



CONCEPT OF WRINKLES IN AYURVEDA WITH SPECIAL REFERENCE TO AGEING

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ABSTRACT Wrinkles are common pathological conditions which appear on ageing skin. Due to improper lifestyle followed by individuals and other environmental factors, these wrinkles may start developing in young age also. Body factors involved in the formation of wrinkles are predominantly *Vata Dosha*, *Rasa Dhatu* and *Mamsa Dhatu*. Management of wrinkles is a tedious process and they must be prevented at their initial stage. Therapeutic steps and formulations indicated in *Bruhatrayee* which are necessary to prevent and cure wrinkles are explained here in this article. *Sneha* and *Avaleha* are one of the important formulations in the management of wrinkles along with the proper follow of steps indicated in *Dinacharya*.

KEYWORDS : Wrinkles, Vali, Ayurveda, Ageing, Sneha, Avaleha

INTRODUCTION-

Skin is reflection of our health. Quality of skin is dependent on the condition of almost all *Dhatu* of body. With increase in age, quality of each *Dhatu* inside body starts diminishing gradually. As a result, quality of skin also starts deteriorating. Formation of wrinkles is one of the most obvious manifestations of aging skin, though many times they appear untimely before the actual stage of old age. It is very difficult to cure and remove wrinkles. Therefore, formation of wrinkles should be prevented ideally.

Aim-

To study the concept of wrinkles and its management from *Bruhatrayee* with special reference to ageing.

Concept of Wrinkles

Wrinkle is a configurational change, without structural alterations at histological level.

In its pathogenesis, there is deterioration of elastic tissue network. As a result, skin becomes looser and loses ability to snap back to its original state after being deformed.

In old age, there is reduction in muscle mass and skin thickness, diminished elasticity of dermal collagen and elastin and drying of stratum corneum, resulting in loss of mechanical strength and visco-elasticity of skin.

Concept of wrinkles in Ayurveda

Wrinkles are termed as *Vali* in Ayurveda. They are one of the cardinal signs of ageing.

Wrinkles are defined as contraction or shrinking (*Samkocha*) together of skin.

Body factors involved in the formation of wrinkles are as follows-

1. *Rasa Dhatu*- *Acharya Sushruta* has stated that untimely formation

of wrinkles is due to the vitiation of *Rasa Dhatu*.

2. *Mamsa Dhatu*- *Mamsa Dhatu* exhibits the attribute of *Sthitishapakatva*. The term "*Sthitishapakatva*" means when some form of force is applied to stretch or move a substance, it returns to its original state after removing that force. Along with *Mamsa*, this property is also seen in skin as *Mamsadhatu* is closely related to skin. Muscle layer beneath skin loses its property of *Sthitishapakatva*. This is also termed as *Shaitihilya* and can occur due to multiple reasons.
3. *Vata Dosha*- Aggravation of *Vata Dosha* is responsible for the *Samkocha* in several body parts. In old age, there is dominance of *Vata Dosha* which is primarily responsible for *Samkocha* and formation of wrinkles.

The severity of wrinkle formation in an individual depends on *Prakruti*, *Sarata* of *Dhatu*, type of food consumed and exposure to environmental factors such as UV-B sun rays, dust, etc.

- In *Pitta Prakruti* dominant person, there is natural *Shithilatva* in their *Dhatu* due to *Drava Guna* and therefore, formation of wrinkles take place much earlier than people of *Kapha* dominant and *Vata* dominant *Prakruti*.
- Excessive consumption of food substances dominant in *Kshara* (caustic/ sharp) and *Lavana Rasa* (salty) cause *Shaitihilya* in *Mamsa* and other *Dhatu* of body and lead to the formation of wrinkles at early stage of life.

MANAGEMENT OF WRINKLES

Management of wrinkles is a challenging and tedious therapeutic goal to achieve and therefore, they should be prevented at initial stage. Administration of certain formulations through oral route, nasal route, direct application over skin and *Basti* are indicated in *Samhitas*.

Some of the formulations which are indicated to cure and prevent the development of wrinkles on skin in *Samhitas* are listed below in the form of a table.

Name of the formulation	Contents	Administration	Actions
Jivaniya Sarpi (Cha. Chi. 29/70)	Dashamula, Shatavari, Bala, Atibala, Punarnava, Amalaki, Ikshu Rasa, Aja mamsarasa, Kshira, Padmabeja, Utpala, Kashmarya, Kharjura, Akshota, Vatam, Abhishuk, etc.	Dose- 1 Karsha orally	Cures Pandu, Jvara, Hikka, Swarabheda, Bhagandara, Parshwashula, Kshaya, Kasa, Vatarakta, Plecha, Apasmara, Ashmari, Sarvanga-Ekanga Vata, Mutrasanga, Vali- Palitya. Imparts Bala, Varna and is Vrushya.
Nagabala Ghrita (A.S.Chi.5/72)	Nagbala, Ghrita, Kshira, Bala, Atibala, Yashti, Punarnava, Prapaundrika, Kashmarya, Piyaal, Kapikachu, Ashwagandha, Sita, Abhiru, Medayugm, Gokshura, Kakoli, Kshirakakoli, Jeerak, Mrunal, Bis, Kharjura, Shrungataka, Kaseruka	Oral	Bala-pushtikara param, Varnya, Aayushya, Ojasya, Vali-Palitanashan, Pitta-Rakta, Kshata-kshaya, Trushna, Bhrama, Daha

Agastya Haritaki (Cha. Chi. 18/61) (A.S.Chi.5/79-84)	Dashamula, Haritaki , Pippali, Shankhapushpi, Shati, Bala, Atmagupta, Apamarga, Chitraka, Bharangi, Pushkarmula, Yava, Goghrita, Guda, Tila Taila, Madhu, etc.	Dose- Coated around two fruits of Haritaki	Pancha Kasa, Kshaya, Shwasa, Hikka, Visham jwara, Grahani, Arsha, Aruchi, Peenasa, Hrudya Roga, Vali, Palitya, Rasayana, Varna-Aayu-Bala vardhana
Vashishthokta Haritaki Rasayana (A.S.Chi.5/85-92)	Dashamula, Bala, Murva, Haridra, Guduchi, Ashwagandha, Haritaki , Yava, Taila, Ghrita, Dhatri Swarasa, Madhu	Can be consumed in all seasons and without following any Do's and Dont's	More potent than Agastya Haritaki Rasayana
Mahakalyanaka Ghrita (Su.Ut.39/234-239)	All Dravyas of Kalyanaka Ghrita, Gandhavarga (Eladi), Ghrita, Mani (Sphatikadi). Dughda of Kapila Cow, Pushpa and Vrunta of Sumana, Champaka, Ashoka, Shirisha, Nalada (Mamsi), Lohitapadma, Keshara, Dadima.		Aayushya, Cures Sarva Jwara, Vali and Palitya
Lakshadi Yamaka (Su. Chi. 25/41)	Laksha, Rodhra, Haridra, Daruharidra, Manahshila, Kushtha, Nagkeshara, Gairika, Varnaka, Manjishtha, Vacha, Saurashtri mrittika, Patanga, Gorochna, Anjana, Padmaka, Padmamadhya, Raktachandana, Parada, Kakolyadi dravya, Kshira, Meda, Majja, Sikhthaka, Goghrita, Godugdha, Kwatha of Kshirivriksha, etc.	Vaktra Abhyanga(Massaged over face)	Removes Vali and Raktapradoshaja Vyadhi- Nilika, Vyanga, Vipadika, Kushtha. It is indicated to be used daily for king, women and similar people by Vaidya.
Saireyakadi Taila (Su.Chi.25/32-37)	Saireyaka, Jambu, Arjuna, Pushpa of Kashmiri, Tila, Markava, Beeja of Chuta, Punarnava, Kardama, Kantakaryo, Kasisa, Pinditaka, Beejasara, Triphala, Loharaja, Anjana, Yashti, Neeraja, Sariva, Modyanti are all macerated in Beejakasara and dissolved in Beejakasara and stored in Lauha Patra for 10 days. Then, Bibhitaka Taila is mixed to it and cooked and again stored in fresh Lauha Patra.	Nasya after Shodhana, Abhyanga	Indriya Bala vardhana, Prevents Akalaja Jara, Khalitya, Cures Vali over the face.
Tuvaraka Siddha Taila (A.S.Ut. 49/88-89)	Tuvarakasthi, Taila	Nasya for 50 days	Removes vali, palita, Imparts Sthira Smruti and Danta, Vapushmanta, Shrutadhar and 300 years of life span.
Kanakarishtha (Cha. Chi. 14/158-168)	Amalaki , Pippali, Vidanga, Maricha, Manjishtha, Lodhra, Sariva, Kushtha, Nagakeshara, Daruharidra, Elavaluka, etc.		Hrudya, Cures Arsha, Grahani, Anaha, Udara, Pandu, Gulma, Vali, Palitya, Khalitya, etc.

- *Nasya* of any other *Siddha Sneha* prepared with *Vata* and *Pitta Shamaka Dravyas* can cure *Akalaja Vali*.
- *Basti* is an important route for the administration of medicines as it normalizes the vitiated *Vata* and therefore, cures *Vali*.

DISCUSSION

Early formation of wrinkles is a result of vitiation of *Rasa*. Formation of wrinkles in old age is due to increase in *Vata Dosha* and undernourishment of *Rasa* and other *Dhatu*. *Shaithilya* of *Mamsa Dhatu* leading to loss of *Sthitishthapaktvais* also responsible for the formation of wrinkles.

There are few formulations indicated in *Charaka*, *Sushruta* and *Ashtanga Samgraha Samhitas* for the same. Majority of them are *Sneha Kalpanas*.

Jivaniya Ghrita and *Nagabala Ghrita* consist of *Dravyas* which are dominant in *Madhura Rasa* and *Sheeta Virya* such as *Shatavari*, *Bala*, *Yashtimadhu*, *Ashwagandha*. They are formed out of *Prithvi Mahabhuta* predominantly and help in retaining the *Sthitishthapaktva* property of skin and *Mamsa Dhatu*. *Dravyas* such as *Kharjura*, *Kashmariya* are suitable *Rasayana Dravyas* for *Rasa Dhatu*. Other *Dravyas* such as *Kshira*, *Aja Mamsa Rasa* are *Brumhana* in action. These formulations impart strength to *Rasa*, *Rakta* and *Mamsa Dhatu* and prevent wrinkles. They can be used when there is dominance of *Vata* and *Pitta Dosha* or *Apatarpaniya Hetu* are responsible for the formation of wrinkles. *Mahakalyanaka Ghrita* consists of *Dravyas* such as *Dugdha*, *Lohitapadma* and *Eladi Gana* which have affinity towards *Rasa Dhatu*. They eliminate *Doshas* from *Rasa Dhatu* and make skin healthier and glow.

Avaleha formulations such as *Agastya Haritaki* perform *Rasayana action* by bringing excellence to all *Dhatu* and prevent the formation of wrinkles. They perform *Rasayana action* by two steps- a) *Srotoshodhana- Haritaki*, one of the major ingredients of above formulations performs *Dosha Anulomana* and *Srotoshodhana*. b) *Agnideepana-Dravyas* present in these formulations are of *Katu*, *Tikta*, *Ushna* dominant attributes such as *Chitraka* and *Pippali*. These formulations prevent the formation when administered at young age.

They are ideal to be used when there is dominance of *Vata* and *Kapha Dosha* or when *Santarpaniya Hetu* are responsible for the formation of wrinkles. *Haritaki*, the most prominent content of *Avaleha* formulations mentioned above bears anti-oxidative and anti ageing properties. Extract of *Haritaki* (*Terminalia Chebula*) exhibits cytoprotective effect against UVB (one of the factors responsible for wrinkles) induced oxidative damage.

Lakshadi Yamaka consists of predominantly *Kashaya*, *Madhura*, *Tikta* dominant *Dravyas* which also have *Varnya* actions such as *Laksha*, *Manjishtha*, *Manahshila*, *Kshirivriksha*. They normalize and maintain the equilibrium of vitiated *Pitta*, *Kapha* and *Rakta*. It also consists of *Sneha Dravyas - Meda*, *Majja* and *Goghrita*. This form of *Sneha* is used when there is excessive dryness in body. This one formulation is indicated as a topical administration to prevent wrinkles over the face.

Taila such as *Saireyakadi Taila* is dominant in *Tikta*, *Kashaya* and *Madhura Rasa* dominant *Dravyas*. *Tikta Rasa* imparts *Sthirakarana* to *Twak* and *Mamsa*, *Kashaya Rasa* performs *Twakprasadana* and *Madhura Rasa* is *Twachya*. All these factors remove *Shaithilya* from *Mamsa* and make it compact and exhibit the action of *Valinashana*.

Kanakarishtha is one *Sandhana* formulation mentioned in *Charaka Samhita* which cures *Akalaja Vali* developed mainly because of vitiation of *Mamsa Dhatu*. *Amalaki*, the major content of *Kanakarishtha* also exhibit anti oxidant action and consists of micronutrients- Vitamin C and Vitamin E along with Gallic acid which impart nutrition to health and prevent wrinkles.

Due to consistent environmental changes, *Nasya* and *Abhyanga* which are two important steps of *Dinacharya* should be applied in daily life as a preventive and curative measure for wrinkles.

Nasya of *Sneha Dravya* pacifies *Vata*, purifies the *Srotas* of head and restores the anatomy of face.

Skin is a seat of *Vayu* and *Abhyanga* is an important procedure administered on *Twak* to control the vitiated *Vayu*.

Basti is the most important and vital therapy for the control of vitiated *Vata Dosh*. Equilibrium of *Vata Dosh* in *Pakwashaya* brings equilibrium to *Vata Dosh* all over the body and helps in the removal and prevention of wrinkles.

CONCLUSION

Wrinkles can be prevented from occurring at early stage and can be delayed by following *Dinacharya* steps namely *Nasya* and *Abhyanga*. *Sneha* and *Avaleha* formulations are likely to be more effective than other forms of formulations in preventing and curing the formation of wrinkles at early stage of life.

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