acne lesions. Although acne is not a life-threatening condition, it can have detrimental effects on the quality of life of affected individuals. Fortunately, acne is readily responsive to the wide-range of available medications, with the goals of therapy being to clear the lesions, prevent scarring, and limit any treatment-related side-effects and psychosocial sequelae. Newer fixed-dose combination products target multiple acne pathogenic factors

and offer simplified dosing regimens, which may potentially enhance both efficacy and patient adherence when compared with single agent therapy. The term acne is derived from Greek word—*acme* which means —prime of life. Although generally considered to be a benign, self-limiting condition, acne may cause severe psychological problems or disfiguring scars that can persist for a lifetime. It is a pleomorphic disorder and can manifest at any time during life but it most commonly presents between ages of 12-24, which estimates of 85% of population affected. In recent years multifactorial nature of acne has been elucidated. An improved understanding of the pathophysiology of acne leads to rational therapy for successful treatment.

Acne may be classified according to predominance of specific skin lesions:

Comedonal (non-inflammatory) – mild

Papular (inflammatory) – mild-to-moderate

Pustular (inflammatory) – moderate

Nodulocystic – severe

This order also follows increasing severity, with cutaneous scarring as the ultimate result.

AETIOLOGY

1. Increased Sebum Secretion:- Sebaceous glands activity is controlled by androgens. The sebaceous glands are usually sensitive to androgens due to enhanced end organ sensitivity. This is due to increased activity in the sebaceous gland of an enzyme 5 alpha reductase which converts testosterone. This binds to specific receptors in the sebaceous glands, increasing sebum secretion.

Androgens are male hormones produced in the testis and in female, adrenal glands and ovaries produce androgens. The most important androgen is testosterone, which affects the face, pubic area and arm pits. Acne is closely related with the sex hormones. Both the sexes are affected by the disease acne but the majority of the patients were females because of involvement of major hormonal changes like Oestrogen occurs during menarche. The increased production of sex hormones makes the sebaceous glands hyper active.

2. Microbial Colonisation:

Propionibacterium acnes are a normal commensal of the pilosebaceous apparatus plays an important role in the pathogenesis of acne. It has lypolytic enzymes capable of altering the local lipid constituents. Other organisms implicated in pathogenesis of acne are P. granulosum, pityrosporum ovale and

coagulase negative micrococci. These organisms act by:

- Breaking down triglycerides (from the sebum) into free fatty acids. Which induce hyperkeratosis in the ductal epithelium.
- Producing extra cellular enzymes which attract inflammatory cells.

3. Occlusion of Pilosebaceous Duct:

In the acne pilosebaceous orifice is occluded by a keratinous plug induced by

- Chemicals (present as ingredients of cosmetics)
- Fatty acids (produced by lypolysis of sebum by micro-organisms)

Thus results in retention of sebum. Further encouraging growth of micro-organisms, which act on the lipids of sebum, liberating free fatty acids which intern enhance follicular occlusion, triggering a vicious cycle. The distended follicle eventually ruptures, releasing pro-inflammatory chemicals into the dermis, stimulating intense inflammation. The ductal epithelium also produces cytokines and an inflammatory cascade is triggered.

Pathogenesis:- Acne vulgaris is follicular disease; it develops at puberty when the sebaceous glands are the most active. In the pre-adolescent period seborrhea oleosa and some comedones frequently appear as fore runners of the disease. For its development beside seborrhea, the hyper keratosis of the pilosebaceous ostia is an important pathogenic factor. A keratinous cum sebaceous plug is formed in follicular neck resulting in the narrowing and some time blocking of the canal. In general a well developed growing hair interferes with the collection of keratinous and sebaceous material. The growing hair plays the role, as it were, of needle. That is why acne never occur on the scalp,

and only rarely on the bared region despite seborrhea being present in these areas.

The primary lesion of acne is the comedone it signifies the plug composed of dried sebum, epithelial cells and keratinous scales; it fills the pilosebaceous canal on the surface of the skin, it appears as a slightly elevated white head; with the passage of time the sulphur constituent of sebum soon gets converted into sulphide turning the white head into black dot, called a black head.

With the comedone extractor, the entire comedones can be readily squeezed out as a yellowish, cheesy looking worm like mass. Some comedons may persist and remain unchanged, but often an inflammatory reaction occurs. The first stage is erythema which surrounds or engulfs the comedone is transformed into moderately firm hemispheric, lentil to bean sized papule of red rose color.

Most of these papules gradually involute leaving no trace; others suppurate to form pustules resulting from the acting of secondary invading micro-organisms, chiefly staphylococci-acne pustulosa. The suppuration may be superficial or deep seated; the deep seated pustules take time to involute. Acne indurata is characterized by rather firm, perifollicular nodules of bluish-red color. They persist for long time. Many of them eventually become completely or partially absorbed. Others transform into cysts - acne cystica. They however tend to persist, discharging from time to time thin, purulent fluid.

In the severest variety of acne, numerous such pseudo cysts draining sinuses and hypertrophic scars are seen.

Reaction of etiological factors and pathogenesis and sequence of events can be represented diagrammatically as,

WHAT CAN MAKE ACNE WORSE?

Menstrual cycle - Girls and women with acne tend to get it worse one or two weeks before their menstrual period arrives. This is probably due to hormonal changes that take place. Some people say they eat more chocolate during this time and wonder whether there may be a connection. However, experts believe the worsening acne is not due to chocolate, but rather to hormonal changes.

Anxiety and stress - mental stress can affect levels of some hormones, such as cortisol and adrenaline, which in turn can make acne worse.

Oil based makeups - moisturizing creams, lubricating lotions, and all makeup that contains oil can speed up the blocking of your pores.

Hot and humid climates - when it is hot and humid we sweat more. This can make the acne worse.

Greasy hair - some hair products are very greasy and might have the same effect as oil based makeup.

Squeezing the pimples - if you try to squeeze pimples your acne is more likely to get worse, plus you risk scarring.

STAGES OF ACNE: There are various terms that describe different forms of acne, such as comedones, papules, pustules, nodules, and cysts. Basically, comedones (plural for comedo) are the name given to plugged follicles: an open comedo is called a blackhead because the surface is visible and turns —black when it's exposed to air. A closed comedo is a whitehead, which is like a blackhead, but is closed at the surface. Plugged follicles can become irritated and swollen enough to burst, thus affecting surrounding tissues. If a plugged follicle erupts above the skin's surface, it becomes a pimple; when it

erupts below the surface, it forms a red lump, such as a nodule or cyst.

HOW BAD CAN ACNE GET?

There are basically three levels of severity:

Mild acne consists of a few lesions that are close to the surface, and not deep or inflamed. Moderate acne is marked by deeper nodular lesions and some redness.

Severe acne involves many lesions, multiple cysts, and a great deal of redness and inflammation.

AYURVEDIC MANAGEMENT

(A) Systemic:

(1) **Vaman- (Emesis):** It is the best procedure to subside the *Kaphaja* abnormalities and in *Yauvana Pidika*.

(2) **Nasya (Errhine):** The medicines are to be taken through nasal route in *Urdhvajatrugata Rogas* and also in disease of *Yauvana Pidika*.

(3) **Virechana:** This therapy is specific for *Pitta Dosh*, or *Pitta samsarga Doshas*. The purgative drugs remove the excess *Pitta* from the *Guda Marga*. Thus helps in the *samprapti vighatana* of *yauvana pidika*.

(B) Local/ External Treatment

As the disease has local spread over the face, the local or external applications have immediate impact upon the characteristic features of the *yauvana pidika* such as unctuousness, burning sensation, itching etc. different *ayurvedic* preparations are prescribed for the topical use in the form of powder, paste, oil, ghee, gel, etc. The method advised for the application may be as *prakshalana, snehana, Swedana, lepana and gharshana etc.*

(1) **Lepa:** Mixture of *varnya dravyas* used in the form of external application. It proves very effective when used simultaneously with internal administration of the drugs.

1. In *yauvana pidika lepa* prepared out of drugs like *vacha, lodhra, saindhava and nsarshapa*
2. *Dhanyaka, Vacha, Lodhra and Kusta* applied over the face is also useful.
3. Application of the *lepa* prepared out of *lodhra, tuvaraka*.
4. *Vatapatra, narikelapushpa, and shukti* are useful.
5. *Lepa* of *lodhra, dhanyaka, vacha* over *mukha* is useful.
6. The *Lepa* prepared out of *Gorochana* and *Maricha*.
7. *Matulungajata, Ghrita, Manashila* and cow dung these formulation should be applied over the face it improves the complexion and cures the *yauvana pidika* and *nyaccha*.
8. Milk and *Shalmali* thorn. If fails then *vamana* is to be done.
9. *Lepa* prepared out of *Jatipala, Chandana, Maricha*.
10. Bark of *Arjuna* tree and milk.
11. *Manjistachurna* with *Madhu*.
12. Washing the face with *varunadi kwata* and *lepa* prepared out to *vatapatra, malathi, raktachandana, kusta, and lodhra, or matulungajata, ghee, manashila, lodhra* are applied over the face.
13. *Kumkumadi Taila Abyanga* can also be done.
14. In all *kshudrarogas Sarpi, Nimba-churna* and *parpati* is to be given internally.
15. *Sahacharaghrita*.
16. *Parada Bhasma* can be used along with other suitable drugs or with any other *yogavahi* formulations can be used to treat *kshudra rogas*.
17. *Haridradilepa* can be applied for face. *Manjistaditaila* to be over the face.
18. *Masuradal* fried with milk and applied over the face or *kaliyaka*,

neelakamala, kusta, priyangupushpa with milk or *tusha rahitamasura yastimadhu, yava, lodhra* with milk or *haridrachurna* with *arka ksheera*.

(2) Surgical and Para-Surgical Treatment:

If the medical treatment does not give better results, surgical and parasurgical procedures like

- (1) *Chedana* (excision)
- (2) *Agni Karma*
- (3) *Kshara Karma*
- (4) *Rakta Mokshana* or *Siravyadha*.

Above said procedures are not easy to encounter and may have complications, so usually patients are reluctant to accept these therapies. Line of treatment prescribed by different *Acharyas* can be summarized as follows-

Sushruta : *Vamana, Lepana*
As. Hridaya : *Vamana, Lepana,*
Nasya, Siravedha
As. Sangraha : *Vamana, Lepana,*
Siravedha
Chakradatta : *Vamana, Lepana,*
Siravedha & Abhyanjana.

REFERENCES

1. *Charaka Samhita* with ayurveda deepika commentary by chakrapani – vaidya Yadavji Trikamji Acharaya, 1st edition, 2001.
2. *Sushruta Samhita* v– by Kaviraj Ambikadutta Shastri, Choukhamba Sanskrit samsthan, 14th Edition ,2003.
3. *Sushruta samhita* with nibandha sangraha commentary- Vaidya yadavji trikamji acharya, Choukhamba Surbharati Prakashana, Varanasi, 2003.
4. *Ashthanga Sangraha of Vagbhataa* text, English Translation by Dr. K.R.Shrikantha Moorthy, Vol. 3. 4th Edition, 2005.

5. *Ashthanga Hridaya* with *sarvaanga sunder of Arundatta & Ayurveda rasayana* of hemadri, Dr Anna Moreshwar Kunte & Krishna Ramachandra Shastri, Reprint of 6th edition, Choukhamba Surbharati Prakashan Varanasi.
6. *Bhavaprakash* of Shri Bhava Mishra edited with Vidyotini Hindi commentary by Bhishagratna Pandit Shri Bramhashankar Mishra, ,Choukhamba Sanskrit Samsthan, Varanasi, 11th Edition 2010.
7. *Bharat Bhaishajya Ratnakar*: Shree Vaidya Gopinath Bhishagratna krutaya, B.Jain publishers Pvt.Lmt., Trutiya Bhag, (Dantyadi lepa/Kshudra rog)Pg no.92, Reprint 2012.
8. *Sharangdhara Samhita*, Choukhamba Oriental, 2005.
9. *Yogratnakar* with Vidyotini Hindi commentary by Vaidya Shri Laxmipati shastri, Choukhamba Prakashan, Varanasi, Reprint – 2009.
10. Harrison Principles of internal medicines, vol 1st & 2nd (15th Edition).
11. Text book of pathology, by Harsha Mohan, 2nd Edition.
12. Principles and Practice of Medicine by Davidson's edited by, John.A.A. Hunter, 20th Edition, Reprint 2006.

CORRESPONDING AUTHOR

Dr. Kalyani Ramchandra Shinde
Shree laxmi vihar society, flat no. B-104,
Bhosale garden, Hadapsar, Pune -28.
Email Id- kalyanishinde5@gmail.com

Source of support: Nil

Conflict of interest: None Declared