

Mukhadushika And Its Management – A Review

Mansi Prashant Dive¹, ^{*}Dr. Sonali Wairagade², Dr. Asha Kaikade³ Dr. Ranjit Ambad⁴, Dr. Nandkishor Bankar⁵

¹Third Year Student, Datta Meghe Ayurved Medical College Hospital and Research Centre, Wanadongri, Nagpur, Maharashtra

²Professor, Department of Kayachikitsa, Datta Meghe Ayurved Medical College Hospital and Research Centre, Wanadongri, Nagpur, Maharashtra

³Assistant Professor, Department of Agadtantra, Datta Meghe Ayurved Medical College Hospital and Research Centre, Wanadongri, Nagpur, Maharashtra

⁴ Associate Professor Dept. of Biochemistry Datta Meghe Medical College, Datta Meghe Institute of Medical Sciences, Sawangi (Meghe) Wardha

⁵ Associate Professor Dept. of Microbiology Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences, Sawangi (Meghe) Wardha

email id: sonaliwairagade@gmail.com

Abstract:

Tarunyapitika or Mukhadushika or Yauvnapidika is explained by Sushruta under Kushudrarogas. This disease is very common observed and described under kshudra roga by various Acharyas. Herb Shalmali Kantka like a small bump or blemish appear on the face skin. Different kinds of herbal treatments are stipulated in Ayurveda that assist to treat Acne, recover the vanished attractiveness and revitalize the individuality.

Acne appears on face when hair follicles got stuffed with oil and dead cells of the skin. Because of Acne white heads, black heads and pimples appears on the face, chest region, back and upper parts of shoulder region. Acne is commonly occurs in teenagers. Both genders and people of all ages are commonly affected by this disease. When these acnes are not treated in early stage they start growing rapidly and turn into sever condition. Permanent scars appear on the skin. In teenagers these scars on face mentally depress young ones and also develop sense of insecurity within them. Hence there is very much need of proper treatment so that all types of medical conditions can be prevented.

Keywords: Acne-Vulgaris, Kshudra roga, Mukhdushika

Introduction:

Mukhadushika also called as Yuvan pidika (Tarunyapitika) is illustrated in Sushrut Samhita by Sushruta. He explained it in Kushudrarogas. It looks like kantak of herbal plant Shalmali so it is called as "Shalmali Kantka Sadrush Pidika" ^[1]on face. Mukhadushika can be co-related with acne vulgaris which is explained in modern science.

Mukhadushika commonly occurs at puberty stage. At this age sebaceous glands are more active. ^[2] As face gets affected mostly ; beauty conscious youngsters may suffer from inferiority complex and depression.

In Ayurveda Mukhadushika is illustrated under Kshudra Kushtha. Skin gets affected mainly by vitiated Pitta dosha along with Rakta. This Kupit Pitta This mala pitta through the blood circulation

which leads to kapha prakopa in twacha and this kupit kapha dosha obstructs the opening of swedavaha strotas i.e. sebaceous glands. Thus develops Mukhadushika. Various Traditional ^[3] treatments are also used for skin diseases.

According to Modern Science Mukhadushika is correlated with Acne Vulgaris. Acne vulgaris is a infection of the pilosebaceous follicle. It is mainly characterized by non-inflammatory white and black heads, and inflammatory lesions like inflamed papules, and pustules. Acne is reactive to various therapies to clear the lesions, prevention of scar and thus indirectly prevents psychological stress of that individual.

Ayurvedic Review: Historical Review:

In Vedic kala^[4] and Pauranik kala there is no description of Mukhadushika elaborated in texts.

Samhita Kala Review:

- Charaka samhita: Dominance of pitta in twacha and shonit
- Sushruta samhita: Illustrated as mukh dushika with forty four types of kshudra roga
- Vagbhata^[5]: Illustrated in both ashtang sangraha and ashtang hridya with thirty six types of kshudra roga
- Madhav Nidan: As per Sushruta he Illustrated the disease and is called by the name yuvan pidika with forty three types of kshudra roga.
- Sharangdhar^[6]: He Illustrated as yuvan pidika with sixty types of kshudra roga
- Bhav Prakash: Illustrated as dominance of kapha, vata and rakta of kshudra roga. Both genders suffer with this disease.
- Yog Ratnakar: Illustrated as yuvan pidika under ksudra roga. This disease is due to dominance of kapha, vata and rakta.

Nidana of Mukhadushika:

Causative Factors of Yuvanpidaka or Tarunyapitika or Mukhadushika

Kala	Aahar (food)	Vihar	Manas (anxiety)	
(age)		(actions)		
Tarunyatva (adolescent)	Katu & Madhur	Vibandha	Udasinta	
Madhyanha (afternoon)	Guru	Anidra	Prakshobh	
Vasant Ritu (spring)	Snigdha & Dughdha Varga	Nidra	Santap	
Grishma Rutu (summer)	Mamsa	Upavasa	Santapa	
Sharada Rutu	Madhya	Atapsevana	Svabhava (Behavioural changes)	

Purva Roopa:

Mukhadushika comes abruptly with the facial appearance of white and black heads.

Following are the characteristic features -

- Loss of sensation sometimes
- No sweating or profuse sweating
- Change in skin colour
- Prominent rashes
- Burning sensation
- Acute pain
- Physical exertion

- Extreme pain in wounds
- Lack of sensation
- Extreme unevenness
- reddish black staining of skin

Roopa:

Signs and symptoms of Mukhadushika indicated by different Acharyas

Sr.No.	Signs and Symptom	Charaka	Sushrut	Vagbhata	Madhava
1	Shalmali Kantakakara	Absent	Present	Absent	Present
	(Just like thorn of Shalmali)				
2	Shoth (inflammation)	Present	Absent	Absent	Absent
3	Raktavarniya (congetion)	Present	Absent	Absent	Absent
4	Vedna (Pain)	Absent	Absent	Present	Absent
5	Bhariv (in cluster)	Absent	Absent	Present	Absent
6	Pitvarniya vrana (yellow fluid in	Absent	Absent	Present	Absent
	the papules)				

Samprapti:

Vitiated vata, pitta and kapha doshas approaches the raktadhatu and it becomes dushit and due to this abnormal creation of kupit pitta occurs. This Kupit Pitta This mala pitta through the blood circulation which leads to kapha prakopa in twacha and this kupit kapha dosha obstructs the opening of swedavaha strotas i.e. sebaceous glands. Thus develops Mukhadushika.

Samprapti Ghataka :

- Dosha Kapha and Vata
- Dhatu -Rasa, Rakta and Meda
- Upadhatu Twak
- Agni Jatharagni mandya
- Srotas Svedavaha, Raktavaha
- Shrotodusti Sanga
- Udbhavasthana Ama-pakwashay
- Sancharasthana Sarva shareera
- Vyakta sthana Mukha
- Adhisthana Twak
- Rogamarga Bahya rogamarga

Chikitsa (Treatment):

A. Systemic

- 1. Vamana : Due to vamana Kaphaja abnormalities get subsided
- 2. Nasya : Through nasal route medicine are given in Urdhvajatrugata Rogas
- 3. Virechana: This treatment is useful in the removal of excess pitta and thus helps

in samprapti vighatan.

B. Local/External Treatment

Local or external applications have instant effect on the archetypal characteristic features of the Mukhadushika such as burning sensation, itching, pain etc. Many types of Ayurvedic combinations are given in the form of powder, paste, gel, etc. Following methods are adapted for the treatment. -

1. Lepa:

One of the Kalpanas discussed under Panchavidha Kashaya is Kalka Kalpana (fine paste), which involves forming bolus of fresh or dry herb by adding water. Kalka Kalpana can be utilised for both external and internal purposes; and one of the Upakalpanas is Lepa Kalpana which is used in Ayurveda as external purposes.^[7]

Following mixtures in the form of Lepa are applied on face -

- Mixture of Varnya Dravyas.
- Vatapatra, Narikelapushpa, and Shukti
- Lodhra, Dhanyaka, Vacha over Mukha.
- Gorochana and Maricha.
- Matulungajata, Ghrita, Manashila and cow dung this formulation should be applied over the face itimproves the complexion and cures the Yauvana Pidika and Nyaccha.
- Jatipala, Chandana, Maricha.
- Kumkumadi Taila
- Vacha, Lodhra, Saindhava and Sarshapa
- Dhanyaka, Vacha, Lodhra and Kusta.
- Lodhr and,Tuvaraka.
- Arjuna mixed with milk.
- Manjista Churna mixed with Madhu.

2. Surgical Treatment

- Chedana
- •Agni Karma
- •Kshara Karma
- •Rakta Mokshana
- •Siravyadha.

Acharyas described treatment as follows -

- Sushruta ^[8] Samhita: Vaman, Lep
- Astang Hridaya^[9]: Vaman, Lep, Nasya, Siravedha
- Bhavprakash^[10] Lepa, Vamana, Abhyang (oil massage)
- Yoga Ratnakara^[11] Siravedha, lepa, Abhyang (oil massage)

- Sharangadhara Samhita^[12] Lepa
- Bhaishajjya Ratnavali^[13] Siravedha, lepa, Abhyang (oil massage)

Modern Review:

Etiology of Acne:

Exact cause is unknown. But there are four etiopathogenetic factors:-

- 1) Increase sebum secretion ^[14] (seborrhea)
- 2) Abnormal follicular keratinization (retention hyperkeratosis)
- 3) Growth of anaerobic bacterium in pilosebaceous unit
- 4) Inflammation
- 5) Others-
- a) Puberty-major trigger factor
- b) Hormonal changes [15]
- c) Drugs
- d) Stress
- e) Environmental factors
- f) Genetics

Pathophysiology:

Hyperactivity of sebaceous gland and increase production of bacteria in sebum leads to increase sebum production and Hyperproliferation of keratinocytes Leads to retention hyperkeratosis. Which causes Formation of plug of keratin and sebum in follicular duct dilated sebaceous follicle produces lesions of Acne/ Comedones.

Types of Acne Lesions:

- 1. Non inflammatory Comedones i.e. blackheads/whiteheads
- 2. Inflammatory- papules/ pustules/ cyst/ Nodules

Classification of Acne Lesions:

On the basis of Severity and morphology-

- 1. Mild Acne:
 - a small bump or blemish on the skin
 - intermittent papules and pustules
- 2. Moderate Acne:
 - Inflammatory condition, superficial papules and pustules,
 - a small bump or blemish on the skin may also be present
 - Lesions may cure with scars.
- 3. Severe Acne:
 - Larger depth and more number of lesions,
 - Papules, pustules, nodules, cysts and possiblyabscesses may be present on the skin
 - Scar and keloid formation can occur.

Morphology:

- 1. Acne Vulgaris:
 - Commonly found in adults.
 - A small bump or blemish on the skin are commonly seen in a 10-year-old children
 - The disorder can be seen till 16-18 years and then subsides,
 - Sometimes does not disappear until the early or mid-twenties.
- 2. Acne Rosasea:
 - Disorder limited to the nose, cheeks, chin, and forehead
 - Classically occurring during middle age.
 - The facial skin becomes oily, reddened and bumpy.
 - In extreme cases, the nose may become visible very red and bulging.
- 3. Nodulocystic Acne:
 - The lesions are deep and painful papules and nodules,
 - which result in formation of scar
 - Sometimes keloid formation can occur
 - Acne can occur on the face, chest and back separately or together.
- 4. Acne Conglobata:
 - have characteristic epithelial-lined sinus tracks.
 - Seem with large, deep nodules, cysts, ulcers, abscesses, sinus tracks, scars and many blackheads.
- 5. Acne Fulminans:
 - It is a severe critical variety of acne
 - Ulceration along with fever and arthralgia.

Complication:

Main Complications are –

- Cysts, Skin abscess may occur
- Permanent facial scars, Keloids may appear on the skin
- Changes in skin color may occur
- Psychological harm to self-esteem, self-confidence, individuality, public life.

Treatment of acne:

- Almost teenagers attempt anti acne preparations bought from their pharmacist
- Local treatment is sufficient for most patients
- Although together local and systemic treatment is needed for pustulocystic scarring acne.

Local treatment

- Regular cleansing of face or affected area with soap and water.
- Chlorhexidine It's an antibacterial cleanser which is used to remove surface sebum.
- Benzoyl peroxide
 - a. This is an antibacterial agent.
 - **b.** It should be applied at night only in initial days.
 - c. It can be applied two times a day if there is no dryness or irritation
 - **d.** It is useful for inflammatory lesions.
- Azelaic acid:
 - a. It is anti-inflammatory application

- b. Reduces the formation of comedones
- **c.** It can be applied two times a day.
- d. It should not be applied more than six months

Systemic treatment Antibiotics:

1. Oxytetracycline and tetracycline -

- Dose for adult is 250 mg up to four times a day
- 1.5 g/day is needed in resistant cases.
- It should be used till 3 months to one year or two years.
- It should be taken on an empty stomach, Contraindications- pregnancy or by children under 12 years
- 2. Doxycycline -
 - Adult dose 100 mg once or twice daily
 - Patients may complain of skin reactions as side effects of the medicine

Conclusion:

Acne is a skin disease commonly found in teenagers and also sometimes in all age groups. It is characterized by pimples on the face, chest, and back. It mostly occurs when the pores of the skin become blocked with oil, dead skin cells, and bacteria. According Ayurveda; aggravated vata, pitta, kapha are main cause in explosion of acne. Vata when gets vitiated due to unhealthy diet and lifestyles affects other two doshas which are kapha and pitta. Aggravated pitta affects rakta dhatu or blood. The vitiated blood affects the skin and causes excess secretion of oil from sebaceous glands. According to Ayurveda these vitiated doshas if treated by samshodhan treatment like vaman and virechan; and if they get eliminated through the body they will never vitiate again. And also so many herbal formulations are described by various Acharyas to treat acne vulgaris. **References**:

- 1. Kaviraj Ambikadutt Shastri. Sushruta Samhita with Ayurveda tatva Sandipika Hindi commentary, Nidana sthana 13/38. Chaukhamba Sanskrit Sansthan, Varanasi; 2014.
- 2. Anthony S. Fauci, Eugene Braunwald, Dennis L. Kasper, Harrison's principle of internal medicine, 15th Edition, volume 1, section 9 Alteration in the skin: Acne vulgaris p. 314.
- 3. Rathi B, Rathi R. Ethno Medicinal documentation of plants used in the treatment of skin diseases by the tribal's of Karanja Ghadge Tahsil of Wardha District Jr of School of Adv studies, Jan -June2019;2(1):22-26
- 4. Agnivesh, Revised by Charaka and Dridhabala, Introduction by Sri Satyanarayana Shastri, Charaka Samhita, Vidyotini Hindi commentary, Sutra sthana 18/24, Chaukhamba Bharati Academy, Varanasi, Vol-1, Reprint; 2009. p. 379.
- 5. Pandit Hari Sadashiva Shastri Para Dakar, Ashtanga Hridaya of Vagbhata, Uttara Tantra Adhyaya 31/6, Chaukhambha Orientalia; Varanasi; 2002
- 6. Kumar S, Palbag S, Maurya SK, Kumar D, Skin care in Ayurveda: A Literature dreview. International Research Journal of Pharmacy 2103; 4(3): 1-3
- Dhote M, Rathi B, Rajput DS, Dongre R. A review on Lepa Kalpana: An inherent topical formulations described in Sharangadhar Samhita. Journal of Indian System of Medicine. 2019 Apr 1;7(2):75
- 8. Vd. Anantram Sharma. Sushruta Samhita Chikitsa sthana 20/36-37; Chaukhamba Surbharti Prakashan; Varanasi; 2010. p. 332.

- 9. Tripathi Brahmanand, Ashtanga Hridaya of Vagbhata, Nirmala Hindi Commentary, Uttar Tantra Adhyaya 32/3, Chaukhamba Sanskrit Pratishthan; 2009. p. 1119.
- 10. Bhishgratna Pandit, Shri Bramha Shankar Mishra. Bhavprakash, Madhyam khanda 61/35; Chaukhambha Sanskrit Sansthana; Varanasi; 2003. p. 587.
- 11. Shastri Vaidya Laksmipati, 7th edition of Yoga Ratnakara, Vidyotini Hindi Commentary, Kshudra rogadhikar, Chaukhambha Prakashan Varanasi; 2012. p. 282.
- 12. Tripathi Brahmanand, Sharangadhara Samhita of Sharangadhara, Uttar khanda Adhyaya 11/11, Chaukhambha Surbharti Prakashan; 2008. p. 392.
- 13. Shastri Ambikadutta, Bhaishajjya Ratnavali, Kşudra roga Chikitsa Chapter 60/37-38; Chaukhambha Sanskrit Sansthan; 2001. p. 663.
- 14. John Hunter, John Savin and Mark Dahl; Clinical Dermatology, Chapter 12; Blackwell publishing, 3rd edition 2002, Reprinted; 2003. p. 148-153.
- 15. John Hunter, John Savin and Mark Dahl; Clinical Dermatology, Chapter 12; Blackwell publishing, 3rd edition 2002, Reprinted; 2003. p. 148-153.