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Review Article

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ROLE OF DWAYAKSHARA IN THE MANAGEMENT OF ANNAVAHA SROTO DUSHTI VIKARA

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ABSTRACT

Kshara is obtained from the ash of drugs, which is alkaline in nature. It is prepared by burning the completely dried cut pieces of plant to ash. After cooling of ash, this has to be added with required quantity of water, macerated and kept overnight. Next day, supernatant fluid has to be collected by filtering through cloth. This filtrate has to be evaporated on fire to get the inorganic material called kshara. Annavaha sroto vikara or maha sroto vikara has its own moola, nidana, lakshana and chikitsa. Ama doshaharana as the main treatment protocol in this which can be attained by deepana- pachana property of kshara. Extensive search of all three volumes of Ayurveda Formulary of India (AFI) was carried out to list out the formulations containing dwaya kshara either in single or in combination which are being indicated for annavaha sroto vikara like aruchi, adhmana, chardi and

many more. Properties of kshara was analyzed with samprapti of each disease to justify the treatment. Totally 35 formulations were found having dwaya kshara as an ingredient. Among which 21, 13 and 1 formulation was containing dwaya kshara, yava kshara and sarja kshara respectively.

KEYWORDS: Dwayakshara, sarjakshara, yavakshara, annavaha sroto vikara, deepana, pachana.

INTRODUCTION

The literary meaning of the word kshara is "substance which has pungent, saline, acrid nature

and possesses the ksharana(to remove the deformed tissue) property".^[1] Kshara is an alkaline substance obtained from the ash of drugs.^[2] Most of the kshara are water-soluble inorganic salts of plant drugs; except tankana (borax) and soraka (potassium nitrate) which are mineral in origin. Kshara kalpana is a preparation, in which plant parts are dried and burnt to ash. This carbon free ash is added with six parts of water, agitated and kept overnight. Next day, the supernatant is collected by filtering through cloth and evaporated to get the inorganic salts. These are hygroscopic hence should be stored in air tight container.^[3] They act mainly as deepaka and pachaka hence are mostly indicated in annavaha sroto vikara.

Dwaya kshara/ kshara dwaya is a combination of two dravya namely, sarjakshara and yavakshara. Sarja kshara is prepared from ash of kshudra duralaba (*Alhagi camelorum*) plant. It is greyish white colour with a strong alkaline taste. Yavakshara is prepared from ash of yava (*Hordeum vulgare*) plant. It is a clear amorphous powder with saline and partly acid taste. Sodium bicarbonate and potassium carbonate are the main content present in sarja kshara and yava kshara respectively. Sodium bicarbonate is a white solid that is crystalline but often appears as a fine powder. It has a slightly salty, alkaline taste resembling that of washing soda. The natural mineral form is nahcolite, component of mineral natron. Potassium carbonate is a white salt, soluble in water, which forms a strongly alkaline solution.

Srotas are the inner transport system of the body which provide platform for other important bioactivities like anna rasa, sapta dhatu, trimala, etc. There are innumerable sukshmasrotas and numerable sthula srotas.^[8] Annavaha srotas is one such sthula antarmukha srotas which is spread from mukha to guda. It helps in ingestion, digestion and absorption of ingested food after which, it is distributed all over body to build the dosha, dhatu and mala. Due to improper ahara-vihara i.e., akala-atimatra-ahita bhojana, there is jatara agnimandya which produces ama which intern causes dosha-dhatu dooshana and then roga like adhmana, chardi, arochaka and many more. These diseases have to be treated on the basis of management of amapradosha which are deepana and pachana.^[9]

MATERIAL AND METHODS

The classical books were searched, to know the properties of sarja and yava kshara.

Table 1: Properties of dwaya kshara. $^{[10,11]}$

Sl. No.	Properties	Sarja kshara	Yava kshara
1	Rasa	Katu (pungent)	Katu (pungent)
2	Guna	Teekshna (sharp)	Snigdha (unctuous), sara (mobility)
3	Veerya	Ushna (hot)	Ushna (hot)
4	Karma	Kledi (increases moistness), deepana (ignites digestive fire) and pachana (promotes digestion)	Hrudya (good for heart), sweda pravartaka (increases sweating), mutala (increases urination), deepana (ignites digestive fire)and pachana (promotes digestion)
5	Doshaghnata	Vatahara (alleviates vata dosha)	Kapha- vatahara (alleviates kapha and vata dosha)
6	Rogaghnata	Beneficial in Shwasa (respiratory disorder),kasa (cough), vrana (wound), udaramaya (diseases of abdomen), krimi (worm infestation)	Beneficial in Shoola (pain), anaha (abdominal distension due to stool and gas), mutrakrichha (painful micturition), kantaroga (diseases of throat), amlapitta (hyperacidity), grahani (irritable bowel syndrome), kaphaja kasa (productive cough), kaphavatodara shoola (painful abdominal swelling)

A thorough search of AFI, all three volumes was carried out to collect the formulations having dwaya kshara and being indicated in annavaha sroto vikara.

Table 2: List of formulation containing dwaya kshara as ingredient. [12,13,14]

	Name of the formulation	Reference	Name of the kshara	Indication
1.	K viida ninnali	B. R. pleeha yakrut rogadhikara /44-46	Sarja and yava kshara	Udara (abdominal swelling), gulma (painful lump)
2.	Saptavimshadi guggulu	B. R. bhagandhara /16-18	Sarja and yava kshara	Anaha (abdominal distension), udara (abdominal swelling)
3.	Dadima ghrita		Sarja and yava kshara	Udara (abdominal swelling), anaha (abdominal distension), gulma (painful lump)
4.	Panchatikta guggulu ghrita		Sarja and yava kshara	Aruchi (anorexia)
5.	Chitrakadi churna		Sarja and yava kshara	Arochaka (anorexia), grahani (irritable bowel syndrome), gulma (painful lump), agnimandya (decreased digestive fire)
6.	Narayana churna	A. H. chikitsa15 / 14-16	Sarja and yava kshara	Udara (abdominal swelling), gulma (painful lump)
7.	Samudradya churna	IB R Shoota / / /- /9	Sarja and yava kshara	Gulma (painful lump), parinama shoola (duodenal ulcer), ajeerna

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				(indigestion)
8.	Hinguwadi churna	Y. R. gulma chikitsa	Sarja and yava kshara	Adhmaana (abdominal bloating), grahani (irritable bowel syndrome), gulma (painful lump), udara (abdominal swelling), mandagni (decreased digestive fire)
9.	Hinguvachadi churna	A. H. chikitsa14 / 31-32	Sarja and yava kshara	Adhmaana (abdominal bloating), gulma (painful lump), aruchi (anorexia), agnimandya (decreased digestive fire)
10.	Shankha dravaka	B. R. pleeha yakrut / 193-196	Sarja and yava kshara	Udara shoola (painful abdominal swelling), adhmaana (abdominal bloating)
11.	Vajra dravaka	B. R. gulma /63-66	Sarja and yava kshara	Ajirna (indigestion), gulma (painful lump),udara (abdominal swelling), mandagni (decreased digestive fire)
12.	Agnitundi vati	B. R. agnimandya / 117-118	Sarja and yava kshara	Agnimandya (decreased digestive fire)
13.	Chandraprabha vati	S. M. 7 / 40-44	Sarja and yava kshara	Anaha (abdominal distension), aruchi (anorexia), mandagni (decreased digestive fire)
14.	Chitrakadi vati	C. chikitsa 15 /96- 97	Sarja and yava kshara	Grahani (irritable bowel syndrome), parinamashoola (duodenal ulcer)
15.	Grahani kapata rasa	B. Y. T. sapta shashtima Taranga, grahani chi /67-68	Sarja and yava kshara	Grahani (irritable bowel syndrome), agnimandya (decreased digestive fire)
16.	Karchooradi churna	B. N. R, sannipata sangrahani kramavipaka	Sarja and yava kshara	Kapha-vata grahani (irritable bowel syndrome), agni dourbalya (decreased digestive fire)
17.	Kshara raja	B. H. U, anubhuta yoga	Sarja and yava kshara	Udara shoola (painful abdominal swelling), gulma (painful lump)
18.	Bruhat agnimukha churna		Sarja and yava kshara	Mandagni (decreased digestive fire), ajirna(indigestion), gulma (painful lump), udara (abdominal swelling)
19.	Lavana tritayadya churna	S. M. 6/99-106	Sarja and yava kshara	Mandagni (decreased digestive fire), gulma (painful lump), adhmana (abdominal bloating)
20.	Jwara matanga kesari rasa	B. R. jwara chiktsa 875-880	Sarja and yava kshara	Amajirna (indigestion), udara (abdominalswelling)
21.	Paashupata rasa	Y. R. ajirnachikitsa	Sarja and yava kshara	Udara (abdominal swelling), grahani (irritable bowel syndrome), mandagni (decreased digestive fire), amadosha (indigestion)

 $\label{thm:containing} \textbf{Table 3: List of formulation containing eka (single) kshara as an ingredient } ^{[12],\,[13],\,[14]}$

Sl. No.	Name of the formulation	Reference	Name of the kshara	Indication
1.	Amrutoja churna	RashtreeyaAyurveda samsthana,Jaipur, anubhuta yoga	Sarja kshara	Chardi (vomiting)
2.	Dashamoolaharitaki	A. H. chikitsa17/ 14- 16	Yavakshara	Arochaka (anorexia), udara (abdominal swelling), gulma (painful lump)
3.	Bharangi guda	B. R. hikka shwasa / 29-32	Yavakshara	Agnimandya (decreased digestive fire)
4.	Yogaraja guggulu	B. R. amavata /90-93		Udara (abdominal swelling), gulma (painful lump), anaha (abdominal distension), agnimandya (decreased digestive fire)
5.	Dashamoola shadphaka ghrita	Ca. Da. Udarachikitsa / 59	Yavakshara	Udara (abdominal swelling), gulma (painful lump)
6.	Saptala ghrita	A. H. chikitsa5 / 22	Yavakshara	Udara (abdominal swelling), gulma (painful lump), mandagni (decreased digestive fire)
7.	Nimbadi churna	B. R. vatarakta / 31-33	Yavakshara	Udara (abdominal swelling), gulma (painful lump)
8.	Palasha pushpasava	B. S. S. asava& arishta prakarana	Yava kshara	Agnimandya (decreased digestive fire)
9.	Tumburvadi churna	S. M. 6/107-109	Yava kshara	Gulma (painful lump), adhmana (abdominal bloating), udara (abdominal swelling)
10.	Yavaksharadi yoga	B. B. R. part-4, 5752	Yava kshara	Agnimandya (decreased digestive fire)
11.	Yavaksharadya churna	B. B. R. part-4,5753	Yava kshara	Shoola yukta gulma (painful lump), agnimandya (decreased digestive fire)
12.	Dantyadi gutika	Y. R. gulma roga	Yava kshara	Rakta gulma (painful lump)
13.	Arogya mishrana rasa	CGHS formulary, anubhuta	Yava kshara	Ajirna (indigestion)
14.	Pranavallabha rasa	B. R. gulma chikitsa/ 134- 137	Yava kshara	Gulma (painful lump)

DISCUSSION

The dwaya kshara has properties like katu rasa (pungent taste), laghu guna (lightness), ushna veerya (hot potency), deepana (ignites digestive fire), pachana (promotes digestion) and is shukra (seminal fluid)- shleshma (mucus) — gulma (painful lump) — adhmana (abdominal bloating) — vibhanda (constipation) — arsha (haemorrhoids) — pleeha (splenomegaly) vinashaka in common.^[15]

Agnimandya^[16] (decreased digestive fire) - laghu guna, ushna veerya helps in easy digestion. Katu rasa helps to alleviate kapha intern alleviates the ama (undigested food) caused due to kapha avarana (obstruction). It does agni deepana and ama pachaka. Ajirna^[17] (indigestion) - as it is caused by guru-sheetaadi kapha vardhaka ahara, katu rasa, laghu guna and ushna veerya of kshara helps to reduce this. Even though there are many types of ajirna, kshara being deepaka and pachaka helps in curing all types. Aruchi^[18] (anorexia) - katu rasa, laghu guna, ushna veerya mitigates kapha dosha which is mostly involved in the symptom. It cures mandagni which is the main reason here, by deepana and pachana.

Anaha^[19] (abdominal distension), adhmana^[20] (abdominal bloating), atopa^[21] (tympanitis)-vata is the reason in all these, which does margavarodha (obstruction). Ushna, teekshna, laghu guna helps in alleviating this avarodha.

Grahani^[22] (irritable bowel syndrome) - kshara does deepana of agni and pachana of ama caused by mandagni which intern has caused dooshana (vitiation) of grahani (duodenum). Amlapitta^[23] (hyperacidity) - as in amlapitta, amla guna of pitta is increased which is reduced by alkalinity of kshara. Chardi^[24] (vomiting) - due to ajirna which causes utklesha (nausea), vayutake the anna (food particle) in the upward direction. Kshara removes this ama and does vata harana.

Gulma^[25] (painful lump) - kapha-pitta does margavarana of vata wherein it moves up and causes pindivat (lump) gulma. Kshara pacifies this kapha and vata and removes avarodha. Udara roga^[26] (abdominal swelling) - vata gets dushita by sweda (sweat) and ambu (lymphatic) vaha srotovarodha which in turn does sraavana (out flow) of anna rasa. Here, katu rasa and ushna veerya does shoshana (drying up) of anna rasa. Annadrava shoola^[26] (gastric ulcer), Parinama shoola^[27] (duodenal ulcer) - vata-kapha involved disease is reduces by ushna veerya of kshara.

CONCLUSION

In all rasashastra classic books, sarjikshara and yavakshara are considered as dwaya kshara. Totally, there are 37 formulation explained in the three volume of AFI having either in single or in combination. Among which, 21 formulation are having dwaya kshara, 13 formulation are having yavakshara and only a single formulation is having sarjakshara. Annavaha sroto dushti caused by improper diet and regimen causes agnimandhya and ama shows symptoms like aruchi, adhmana, chardi and many others. Hence, kshara having properties like ushna,

teekshna, deepaka and pachaka, helps in curing diseases of maha srotas.

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