

A REVIEW ARTICLE ON ADOLESCENCE ACNE AND ROLE OF AYURVEDA IN ITS
MANAGEMENT

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ABSTRACT

The term adolescent means to grow, to mature. This is the period of rapid change and maturation when the child grows into an adult and one of the most enjoyable stages of one's life Acne is skin problem that affects many teenagers, ranging from an occasional breakout to chronic acne. Acne has always been one of the most burning problems of the young population. Acne is an inflammation of the pilosebaceous units of certain body area (face, trunk, rarely buttocks) that occurs most frequently in adolescence. *Ayurveda* various types of therapies and formulations are there, with the help of them we can overcome the adolescence acne. All the related classical texts have been thoroughly reviewed and critically analyzed and contemporary texts, internet sources like Pubmed has been referred. Though its pathophysiology is complex and having a series of various interactions it is not serious but can damage the self esteem. So the treatment should be started with counseling and stepwise purification, pacification. *Ayurveda* has whole body purifying and detoxifying which are beneficial on adolescence acne. As in *Tarunyapitika* as there is vitiation of *Tridoshas* along with *Rakta dhatu* is present, so elimination of accumulated toxic products by *Shodhan* and pacification and correction of the entities by *Shaman chikitsa* should be done. Mild acne can be treated with over the counter medication but more severe acne needs medical attention and by using *Vaman*, *Virechan* and *Raktamokshan*, therapies this adolescence acne can be cured. With due care, we can overcome the acne and prevent permanent scarring also.

KEYWORDS: Adolescence Acne, Sebum, Comedo, Vitiation of *Tridoshas*.

INTRODUCTION

The term adolescent is derived from the Latin word '*Adolescere*' meaning to grow, to mature. This is a group of young people between the age of 10 to 19 years. This is the period of rapid change and maturation when the child grows into an adult and one of the most enjoyable stages of one's life. But so many problems are there to interrupt their physical, mental, emotional, social and spiritual state. Acne vulgaris is an extremely common problem with remains lifetime in 85% of the people and it mainly occurs in the adolescence.^[1] Among various burning issues of adolescent health, acne is one of the challenge begins at puberty which may worsen during adolescence. Mukhadushika is a common disease known to us since from Acharya Sushruta's period. It is considered as one of the kshudraroga,^[2] As per Charakapidika is raktapradoshajaroga (hematological disorder) and belong to bahyarogamarga.^[3] Acne is skin problem that affects many teenagers, ranging from an occasional breakout to chronic acne. The emotional

impact of acne is often very difficult for adolescents to tolerate because they are in a period of life that is characterized by pronounced emotional volatility and they are often especially sensitive to its adverse effect on physical appearance. As a result acne causes significant anxiety, depression, frustration and anger. It is not a serious health risk, but can damage self- esteem as severe acne can cause permanent scars which lead to build inferior complex and lowers the self confidence level. In *Ayurveda* it is also called as *Tarunyapidka* as it affects the adolescents, *youvanpidika* as Youvana means youth and Pidaka means a skin eruption and it mostly occurs in young age, *mukh dooshika* as it harms to the beauty of face it and *padmini kantaka* as acne has thorn like nature. In *Ayurveda* various types of therapies and formulations are there, with the help of them we can overcome the adolescence acne. When *Ayurveda* and modern science go hand in hand we can surely cure the adolescence acne. And one of the vitiated dosha in this disease is Rakta.

Property of Rakta is analogous to Pitta dosha, there for Virechana is also effective in Rakta javikara.^[4]

Ayurvedic Review of Acne Vulgaris

Mukhadushika is not considered a main disease in Ayurvedic scriptures. It is one of the 44 Kshudra rogas (minor diseases) mentioned by Sushruta. Due to Kapha, Vata and Shonita, like Shalmali Kantak (thorn), there is a Pidika on the face, it is called Mukhadushika or Yuvanpidika. Acharya Vagbhatta has also considered the inclusion of Meda in Mukhadushika^[5], which is similar to the sebum of modern theory.

Nidana of Mukhadushika (Cause)

The description of specific remedies of Mukhadushika is not found in the Samhitas. Acharya Sushruta has considered the cause of Mukhadushika to be Kapha, Vata and Rakta. Acharya Charak, instead of speaking Mukhadushika, has called Pidika and the cause by Pitta and Rakta Dhatu.^[6] Acharya Vagbhatta has described the deformity of Med in causes of Mukhadushika. Acharya Sharangdhara has considered the cause of Mukhadushika to be the Mala of Shukra Dhatu.^[7] Bhavprakash considered the reason for Mukhadushikato be Swabhava (behavioural changes). The causes of acne mainly divided into 4 parts- Aaharaj (diet), Viharaj (Physical activities), Manas (Psychological), Kalaj (Age and Season).

Aaharaj (diet)- Excessive intake of Katu, Amla and Lavan Ras, Ushna, Tikshna, Abhishyandi, Snigdha and Guru Guna, Oily food material, Chinese food, Dairy milk product, Glucose diet etc.

Viharaj (Physical activities)- Divaswapna, Ratrijagaran, Atiaatapsevan, Anidra or Alpnidra.

Manas (Psychological)- Atikrodha, Atishoka, Atichinta, Atibhaya, Swabhava

Kalaj (Age and Season)- TarunyaVaya (Young age), Sharad, Grishma and Vasant Ritu.

Rupa of Mukhadushika (Sign and Symptoms)

According to Sushruta- "Shalmali Kantak Prakhya Pidika" (Papules formation like shalmali thorn) over the face. Acharya Vagbhatta has described the signs and symptoms of Mukhadushika in more detail than Sushruta.^[8]

Anxiety

Depression.

Socially withdrawn.

Poor facial aesthetics.

Samprapti of Yuvanpidika

According to the Ayurveda, Yuvanpidika occurs due to the Prakopa of Vata, Kapha, Vayu and Rakta Dhatu which leads to the formation of structure resembling Shalmalikantaka. The formation of Yuvanpidika is a complex process. There are various factors which affect the equilibrium between the Doshas and Dhatus in the body especially Vata, Pitta, Kapha Dosha and Rakta

Dhatu. Due to such disturbed equilibrium, the aggravated Doshas and Dhatus causes obstruction of the Lomakup i.e. pilo-sebaceous unit. This obstruction result into swelling of that particular area and leads to the formation of micro-comedones.^[9] After certain time, due to the affect of metabolism (Paka) there occurs the formation of pustules, papules and cysts. Sometimes these microcomedones rupture resulting into formation of Vrana Vastu (scar)^[10] According to some scholars, Pitta is also involved in Samprapti of the Acne. The character of Rakta and Pitta are similar in nature and therefore the Lakshanas like swelling, reddishness, and burning sensation are seen. Charaka says that vitiated Pitta resides in the Rakta and Sweda causing redness and swelling i.e. formation of Pidika. Shukradhatumala is also considered as an important factor for the Acne. During adolescence many physical, hormonal and psychological changes occurs in the body which are the result of the interaction of the Panchmahabhutas. There are many bi-products released during the formation of Shukra (semen) which get accumulated and causes acne.

Acne may be classified according to predominance of specific skin lesions

1. Comedonal (non-inflammatory) – mild.
2. Papular (inflammatory) – mild-to- moderate.
3. Pustular (inflammatory) – moderate.
4. Nodulocystic – severe.

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

Prevalence

Its prevalence is 80% in India and 3 out of 10 are bad enough need treatment to prevent the permanent scarring.

AIM

To review adolescence acne its management with *Ayurveda*.

OBJECTIVES

1. To review the literature of acne.
2. To review the *Ayurvedic* management of acne.

MATERIALS AND METHODOLOGY

All the related classical texts including *Sushruta* and *Vagbhat* have been thoroughly reviewed and critically analyzed and contemporary texts internet sources like Pubmed has been referred.

Causes of acne

1. PCOS and hormonal imbalance related to menstrual cycle.
2. Some drugs (antibiotics, antidepressant, tranquillizers) cosmetics.
3. Even corticosteroids and androgen hormones used in treatment in certain conditions can cause acne.
4. Excess application of hair oil, dandruff etc are the causes of acne.

5. Psychological disturbance or emotional factors also play an important role.
6. Some individuals are genetically more susceptible to acne.
7. Air pollution and humidity can worsen the acne.
8. Lack of personal hygiene.
9. Over usage of cosmetics which has direct impact on facial skin.
10. As per modern science, it is caused when the hair follicles is plugged with oil and dead skin cells.
11. Too much spicy- oily- heavy diet, more frequent consumption of dairy products including and disturbances in biological clock e.g. night awakening which vitiates *Tridoshas* and *Raktadhatu*.
12. Heavy sweating and humidity.
13. Excessively touching, resting on, or rubbing the skin.

Pathophysiology of Acne

Pathophysiology involves a series of complex interactions between hormonal imbalance, keratinization of sebaceous glands and secondary infection. Increased sebum production by sebaceous glands and abnormal desquamation of hair follicles occurs in response to increased androgen levels with onset of puberty. Obstruction of adjacent hair follicles with increased levels of androgen causes follicular distension, which is after accompanied by the proliferation of the bacteria *Propionibacterium acnes* and the activation of an inflammatory response causing bumps on face, upper part of chest and back as sebaceous follicles are in great number on these areas. When excess of sebum dries and hyper keratosis at the opening of hair follicle occur it give rise to black or white comedo. Due to sebum, chemical changes occur in comedo, at first it is not infected but due to secondary infection, bacteria multiply within the plugged pores pus formation takes place causing tender red pimple.

According to *Ayurveda* due to above said reasons *Tridoshas* specially *Pittadosha*, *kaphadosh* get affected and in turn they lead to vitiation of *Rakta dhatu* and *Mamsa dhatu*. This causes constant irritation in the localized areas like face, neck, shoulder, chest and eruptions known as acne/pimples.

Ayurvedic Management

As patients suffering from acne are not serious in general terms but they are in need of assurance as they are at the low level of confidence. Mild acne can be treated with over the counter medication, more severe acne needs medical attention. First rule out the cause e.g. PCOS, hormonal imbalance etc. Then make sure that face should be free from oil so wash it 3 – 4 times with water and mild soap.

A. Shaman Chikitsa

With mild laxative like *Avipattikar churna*, *Gandhav haritaki*; following drugs have dramatic results on acne.

1. Blood purifying, detoxifying herbs possessing astringent and bitter tastes can be used as astringent taste helps to dry up the oil and bitters like *neem*, *turmeric* etc have antibacterial effect, they cleanse the acne heal it quickly.
2. *Rakta Chandan*, *Khadir* and *Manjishtta* improve the blood circulation and purify the blood.
3. *Amalaki* nourishes the skin and blood.
4. *Shatavari*, *Ashwagandha* and *Ashok* help to correct hormonal imbalance.
5. *Saptamrut loha* and *Mahamanjishttadi* decoction have positive results.
6. *Triphala guggul* dries up the sebum and clears the channels and pores.
7. *Arogyavardhini* and *Keshour guggul* helps to regulate *vata* and *pitta doshas*.
8. *Sanshamni vati*. It contains anti-inflammatory properties which helps reduce swelling and relieve skin inflammation.
9. *Usheerasav*, *Chandanasav* and *Arvindasav* help to purify blood, dries up sebum and act as blood tonic respectively.

B. Shodhan Chikitsa

In severe cases vomiting (*Vaman*) which helps to remove vitiated *Kapha dosha* from body and purgative (*Virechan*) which helps to remove vitiated *Pitta dosha* from body are very effective. We can also give the blood – letting therapy (*Raktamokshan*) as there is vitiation of *Rakta dhatu* is there. *Nasya*, *Upanah swedan* chronic disease and *bahudoshattva* in stage above shodhan is very useful. In *mukhadushika doshas* are situated in *shakhamarg* so far eliminating them shodhan is very useful.

C. Local application

1. Complexion enhancer like turmeric, sandal wood paste etc.
2. Coolants and mind soothing medicines like *Chandan*, *Draksha* and *Usheer*.
3. *Daruharidra* and *jaiphal* help to reduce the acne scars and gives glow to the face.
4. Paste of *Sariva* and *Manjishttha* as mild scrub.
5. *Kumkumadi tail* also works very well as applied overnight.
6. Local *Swedan* helps to open the channels and pores.

OBSERVATION

Due to above stated causes adolescence acne is observed though its pathophysiology is complex and having a series of various interactions it is not serious but can damage the self esteem of youth. So the treatment should be started with counseling and then stepwise purification pacification of body should be done.

DISCUSSION

In *Ayurveda* Adolescence acne can be compared with *Tarunyapitika* in which due the specific reasons *Vata* and *pitta dosha* along with *kapha dosha* are vitiated which in turn vitiates the *Rakta dhatu* and *Mansa dhatu* leading to

cause acne. During puberty excess production of sebum takes place which blocks the sebaceous follicle. Increased amount of sebum combine with number of desquamated epithelial cells and this material is accumulated and distends the follicle forming a micro comedo. The micro comedo expands in size to form an open or closed comedo. With *Swedan* and mild scrub the channels can be opened. *Ayurveda* has whole body purifying and detoxifying therapies like *Vaman* and *Virechan* which are beneficial on adolescence acne. By using antibiotic, blood purifying, cooling, nourishing and healing properties of *Ayurvedic* drugs, we can give a new ray of hope to the adolescent who are suffering from the same. *Acharya Sushruta* has explained in *Chikitsasthan* that if the disease is located in *Tvak (Rasa)*, cleansing and pasting should be used; if it is located in blood, evacuation, pasting, intake of decoction and blood-letting are useful and in disease being located in muscle, cleansing, pasting, intake of decoction, blood-letting, use of *Arishtthas* should be done. So in *Tarunyapitika* as there is vitiation of *Tridoshas* along with *Rakta dhatu* is present, so elimination of accumulated toxic products by *Shodhan* and pacification and correction of the entities by *Shaman chikitsa* should be done so that combination of *Ayurvedic* decoctions and formulations are practiced.

CONCLUSION

Acne is a common disorder associated with considerable patient distress, anger and depression and also disturbed biological clock and hormonal imbalance and also associated with environmental factors. The pathophysiology of acne involves a complex series of interactions between hormones, alterations to keratinization of sebaceous glands, and bacterial infection. Mild acne can be treated with over the counter medication, more severe acne needs medical attention and *Ayurveda* has a treasure of herbs, formulations and different body purifying therapies like *Vaman*, *Virechan* and *Raktamokshan*, by using this adolescence acne can be cured and even its scars can also be lightened. With due care and following the biological clock we can overcome the acne and prevent permanent scarring also.

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