RESEARCH PAPER

Empowering Midlife Women: The Role of Shatavari Gulam in Menopausal Health: A Narrative Review

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ABSTRACT

Background: Menopause is a natural transition associated with diverse health challenges that may affect the physical and psychological well-being of women. Ayurveda emphasizes Rasayana therapy and Vata-Pitta Shamana in promoting health during this stage. Shatavari Gulam, an Ayurvedic Avaleha formulation, may offer a traditional approach to supporting menopausal health.

Objective: To explore the therapeutic significance of Shatavari Gulam in menopausal health, focusing on its Ayurvedic rationale, traditional properties, and potential benefits.

Methods: A narrative review was undertaken based on classical Ayurvedic literature and relevant published scientific studies concerning Shatavari (*Asparagus racemosus*), Avaleha Kalpana, and their relevance to menopausal health.

Conclusion: Shatavari Gulam may represent a promising Ayurvedic formulation for supporting women's health during menopause, owing to the traditional Rasayana and adaptogenic properties of Shatavari. However, further scientific and clinical investigations are required to establish its efficacy, safety, and role in the management of menopausal symptoms.

Keywords: Shatavari Gulam, Menopause, Rajonivritti, Shatavari, Avaleha, Rasayana.

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INTRODUCTION

Menopause is an important and inevitable physiological turning point in women's lives. The number of postmenopausal women is continuously increasing owing to the rise in the global population. About 26% of all females below 50 years have already entered the postmenopausal stage, while early age menopause increased by 21% . The decrement in estrogen causes an imbalance in the HPO-axis, leading to irregular cycles and eventual cessation of cycles. This change in hormones gives rise to a variety of symptoms like hot flashes, urogenital infections, osteoporosis, anxiety, sleep disorders, and cognitive dysfunction. About 75% of women suffer from menopausal symptoms due to estrogen deficiency. By 2025, the number will reach 1.1 billion menopausal women. Even though HRT reduces these symptoms, it introduces a lot of risks, such as breast cancer and thrombo-embolism; hence, its use demands much safer alternatives(A).Shatavari is mentioned in women's healthcare practices. Beginning from the regulation of the monthly cycles to pregnancy and post-natal stages, the capability of Shatavari to enhance the female reproductive organs is well known. Ayurveda relates menopausal disorders to conditions of Jaravaya, Rajonivritti, Dhatu-kshaya, and Vata-vriddhi. Ayurveda proposes Rasayana and Vata-Pitta Shamana.*Avaleha* or *Leha* is a semi solid dosage form of Ayurvedic pharmaceutics intended for internal administration. It is prepared by addition of jaggery, sugar or sugar candy and boiled with prescribed drug decoction or drug juice etc. liquids. It can be consumed along with some adjuvant. According to Acharya Sharangdhara the solid mass obtained by evaporating moisture content of aqueous solution (*Swarasa, Kwatha*, *Hima* and *Phanta*) is known

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as *Avaleha* or*Leha* and the process is known as *Rasakriya*. The word *Avaleha* has been coined from *'lih-aswadane'*. Metabolism and absorption of *Avaleha* starts from the mouth itself due to the presence of good number of sweetening agents like glucose, fructose etc. *Avaleha*is an *Upakalpana* of *Kwatha klapana.*In present era, *Avaleha* is gaining rapid importance because of its good compatibility and dietetic value[1].

Shatavari is frequently suggested in Ayurveda to relieve menstruation discomfort, balance hormones, and improve lactation. Its reputation as a uterine tonic and fertility booster has earned it a position of distinction in both traditional and modern approaches to women's healthcare. Adaptogenic and Hormonal Balance Properties Another feature of shatavari's traditional use is its adaptogenic properties, which highlight its ability to alter the body's stress response. Shatavari, as an adaptogen, aids in the restoration of equilibrium during times of physical and emotional stress. It is thought to nourish and renew the body while also encouraging resilience and vigor. Shatavari's influence on the endocrine system is particularly remarkable in the context of hormonal homeostasis. It is frequently sought after for its ability to treat illnesses such as polycystic ovarian syndrome (PCOS) and reduce menopausal discomfort.[4]

MATERIALS AND METHODS

Shatavari in Women's Reproductive Health and Wellness

Shatavari (*Asparagus Racemosus*) belongs to Aspergaceae family is an important drug in Ayurveda. Steroidal saponins are thought to be the principal bioactive constituents of shatavari root. These saponins are known as shatavarins I–IV, and they are glycosides of sarsasapogenin. Shatavari root also contains other chemical constituents of note, including racemosides, racemosol, racemofuran and asparagamine A, all of which display antioxidant activity. The limited research that exists suggests that shatavari also contains phytoestrogenic compounds that are capable of binding to the estradiol (E2) receptors (E2R). Indeed, E2R functionalised magnetic nanoparticles can isolate phytoestrogens of 4.6 nmol E2-equivalent activity from a 1-mg crude extract of *Asparagus racemosus*.The phytoestrogens that are most relevant to human health are those for which the following is the case: (1) they are distinct from structures that occur naturally in mammals; (2) they are contained in plants that are consumed by humans; and (3) they are bioavailable and capable of binding to human E2R. Thus, the isoflavones genistein and daidzein, the coumestan, coumestrol, the lignans enterolactone and enterodiol, the flavonols quercetin, kaempferol, rutin and the stilbene resveratrol represent the most prolific and relevant dietary forms of phytoestrogens in humans. In silico research suggested that shatavari-derived phytoestrogens, including rutin, kaempferol, genistein, daidzein and quercetin, bind to E2R with greater affinity than a selective estrogen receptor modulator control, bazedoxifene. [2]

The available literature indicates that Shatavari(Asperagus racemosus) contains phytoestrogenic compounds that are able to interact with the estradiol receptors. Phytoestrogens in Shatavari, namely the steroidal saponin compounds known as Shatavarins, quercetin, and glycosides©,

Girls and women are more frequently exposed to psychological, physical and physiological stressors during their reproductive life. Based on animal studies, we propose that stress causes OS that negatively affects the physiology of the ovary by reducing estradiol-17 β level and inducing granulosa cells as well as oocyte apoptosis. Oocyte apoptosis deteriorates oocyte quality that reduces fertilization rate and thereby reproductive outcome. Shatavari is frequently used to treat reproductive health disorders. We propose that *shatavari* possibly nourishes ovary by increasing estradiol-17 β level, reducing OS level, increasing antioxidant ability to correct the reproductive health disorders. To strengthen this possibility, further studies are required to understand the molecular mechanism of *shatavari* action in greater detail in order to improve the treatment strategy of such important herbal reproductive health tonic of women in Ayurvedic system of medicine.[3]

Avaleha Kalpana:

Avaleha Kalpana is the *Upakalpana* of *Kashaya Kalpana*. It is prepared by adding sweetening agents to Kashaya or other liquids and by heating until it attains proper confirmatory signs.[5]

Definition:

According to Acharya Sharangadhara,[6] decoctions etc. preparations are heated further to obtain *Avaleha* and *Rasakriya* which are in thicker consistency. According to Acharya Charaka[7], Preparations which are made by heating sugar syrup etc. sweet substances up to a specific proportion and are consumable by licking is called *'Leha'*.

Synonymns:

Various synonyms are given which are as follows:

- *Lehya*
- *Leha*
- *Avaleha*
- *Rasakriya*
- *Ghana*[8]

Common ingredients of *Avaleha*[9]

1. *Drava Dravya* (aqueous medium) - *Swarasa, Kwatha, Hima* or any liquid medium.
2. *Madhura Dravya* (substrate) - Sugar, jaggery, and sugar candy.
3. *Prakshepaka Dravya* - Fine powder, pulp
4. *Sneha Dravya* - Ghee, Taila, honey.

Preparation of *Avaleha:*[10]

1. A clean and dry vessel is taken and *Dravadravya* is added to *Kwatha* is prepared and then *Madhura dravya* is added.
2. Throughout the heating, continuous stirring is carried so as to prevent the charring as well as for creating feasibility for proper dispersion of the chemical constituents of the drugs.
3. Before the *Aasanna paaka lakshana, Kalka dravya* is added.
4. Stirring is continued until proper *Paaka siddhi lakshanas* are attained.
5. Usually, *Prakshepas* are added in slightly hot condition. Proper mixing is necessary to avoid the accumulation or improper distribution of *Prakshepa dravyas*.
6. If *Madhu* is mentioned in the formulation, it should be added only after complete cooling of the product

Duration of Paaka: [11]

Sharngadharacharya opines that, the preparation of *Ghrita, Taila* and *Guda (Avaleha)* should not be completed in one day. It will allow the complete or maximum transfer of active ingredients within *Kalka* into ***Shatavari gudam*** **[17] Ref 1** liquid or *snehadravya* of *Avaleha* if carried in a greater number of days.

Sidhilakshana **[12]**

- *Tantumatwam(Thread consistency)*
- *Apsu majjana(Sinks in water)*
- *Kharatva/Sthiratwam(Rough and stable)*
- *Peedite bhajate mudram(Imparted finger prints)*
- *Gandha-varna- rasodbhava (Appreciable colour,odor and taste).*

Usual dosage: [13]

Usually, it is recommended in the dose of 48 gram. But in practice it is administered in the dose of 5-10 gram in adults and 3-6 gram in children.

Anupana (Adjuvant)**[14]**

Usually, Ksheera (milk), Ikshurasa (sugarcane juice), Yusha (soup), Kashaya (decoction) prepared with Pancha Moola or Vasa is used as *anupana* for the intake of *Avaleha.* These are determined according to *roga prakrit*(Nature of the disease)i,rogi(Patient) etc.

Time of administration [15]

- For *urdwajatrugatavikaras(diseases of the head region)*, *Avaleha* is indicated to be taken in the evening.
- For the diseases of the rest of the body parts, *Avaleha* is to be taken before having food.

Shelf life: [16]

One Year

Sl no	Ingredients	Botanical name	Part used	Quantitiy
1.	*Shatavari swarasa*	*Asparagus racemosus.Wild*	*Moola*	*1 Adhaka (3.072 L)*
2.	*Ikshu rasa*	*Saccharum officinarum. Linn*	*Kanda*	*1 Adhaka (3.072 L)*
3.	*Grita*	*-*	*-*	*1 Prastha (768 g)*
4.	*Kusthumburu (Dhanyaka)*	*Corriandum sativum. Linn*	*Beeja*	*½ Pala*
5.	*Krishna (Pippali)*	*Piper longum.Linn*	*Phala*	*½ Pala*
6.	*Dhatri*	*Emblica officianlalis.Gaertn*	*Phala*	*½ Pala*
7.	*Kushta*	*Saussures costus.Lipsch*	*Moola*	*½ Pala*

8.	*Padmaka*	*Prunus cerasoides D. Don.*	*Kandasara*	*½ Pala*

***Rasapanchaka* of *dravyas:*[18]**

Sl no	***Dravya***	***Rasa***	***Guna***	***Veerya***	***Vipaka***	***Karma***
1.	*Shatavari*	*Madhura, tikta*	*Guru,snigdha*	*Seeta*	*Madhura*	*VP Shamaka*
2.	*Ikshu*	*Madhura*	*Guru*	*Seeta*	*Madhura*	*VPshamaka*
3.	*Kusthumburu*	*Kashaya, tikta*	*Laghu Snigdha*	*Ushna*	*Madhura*	*Tridoshahara*
4.	*Krishna*	*Katu*	*Teekshna, Laghu, Snigdha*	*Anushna*	*Madhura*	*KV Shamaka*
5.	*Dhatri*	*Amlapradhana lavanarasa varjitha pancharasa*	*Ruksha, Laghu, Sara*	*Seeta*	*Madhura*	*Tridoshahara*
6.	*Kushta*	*Tikta, Katu, Madhura*	*Laghu, ruksha, teekshna*	*Ushna*	*Katu*	*KV Shamaka*
7.	*Padmaka*	*Kashaya Tikta*	*Laghu, snigdha*	*Seeta*	*Katu*	*KPhara*

- Method of preparation: General method of preparation of *Lehya* (Gudapaka).
- Dose: 10-15 gm
- *Anupana: Ksheera (Milk)*
- *Karma:Mutrala(Diuretic)*
  - *Sheetala (Coolant*
  - *Balya (Tonic*
  - *Stanyavardhaka (Galactogogue*
- Indications*: Sarva prakara mutrakricchra (all kind of dysuria)*
  - *Meha (Urinary disorder)*
  - *Rakta pitta(Bleeding diseases)*
  - *Halimaka(Liver diseases*

Ref 2 [19]

Sl no	***Dravya***	***Botanical name***	***Part used***	***Quantity***
1	*Shatavari swarasa*	*Asparagus racemosus. Wild*	*Moola*	*1 Prastha*
2	*Sita (Sharkara)*	*-*	*-*	*1 Pala*
3	*Shunti*	*Zingiber officianale. Rose*	*Kanda*	*3 Karsha*
4	*Pippali*	*Piper longum. Linn*	*Phala*	*3 Karsha*
5	*Yastimadhu*	*Glycyrrhiza glabra .Linn*	*Moola*	*3 Karsha*
6	*Ela*	*Elettaria cardamomum. Matom*	*Beeja*	*3 Karsha*
7	*Gokshura*	*Tribulus terrertris. Linn*	*Moola/Beeja*	*3 Karsha*
8	*Rasanjana*	*Berberis aristate. Dc*	*Moola twak*	*3 Karsha*
9	*Bhoomitala*	*Asparagus adscendens.Roxb*	*Kanda*	*3 Karsha*
10	*Usheera*	*Vetiveria zizanoides.(Linn) Nash*	*Moola*	*3 Karsha*
11	*Patha*	*Cissampelos pareira.Linn*	*Moola*	*3 Karsha*
12	*Vidari*	*Peuraria tuberosa. Dc*	*Kanda*	*3 Karsha*
13	*Sariva*	*Hemidesmus indicus. Schult*	*Moola*	*3 Karsha*
14	*Bhoomyalaki*	*Phyllanthus niruri. Linn*	*Pachanga*	*3 Karsha*
15	*Sarkara*	*-*	*-*	*2 Pala*
16	*Twaksheeri*	*Bambusa arundinaceae. Wild*	*Kanda*	*30 Tola*
17	*Grita*	*-*	*-*	*QS*

***Rasapanchaka* of *dravyas:*[20]**

Sl no	***Dravya***	***Rasa***	***Guna***	***Veerya***	***Vipaka***	***Karma***
1	*Satavari swarasa*	*Madhura, tikta*	*Guru,snigdha*	*Seeta*	*Madhura*	*VP Shamaka*
2	*Sita*	-				
3	*Shunti*	*Katu*	*Laghu, snigdha*	*Ushna*	*Madhura*	*VK hara*
4	*Pippali*	*Katu*	*Teekshna, Laghu, Snigdha*	*Anushna*	*Madhura*	*KV Shamaka*
5	*Yastimdhu*	*Madhura*	*Guru, snigdha*	*Seeta*	*Madhura*	*VP shamaka*
6	*Ela*	*Katu, Madhura*	*Laghu., Ruksha*	*Seeta*	*Madhura*	*PV hara*
7	*Gokshura*	*Madhura*	*Guru, Snigdha*	*Seeta*	*Madhura*	*VP shamaka*
8	*Rasanjana*	-				
9	*Bhoomitala*	*Madhura, Tikta*	*Guru,Snigdha*	*Seeta*	*Madhura*	*VP Shamaka*
10	*Usheera*	*Tikta,Madhura*	*Laghu, snigdha*	*Seeta*	*Madhura*	*VP Shamaka*
11	*Patha*	*Tikta*	*Laghu,*	*Ushna*	*Katu*	*VK Shamaka*
			Teekshna			
12	*Vidari*	*Madhura*	*Guru,Snigdha*	*Seeta*	*Madhura*	*VP Shamaka*
13	*Sariva*	*Tikta,*	*Guru,*	*Seeta*	*Madhura*	*Tridoshashamaka*
		Madhura	*Snigdha*			
14	*Bhoomyalaki*	*Tikta, Kashaya, Madhura*	*Laghu, Ruskha*	*Seeta*	*Madhura*	*PK shamaka*
15	*Sarkara*					
16	*Twaksheeri*	*Madhura, Kashaya*	*Ruksha, Laghu, Teekshna*	*Seeta*	*Madhura*	*VP sham*
17	*Grita*					

- Method of preparation: General method of preparation of *Lehya (Gudapaka).*
- Dose: 10-15 gm
- *Anupana: Ksheera*
- *Karma: Mutrala (Diuretic)*
    - *Shetala (Coolant)*
    - *Balya (Tonic)*
    - *Stanyavardhaka (Galactogogule)*
- Indications*: Sarva prakara murccha(all kind of syncope), Meha(Urinary disorder) , Raktapitha(Bleeding diseases) ,Kamala(Jaundice), Haleemaka(Liver diseases), Shoola(abdominal pain).*

Ref 3 [21]

Sl no	***Dravya***	***Botanical name***	***Part used***	***Quantity***
1	*Shatavari swarasa*	*Asparagus racemosus* .Wild	*Moola*	*1 Adhaka*
2	*Guda*	-	-	*1 Adhaka*
3	*Gritha*	-	-	*1 Prastha*
4	*Vishwa*	*Zingiber officianale. Rose*	*Kanda*	*1 Karsha*
5	*Ela*	*Elettaria cardamomum. Matom*	*Beeja*	*1 Karsha*
6	*Musali*	*Asparagus adscendens.Roxb*	*Kanda*	*1 Karsha*
7	*Patha*	*Cissampekos pareira. Linn*	*Moola*	*1 Karsha*
8	*Swadamstra*	*Tribulus terristris.Linn*	*Moola, Beeja*	*1 Karsha*
9	*Sariva*	*Hemidesmus indicus. Schult*	*Moola*	*1 Karsha*
10	*Krishna sariva*	*Cryptolepis buchanani. Roem*	*Moola*	*1 Karsha*
11	*Usheera*	*Vetiveria zizaniodes. Nash*	*Moola*	*1 Karsha*
12	*Bhoomyalaki*	*Phyllanthus niruri.Linn*	*Panchanga*	*1 Karsha*
13	*Vidari*	*Pueraria tuberosa. Dc*	*Kanda*	*1 Karsha*

14	*Magadhi (Pippali)*	*Piper lingum. Linn*	*Phala*	*1 Karsha*
15	*Madhuka*	*Glycyrrhiza glabra. Linn*	*Moola/Kanda*	*1 Karsha*
16	*Adrija (Shilajathu)*	*Asphaltum punjabinum*	*-*	*1 Karsha*
17	*Tugaksheeri (Vamsalochana)*	*Bambusa arundinaceae. Wild*	*Kanda Madhya*	*1 Kudava (192gm)*
18	*Sarkara*	*-*	*-*	*1 Kudava*

***Rasapanchaka* [22]**

Slno	***Dravya***	***Rasa***	***Guna***	***Veerya***	***Vipaka***	***Karma***
1	*Satavari swarasa*	*Madhura*	*Guru*	*Seeta*	*Madhura*	*VPsamaka*
		Tikta	*Snigdha*			
2	*Guda*	*-*				
3	*Gritha*	*-*				
4	*Vishwa*	*Katu*	*Laghu snigdha*	*Ushna*	*Madhura*	*VK hara*
5	*Ela*	*Katu*	*Laghu*	*Seeta*	*Madhura*	*PV hara*
		Madhura	*Ruksha*			
6	*Musali*	*Madhura*	*Guru*	*Seeta*	*Madhura*	*VPshamaka*
		Tikta	*Snigdha*			
7	*Patha*	*Tikta*	*Laghu Teekshna*	*Katu*	*Ushna*	*VK shamaka*
8	*Swadamstra*	*Madhura*	*Guru Snigdha*	*Seeta*	*Madhura*	*VP shamaka*
9	*Sariva*	*Tikta*	*Guru*	*Seeta*	*Madhura*	*Tridoshasamaka*
		Madhura	*Snigdha*			
10	*Krishna sariva*	*Tikta*	*Guru*	*Seeta*	*Madhura*	*Tridoshasamaka*
		Madhura	*Snigdha*			
11	*Usheera*	*Tikta*	*Laghu snigdha*	*Seeta*	*Madhura*	*VP shamaka*
		Madhura				
12	*Bhoomyalaki*	*Tikta*	*Laghu*	*Seeta*	*Madhura*	*PK shamaka*
		Kashaya	*Ruksha*			
		Madhura				
13	*Vidari*	*Madhura*	*Guru*	*Seeta*	*Madhura*	*VP shamaka*
			Snigdha			
14	*Magadhi (Pippali)*	*Katu*	*TeekshnaLaghu Snigdha*	*Anushna*	*Madhura*	*KV Shamaka*
15	*Madhuka*	*Madhura*	*Guru*	*Seeta*	*Madhura*	*VP shamaka*
			Snigdha			
16	*Adrija (Shilajathu)*	*-*				
17	*Tugaksheeri (Vamsalochana)*	*Madhura*	*Ruksha Laghu Teekshna*	*Seeta*	*Madura*	*VP shamaka*
		Kashaya				
18	*Sarkara*	*-*				

- Method of preparation: General method of preparation of *Lehya (Gudapaka).*
- Dose: 10-15 gm
- *Anupana: Ksheera*
- *Karma(Action): Mutrala (Diuretic)*

- *Shetala (Coolant)*
- *Balya (Tonic)*
- *Stanyavardhaka (Galactogogule)*

- Indications*: Sarva prakara mutrakrichra(all kind of dysuria), 20 prakara Meha(urinary disorder),Rakthapitta(Bleeding diseases), Moodavata(encirculating vatic problems), Haleemaka(Liver cirrhosis), Kshaya(Emaciation), Kshatha(injury), Padadaha(Burning foot), Yonidosha(Vaginal disorder),Rajodosha(Menstrual disorder), Asthisrava(Leucorrhoea), Asrigdhara(Menorrhagia).*

Modern review of *Avaleha* Kalpana: [23]

According to modern pharmaceutics, *Avaleha* can be correlated with Syrups, elixirs, linctus and confections.

- Syrups: Concentrated sugar solution or sucrose is dissolved in water or other liquid media to obtain syrups. Concentration of sugar will be 66.7% in this medium. Syrups are used for masking disagreeable taste of ingredient drugs, also as flavours or vehicle for other medicinal preparations.
- Elixirs: Elixirs are sweet, pleasantly flavoured sweet hydroalcoholic liquid preparations which are administered orally. 5-40% Ethyl alcohol is the main ingredient of elixirs and it may also contain glycerine, sorbitol, propylene glycol, sugar, other preservatives etc.
- Linctus: Linctus are sweet, viscous liquid medicinal preparations commonly having sedative, demulcent or expectorant properties. Majority of cough syrups constitutes this form that gives smoothening effect for mucous membrane of throat.
- Confections: Confections consist of a drug mixed with honey or syrup. It may be used as an excipient for pill masses also. They are soft solid mass, which contains one or more medicinal components so as their palatability and easy usage will be enhanced.

DISCUSSION

Avaleha can serve as potent rejuvenators (*Rasayana*) in healthy individuals as well as eliminate diseases (*Vyadhiharatva*) in diseased ones especially in nutritional deficiency disorders. Vast varieties of *Shamanayogas, Rasayanayogas, Vrishyayogas* etc. can be cited with *Avaleha* dosage forms in classics. They serve with antioxidants and hence promote health key factors in lickable form without any synthetic preservatives. *Avaleha* contains significant amount of sugar which are added as an ingredient acts as a natural preservative and thereby increases shelf-life of the formulation without adding any artificial external additives. As the word *Avaleha* itself denotes the formulationswhich are 'lickable', vast percentage of drug absorption is being taking place in the oral mucosa itself, as they are administered by licking or chewing. The metabolism and absorption of *Avaleha* starts from the mouth itself as high glucose, fructose etc. sweetening agents are present. Semi-solid dosage form such as *Avaleha*, Confectionery based forms etc. are intended to provide drug absorption via the oral cavity. Oral mucosa is having shortrecovery time from traumas or damages and heals by itself which reduces effects of adverse drug reactions induced by long term topical drug delivery. The oral trans- mucosal route has significant potential for drug delivery and the next level of absorption takes place in the stomach where gastric lipase hydrolyses fats into fatty acids and glycerol. Because of fewer Langerhans cells compared to external skin the possibility of all allergic responses is also limited in oral mucosal drug delivery. The oral mucosa is highly hydrated and vascularized which facilitates drug dissolution and allow the drug to gain direct access to systematic circulation via capillaries and venous drainage. Moreover, the small surface area of the oral membrane helps in sustained drug release, especially for high potency drugs.[24]

CONCLUSION

In today's fast- paced lifestyle, where stress, improper diet and emotional strain affect women's health, this *rasayana* acts as a natural adaptogen. More than just a tonic, it embodies the wisdom of centuries, gently supporting hormonal balance, fertility and emotional well-being. In a woman's lifetime, her physiology transitions through several distinct stages- puberty, reproductive years, pregnancy, postpartum and menopause. Challenges faced by women in each of these stages are different. *Shatavari Gulam* offers a supportive role in each of these stages: improving the strength of *Garbhashaya* (uterus), it is *stanyajanana* (enhancing lactation), soothes menopausal heat and also helps in combating mood swings and fatigue. It can be used as per the *yukti* of the *Vaidya* (physician).[25] When taken in an appropriate way, it becomes not just a medicine, but a ritual for self-care to honour womanhood in its most natural and graceful form. Avaleha acts as a potent Rasayana in both healthy and diseased individuals. Shamana, Rasayana and Vrishya yogas are frequently cited in classics. Avaleha provides antioxidants, promotes health and requires no artificial preservatives due to its natural sugar content. The therapeutic rationale of Shatavari Gulam assumes its maximum importance in menopausal women, when there is a fall in estrogen levels and associated systemic

symptoms. Phytoestrogens, Pitta-Shamana property, Rasayana action, and well-established antioxidant properties of Shatavari make it an ideal herbal remedy that poses minimal risks when compared to HRT(D).

REFERENCES

1. Khandelwal KR, et al. Avaleha kalpana: medicated semisolid preparation—an synoptic overview. *Int J Res Ayurveda Pharm*. 2021;12(2):XX–XX. Available from: ResearchGate.
2. O'Leary MF, Jackman SR, Sabou VR, Campbell MI, Tang JCY, Dutton J, et al. Shatavari supplementation in postmenopausal women improves handgrip strength and increases vastus lateralis myosin regulatory light chain phosphorylation but does not alter markers of bone turnover. *Nutrients*. 2021 Nov 27;13(12):4282.
3. .Pandey AK, Gupta A, Tiwari M, Prasad S, Pandey AN, Yadav PK, et al. Impact of stress on female reproductive health disorders: possible beneficial effects of shatavari (*Asparagus racemosus*). *Biomed Pharmacother*. 2018 Jul;103:46-49.
4. Sinha B, Tare H. *Asparagus racemosus*: a holistic review of its traditional uses and modern research. *Int J Pharm Qual Assur*. 2024;15(1):Article 80.
5. Abdul Kabeer VM, Krishnamurthy MS. Critical review of Avaleha Kalpana and its different dosage forms. *Int J Res Ayurveda Pharm*. 2020;11(2):XX–XX.
6. Sastri P, editor. *Sharngadhara Samhita*. 8th ed. Varanasi: Chaukhambha Orientalia; 2008. Madhyama Khanda, Chapter 8; p. 206.
7. Trikamji J, editor. *Charaka Samhita*. Varanasi: Chaukhambha Orientalia; 2011. Sutrasthana; p. 72.
8. Murthy KRS. *Sharngadhara Samhita*. Varanasi: Chaukhamba Krishnadas Academy; 1984. Madhyama Khanda, Chapter 8; p. 111.
9. .*Bhartiya Ayurveda Bheshaja Samhita*. Bhaga 2, Khanda 1 (Aushadha Yoga). New Delhi: Government of India; 2011. Avaleha section; p. 1.
10. *Bhartiya Ayurveda Bheshaja Samhita*. Bhaga 2, Khanda 1 (Aushadha Yoga). New Delhi: Government of India; 2011. Avaleha section; p. 1.
11. Tripathi B, commentator. *Sarangadhara Samhita*, Madhyama Khanda. Varanasi: Chowkhamba Surbharati Prakashan; 2017. Verse 8/3.
12. Tripathi B, commentator. *Sarangadhara Samhita*, Madhyama Khanda. Varanasi: Chowkhamba Surbharati Prakashan; 2017. Verse 8/3.
13. Krishnamurthy MS. *Sahasrayoga* (with Dharakalpa). 1st ed. Varanasi: Chaukhambha Orientalia; 2021. p. 733.
14. Tripathi B, commentator. *Sarangadhara Samhita*, Madhyama Khanda. Varanasi: Chowkhamba Surbharati Prakashan; 2017. Verse 8/3.
15. Krishnamurthy MS. *Sahasrayoga* (with Dharakalpa). 1st ed. Varanasi: Chaukhambha Orientalia; 2021. p. 734.
16. Sharangadhara Acharya. *Sharangadhara Samhita* with commentary of Adhamalla's Dipika and Kashirama's Gudhartha Dipika. Shastri P, editor. 6th ed. Varanasi: Chowkhambha Orientalia; 2005. Madhyama Khanda, Prathama Khanda 1/52-13.
17. Krishnamurthy MS. *Sahasrayoga* (with Dharakalpa). 1st ed. Varanasi: Chaukhambha Orientalia; 2021. p. 739.
18. Hegde PL, Harini A. *Textbook of Dravyaguna Vijnana*. Reprint ed. New Delhi: Chaukhambha Publications; 2024. p. 614.
19. Krishnamurthy MS. *Sahasrayoga* (with Dharakalpa). 1st ed. Varanasi: Chaukhambha Orientalia; 2021. p. 740.
20. Hegde PL, Harini A. *Textbook of Dravyaguna Vijnana*. Reprint ed. New Delhi: Chaukhambha Publications; 2024. p. 614.
21. Krishnamurthy MS. *Sahasrayoga* (with Dharakalpa). 1st ed. Varanasi: Chaukhambha Orientalia; 2021. p. 741.
22. Hegde PL, Harini A. *Textbook of Dravyaguna Vijnana*. Reprint ed. New Delhi: Chaukhambha Publications; 2024. p. 614.
23. Gudise VS, Dasari MP, Kuricheti SSK. Efficacy and safety of *Shatavari* root extract for the management of menopausal symptoms: a double-blind, multicenter, randomized controlled trial. 2024 Apr 8.
24. Ademola J, Ajgaonkar A, Debnath T, Debnath K, Langade J. Efficacy and safety of *Shatavari* root extract (*Asparagus racemosus*) for menopausal symptoms: a randomized, double-blind, three-arm, placebo-controlled study. *Front Reprod Health*. 2025;7:1654503. doi:10.3389/frph.2025.1654503.
25. Gudise VS, Dasari MP, Kuricheti SSK. Efficacy and safety of *Shatavari* root extract for the management of menopausal symptoms: a double-blind, multicenter, randomized controlled trial. 2024 Apr 8.