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EVALUATION OF *SHOTHAHARA MAHAKASHAYA* OF *CHARAK SAMHITA*: A LITERARY REVIEW

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ABSTRACT

Shothahara mahakashaya denotes group of ten medicines, which act on *Shotha roga. Shotha roga* can be correlated with the term edema/Swelling of modern medicine. *Shothahara Mahakashaya* is the 38th gana of the 50 *mahakashaya* gana described in fourth chapter of *Sutra sthan* of *Charak Samhita* and includes *patala, agnimantha, bilva, syonaka, kashmariya, kantakari, brihati, shalaparni, prishaniparni, goksura* ten ingredients. These 10 plants are work together and give enhanced effect. They are also effective individually. These plants having *Katu, Tikta, Kasaya Rasa,Ushna Virya,Katu Vipaka, Ruksha, Laghu Guna and Tridoshaghan* (Mainly *Vataghana*) properties.

KEYWORDS: *Shothahara mahakashaya*, swelling, *Dashamula, Ayurveda*, Anti-edematous, Diuretic.

INTRODUCTION

Shothahara mahakashaya, group of ten *dravyas*, which act on *Shotha roga. Shotha roga* can be correlated with the term Swelling/edema of modern medicine.[1]

In *Ayurveda,various varities of Shotha*are described. These include mainly three types as described by *charaka*samhita -*Vataj shotha, Pittaj shotha, kaphaj shotha*. Two types (*Nija & Agantuja or Ekangaja, Sarvaja* four *Vattik, Pattik, Shlaismika* & *Agantuja*, seven types *Vattika, pattika, Shlaismika, Shanipataja, vatapattika, vattashlaismika, pittashlaismika* eight types *Vattika, pattika, Shlaismika, Shanipataja, vatapattika, vattashlaismika, pittashlaismika, agantuja.*[16]

***SAMPRAPATI*[15]**

- ***Bahya sira prapya yada kaphasrikapitani samdushayatiha vayu.***

Tairbadhamarga sa tada visharpatyutsedhalinga shawathum karoti.

(Charaka Samhita chikshasthan 12)

Mentioned causative factors of *shotha roga, kapha, asrik (*Blood*) and pitta* enter the external vessels *(Bahaya sira)* and afflict *vata dosha*. As a result, the channel of circulation gets obstructed which spreads to the nearby areas, leading to *shotha. Shotha* is characterized by swelling.

SIGN AND SYMPTOMS OF *SHOTHA ROG*[15]

Ushma tatha syadwathuh siranamayam ityev ca poorvrupm.

Sgoravam syadanavsthitatvam sotsedhamoosmaatha siratanutavam.

Slomaharshaangavivarnata ca samanyalingam swathoh pradistam.

(Charaka Samhita chikshasthan 12/10-11).

Ushma-Increased temperature.

Davathu-Burning sensation.

Siranam Ayam-Dilation of the vessels of Locality.

Sa gauravam-Heaviness.

Anvasthitatvam-Instability.

Utseda-elevation.

Loma harsa-Horripilation.

Anga vivarnata-Discoloration of skin over the limbs.

***SHOTHAHARA MAHAKSHAYA DRAVYAS*[1]**

Patlaagnimanthsyonakabilvakashmriyakantkarikabrihatishalparniprishamanigokshura iti dashemani swayathuharani bhawanti. (Charaka Samhita Sutrasthan 4).

Table. 1*: Shothahara Mahakshaya Dravyas.*[2,3,4,6,7]

S.No.	Name	Botanical Name	Family	English Name	Useful part
1.	*Patala*	*Stereospermum suaveolens DC*	Bignoniaceae	Rose flower fragrant	Root bark, flower, seed, leaf, *kshara*
2	*Agnimantha*	*Clerodendrum phlomidis Linn.*	Verbenaceae	Glory Bower	Root bark, bark, *panchang*, leaves
3	*Shyonaka*	*Oroxylum indicum Vent.*	Bignoniaceae	Midnight horror, oroxylum, Indian trumpet flower	Root bark
4	*Bilva*	*Aegle marmelos Corr.*	Rutaceae	Bael tree	Fruit, leaves, root
5	*Gambhari*	*Gmelina arborea Linn.*	Verbenaceae	Kumil, White teak, Gamar	Root, fruit, flower, leaves
6	*Kantkari*	*Solanum surattense Burm./ S. xanthocarpum Schrad and Wendl*	Solanaceae	Yellow berried night shade	Whole plant, root,
7	*Brihati*	*Solanum indicum Linn.*	Solanaceae	Poison berry, Indian night shade, African Eggplant, Bush Tomato	Root, fruit
8	*Shalaparni*	*Desmodium gangeticum DC*	Leguminosae	Sal leaved desmodium	Whole plant, root
9	*Prisnaparni*	*Ureria picta Desv.*	Leguminosae	Indian uraria	Root
10	*Gokshura*	*Tribulus terrestris Linn.*	Zygophylaceae	Land caltrops/ Puncture vine/cow hage	Root, fruit

Table. 2: Properties and Action.[2,3,4,6,7]

S. No	Sanskrit Name	Guna	Rasa	Virya	Vipaka	Dosha Karma	Main karma
1	*Patla*	*Laghu, Rooksha*	*Tikta, kashaya*	*Ushna*	*Katu*	*Tridoshahara*	*Shothahara, mutral,*
2	*Agnimanth*	*Laghu, Rooksha*	*Tikta, Katu, Kashay, Madhur*	*Ushna*	*Katu*	*Kaphavatahar*	*Shothahara, vednasthapak*
3	*Syonaka*	*Laghu, Rooksha*	*Madhur, tikta, kashaya*	*Ushna*	*Katu*	*Kaphavatahar*	*Upashosan, mutral, shothahara*
4	*Bilv*	*Laghu, Rooksha*	*Kasaya,Tikta*	*Ushna*	*Katu*	*Kaphavatahar*	*Shothahara, Dipan, pachan*
5	*Gambhari*	*Guru*	*Tikta, Kasaya, Madhur*	*Ushna*	*Katu*	*Tridoshahara*	*Shothahara, mutral*
6	*Kantkari*	*Laghu,Rooksha, Tikshna*	*Katu, Tikta*	*Ushna*	*Katu*	*Kaphavatahar*	*Kashahar, mutral,*
7	*Brihati*	*Laghu, Rooksha, Tikshna*	*Katu,Tikta*	*Ushna*	*Katu*	*Kaphavatahar*	*Kashahar, mutral, hridroghara*
8	*Shalaparni*	*guru, snigdha*	*madhur, Tikta*	*Ushna*	*madhur*	*Tridoshahara*	*Angamardprashama, Shothahara, deepan*
9	*Prisnaparni*	*laghu, snigdha*	*madhur, Tikta*	*Ushna*	*madhur*	*Tridoshahara*	*Angamardprashama, deepan*
10	*Gokshur*	*Guru, Snigdha*	*Madhur*	*Sheeta*		*Vatapittahara*	*Mutravirechaniya*

These 10 dravyas are considered as Dashamoola. *Shothahara mahakashaya* having *Katu, Tikta, Kasaya Rasa, Ushna Virya, Katu Vipaka, Ruksha, Laghu Guna* and *Tridoshaghan* (Mainly *Vataghana*) properties and with *Ushna Virya and Katu Vipaka* change sentence.

Table. 3: Shows chemical constitute, pharmacological properties.

S. No.	Dravya Name	Chemical constitutes	Extract/ Active chemicals	Mode of Action	Ref.
1	Patla	Flavonoids, terpenoids, saponin, stereolensin, Iridoid glycoside, beta-sitosterol etc	ethanol extract of bark	its inhibition on histamine and 5-HT release at the site of inflammation or by blocking their action responsible for prostaglandin synthesis or by inhibiting prostaglandin synthesis through COX-2 inhibition mechanism	[16]
2	*Agnimanth*	Beta-sitosterol, luteolin, alphelandrine, premnine, betulin, ganiarine etc.	chlorofom extract of aerial part, aqueous extract of root bark	Inhibition of the synthesis of prostaglandins & other inflammatory mediators	*[9], [17]*
3	*Syonaka*	Baicalin, tetulin, oroxindin, aloe-emodin,chrysin, oroxylium A, p-coumaric acid, scutellarein-7-rutinosides, prunetin, beta-sitosterol etc.	Ethanol Extract of Stem Bark	suppressed the activation of pro-inflammatory cytokines including NF-κB, TNFα, IL-1β, and IFNγ and the activity of cyclooxygenase enzymes	*[10]*
4	*Bilv*	Root- Xanthotoxin, umbelliferone, marmesin, marmin, skimmin, etc.	Root- three active compounds aegeline, skimmianine, and marmin	potently inhibited the histamine release from rat mast cells	*[11], [18]*
5	*Gambhari*	Beta-sitosterol, ceryl alcohol, gmelinol, butyric acid, tartaric acid, apigenin, arborone, ardorel, isoarborel, cutytyl ferulate, epieudesmin, gmelanore, etc.	Aqueous & Methanolc extract of bark	inhibition of prostaglandin and other autocoids	*[12]*
6	*Kantkari*	Beta-carotene, diosgenin, carpesterol, solasodine, solamargine, beta-solamargine, solasonine, solasodino-L-rhamnosyl-B-D-glucoside, solanocarpine, tomatidienol etc.	Methanolc Extract of Leaf	Inhibitory effect on the release of active pain substance such as histamine, serotonin, polypeptides or prostaglandins	*[19]*
7	*Brihati*	Carotene, solasonine, carpesterol, solanocarpone, diosgenin, beta-sitosterol, lanosterol, solanine, solamargine, solasodine, vit-C etc.	Methanolc extract of fruit	Inhibition of pain substance like histamine, serotonin & inhibit the synthesis of prostaglandins, inhibit of the cyclooxygenase pathway	*[20]*
8	*Shalaparni*	Flavonoids, N,N-	ethanolic	Flavonoids - anti-inflammatory	*[13]*

		dimethyltryptamine, hypaphorine, hordenine, caudicine, gangetin-3H, gangetinin, desmodin etc.	extract of leaves	effects through its inhibition of the cyclooxygenase pathway	
9	*Prisnaparni*	Flavonoids, steroids, triterpinoids, tannins, carbohydrate, Amino-acids,	Methanolc extract of aerial part	histamine,prostaglandins, kinin and pro- inflammatory cytokinins	*[21]*
10	*Gokshur*	Root- campesterol, beta sitosterol,stigmasterol,neotigogenin	ethanolic extract of fruit	inhibited the expression of cyclooxygenase-2 (COX-2), suppressed the expression of pro-inflammatory cytokines	*[22]*

DISCUSSION

Dashmool reduces vitiated *Tridosha*; when there is a high *Vata* & it can be used as a tonic to strengthen the system, exhibits anti-oxidant, anti-cancer activity, strengthens the body and enhances the production of tissue. *Dashmoola* is used in Ayurveda texts for the following disorders- use ayurveda terms (Pyrexia (different types of fevers)), (acute and chronic asthma), (chronic cough), (hiccups), (cough), all types of *vata* disorders, pain disorders, epilepsy, heart diseases, renal disorders, all types of paralysis, ascites and all types of post delivery complaints, tetanus aphrodisiac, infertility and in *panchkarma* treatments mainly Basti, ShiroDhara, Swedan Karma.

CONCLUSION

All the drugs are and having Alkaloids, Lignan, Flavanoid etc which, Help the reduce the edema. All the 10 drugs are having the quality to treat the *shotha roga. Shothahara mahakashya* helps re-establish normal physiological function in the affected tissues and organs.

Dosha karma (Effect on humors)- specifies mainly vata dosha, normalizes kapha dosha Dhatu (Tissue effect)- Rasa,Mamsa, Asthi Organs effect- Nerves, Muscles, Bones, Joints Main Indication- Vata disorders Physician can select the best drug among these with the help of YUKTI PRAMANA.[5]

Shothahara mahakasaya every dravya though an ingredient of Dashmool, an anti inflammatory formulation from Ayurveda, is not indicated in Ayurveda as a single drug formulation for internal use in treatment of inflammatory disorders.

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