

REVIEW ARTICLE: PHARMACEUTICAL UTILITY OF KSHARA (ALKALIES) IN RASASHASTRA

Mahantesh B. Rudrapuri, G.Vinay Mohan

¹M.D. (R.S.B.K), FAGE, Professor & HOD, PG Dept. Of RasaShastra & Bhaishajya Kalpana;

²Principal;

Shri Shivayogeeswar Rural Ayurvedic Medical College & Hospital, Inchal, Tq: Saundatti, Dist: Belgaum, Karnataka, India

Email: mbrudrapuri@gmail.com

ABSTRACT

Ksharas are alkaline materials, derived from different plants. Even they have animal and mineral origin. Pertaining to *Rasashastra* (Iatro-Chemistry and Ayurveda Pharmaceutics), *Kshara* (Alkalies) plays an vital role in the Processing and Preparation of *Rasadravayas* (Metal and Minerals). *Tankana kshara* (Borex) is considered as the universal Antidote for almost all *Sthavara vishas* (herbal poisons). Among All Sharp instruments and accessory instruments, Alkalies are the best as it performs many actions such as Incision, Excision, etc even in inaccessible areas. Success can be achieved by its use in grave diseases and also because it can be used in the form of drink. so *Ksharas* are having more importance in the *Rasashastra*.

Keywords: *Kshara, Rasashastra, Rasa dravyas,*

INTRODUCTION

Ksharas are alkaline materials, derived from different plants. Even they have animal and mineral origin. Because of their *chedana & bhedana guna*, (Cutting and Breaking quality) these *ksharas* are included under *Anushastra*. [1] These are named as *ksharas* because of their corrosive nature (*kshara guna*). Some *Acharyas* have included *kshara* in *Madhuradi rasa* (Taste), but *Atreya Punarvasu* concluded it as *dravya*, [2] not a *Rasa*, because *kshara* means the flowing capacity & it is the action of a *dravya*. Clinically Application of *Kshara* reduces bleeding and chances of reoccurrence of the diseases

are very rare. An Alkali administered by an intelligent physician subsides all serious diseases in which its use is recommended. *Ksharas* are having more importance in the *Rasashastra*. They play vital role in processing of *Rasadravayas*.

An Alkali is a substance that has a high P^H when in solution and tends to neutralise acids. The amount of Alkali available in the body to act as a buffer moderating changes in P^H is called the alkali reserves of standard Bicarbonate. A high Alkali reserve is particularly important for those involved in high intensity activities lasting up to three minutes (Ex. 800

meters run). The Bicarbonate ions helps to neutralise Lactic acid produced during Anaerobic Respiration.

AIM OF THE STUDY

- 1) To know the Pharmaco-therapeutics of *Ksharas*.
- 2) To know the importance of *kshara in Rasashashtra*.
- 3) To know the vital Role of *Kshara in Rasashashtra*.

DERIVATION AND DEFINITION OF KSHARA

According to Sanskrit-English dictionary, *kshara* indicates corrosive, caustic acid, pungent and saline. [3]

According to *Shabda kalpa druma*, *Kshara* means the one which is having corrosive property.[4]

Acharya chakrapani has given that *kshara* means the one which moves/flows downwards. *Kshara* has the property of *ksharana guna*. So it slowly brings the vitiated *doshas*(humors) downwards, as *charaka* states.[5]

According to *Sushruta*, *kshara* means the *dravya* which is having *ksharana guna*. [6] For the same, *Dalhana* says, *ksharana* means mobilizing or removing the vitiated *Twacha*(skin), *Mamsa*(Muscles), etc dead tissues from the body.

TYPES OF KSHARA

- A. 1. Paniya Kshara.(Milder Alkali)
2. Pratisaraniya Kshara.(Caustic Alkali)
- B. 1. Mrudu Kshara.(Mild)
2. Madyama Kshara.(Moderate)
3. Tikshna Kshara.(Sharp)
- C. 1. Dwikshara
2. Ksharatraya
3. Ksharapanchaka
4. Ksharastaka.
- D. 1. Khanija (Mineral)- Tankana, Sarjakshara.
2. Praniya (Animal)- Shankha, Kaparda.
3. Vanaspatija (Plant)- Apamarga kshara, Yavakshara.

SHELF LIFE PERIOD OF KSHARA

Depends upon the method of Preservation Up to 5 Years

ROLE AND IMPORTANCE OF KSHARA IN RASASHASTRA

1. *ksharas* are having mineral origin such as *Tankan* (Borex), *Surya kshara* (Potassium Nitrate).
2. *ksharas* needs *Shodana* (Detoxification)
3. The dosage of *kshara* is less.
4. *Ksharas* are also more potent like that of *Rasadravyas*.
5. *Ksharas* are required in *Shodana* of *Rasadravyas*.
6. *Ksharas* are extracted from *Bhasma* (Ash), as *Bhasma* are the important preparations of *Rasadravyas*.
7. *Ksharas* are used as Antidotes for complications of *Rasoushadis*.

As these *ksharas* are more useful in the processing of *Parada* (Mercury) and other *Rasadravyas*, so these are included in *Rasashastra*. [7]

UTILITY OF KSHARA (ALKALIES) IN RASASHASTRA

Ksharas are used widely in *Rasashastra* in the processing of *Parada* and other *Rasadravyas*. Mainly used in *Parada samskara*, *Rasadravya sodhanartha*, *maranartha*, *satvapatanartha*, *dravanarth*, and *Rasoushadhi nirmanarth*. Even *ksharas* are used as antidote for *visha dravyas*.

1. *Parada samanya shodana*: [8]

During *samanya shodana* (General purification) of *parada*, *parada* is triturated with *Nagavalli patra rasa* (Betel leaf), *Ardraka rasa*(Wet ginger) and *Kshara traya* (*Sarja kshara*, *yavakshara* and *tankana kshara*) for 3 days.

2. *Parada samskara*: [9]

In *Deepana samskara* of *Parada*, *Tankana kshara* is used.

3. *Parada kshara bhanda*: [10]

In *Kshara bhanda* of *Parada*, *kshara dravyas* are used.

4. *Rasoushadhi nirmanarth*:

Ksharas are used in the preparation of *Rasoushadhies* (compound formulations) for exam-

ple *Shudda Tankana* is used in the preparation of following *Rasayogas* – *Anandabhairava Rasa*, *Mrutyunjaya Rasa*, *Tribhuvana Keerthi Rasa*, etc and even *kshara parpati*.

5. **Ksharas are included in different vargas:**

- Ksharas* are separately grouped in one *Varga* called *kshara varga*, which includes – *Sarja kshara*, *yava kshara*, *Tankana kshara* and *Surya kshara*.
- Even with *kshara*, different groups are made as such, *dwikshara*, *trikshara*, *kshara panchaka* and *ksharastaka*. [11]
- Kshara* is important drug in *Dravaka gana* and *Mitrapanchaka*. (Metal liquefying drugs) [12]
- Vida varga* includes *kshara* – [13]

UTILITY OF KSHARA IN SHODHANA AND MARANA OF RASA DRAVYAS:

- Vaikrant* (Tourmaline) [14] - Sour liquid like kanji or cows urine or decoction of kulattha (Horse gram) or juice of *kadali* (Banana) *kanda* are taken and *Panchalavana* (Five types of salts), *Yavakshara* and *Tankana* are added to this solution is taken in *Dola yantra* and boiled in it for 3 days.
- Shilajetu* (Mineral pitch) [15]- *Shilajatu* is washed with *kshara jala*.
- Haratala* (Yellow Arsenic) [16] - *Haratala* is subjected to boiling in *Dola yantra* in one of the liquids i.e in the juice of *kushmanda* (Pumkin) or solution of *Tilakshara* or *Churnodaka* (lime water) to purify it.
- Gouripashana* (White Arsenic) [17], - *Swedana* (Steaming) in *Dola yantra* containing *Tankana kshara* and *Godugdha* (Cowsmilk).
- Ratna (pravala)* (Gem stone) [18] - *Pravala* can be purified by boiling in *Dola yantra* in the *ksharavarga*.
- Sasyaka* (Blue vitriol) [19], - Equal quantities of *Sasyaka*, *Gandhaka* (Sulphur) and *Tankana* are ground with juice of *Lakucha* (Variety of Lemon), confined to crucible and given *kukkuta*

puta (Measure of Heat) to obtain the *Bhasma* of *Sasyaka*.

- Haratala* (Yellow Arsenic) [20]- *Shudha Haratala* is subjected to *Mardan* (Trituration) along with *Punarnava Rasa* for one day. Ball is made and dried. Pot is taken and half of it is filled with *Punarnava kshara* then ball is put in the pot and again *Punarnava kshara* is filled up to the neck and then its subjected to heat for 5 days.
- Visha* (Poisons) [21] - In *Marana* process of *Visha*, *Visha* is mixed with equal quantity of *Tankana* and triturated well.

UTILITY OF KSHARA IN SATVAPATANA AND DRAVANA OF RASA DRAVYAS

- Sasyaka* (Blue vitriol) [22] - Purified *Sasyaka* powder and one fourth of purified *Tankana* is mixed and kept in *karanja* (pomegranate) *oil* for one day. Then it is taken out and a ball is prepared out of it. Confining it into a crucible, heated in intensive fire made of Coal. This yields the *Sattva* which is red like *Indragopa* (red insect).
- Bhunaga* (Earth worm) [23] - Equal quantity of *Guda* (Jaggery), *Guggulu* (Resin), *Laksha* (Resin), *Una* (Wool), *Fish*, *Pinakya* (Sesamum paste), *Tankana*, are taken and *Mardan* is done and subjected to *sattvapatana*.
- Kasisa* (Green vitriol) [24] - *Sattva* is obtained from *kasisa*, if it is subjected to *Sattvapatana* like that of *Kankshi* (Allum). (it is ground in *kshara* like *Yavakshara*, Sour substance like *kanji* etc. a ball is prepared, kept in crucible and heated intensively in the fire, *Sattva* can be obtained definitely.
- Kankshi* (Allum) [25] - it is ground in *kshara* like *Yavakshara*, Sour substance like *kanji* etc. a ball is prepared, kept in crucible and heated intensively in the fire, *Sattva* can be obtained definitely.
- Abhraka* (Mica) [26] - Purified *Abhraka* (Mica) is mixed with quarter quantity of *Tankana* and

Rubbed with *Musali* juice. After making the *Chakrikas* (Flakes) and drying, they are confined in *Satvapatna kosthi* (Bhatti) and Subjected to intensive heat. This would yield sattva (Essence-metallic portion) of *Abhraka*.

6. *Vaikrant* (Tourmaline) [27] - The *ksharas* of *Mocharasa*, *Morata* and *Palasha* are dissolved in Cow urine and Bavana of this solvent is given to *Vaikranta* powder. Then the bolus of *Vajrakanda* and *Haridra* and Powders of *Triphala*, *Tankana*, *Lakha* and *Navasagara* are added to it and rubbed in *Meshashringi* juice to prepare a ball. This ball after drying is kept in *Andhamusha* (Crucible) and heated in intense fire.
7. *Ratnas*[28]- A ball is prepared by Grinding the drugs such as *Hingu*, *Panchalavana*, *Ksharatraya*, *Mamsadrava*, *Amlavetasa*, *Navasagar*, Ripened *Jayapala bija*, *Bhallataka*, *Dravanti*, *Rudravanti*, *Kshirakakoli*, *Chitramula*, *Arka kshira*, and Latex of *Snuhi*. The *Ratna* having auspicious and superior qualities, are kept inside this ball and covered with leaves of *Bhurja* and tied with thread. it then kept in the *Dola Yantra* which is filled with the juices of same drugs as well as *kanji* and boiled for 3days and 3 nights in the intensive fire.

Kshara as antidote – for *Vatsanabha* (*Aconitum visha*).[29].

Ksharas are used in the preparation of **Rasoushadies**. Ex:- *Kshara parpati*

CONCLUSION

- 1) Alkalies are widely used in *Rasashastra* because of their corrosive action.
- 2) Alkalies are used in *Shodana*, *Marana*, *satvapatana* and *Dravana* of *Rasadravyas*.
- 3) Even Alkalies are used in Therapeutics and also as an Antidote.
- 4) Alkalies play a vital role in the preparation of *Rasoushadies*.

REFERENCES

1. Acharya Vagbhata, Atridev gupta, Astanga Hrudaya, Sutrasthana, 30. Edition-2062, Varanasi, Choukhambha Publications, 2005, Page-163.
2. Acharya Charaka, Kashinath Shastri, Charaka Samhita, Sutrasthana, 26. Edition-2059, Varanasi, Choukhambha Publications,2002, Page- 331.
3. Vaman Shivaram Apte, The Practical Sanskrit – English Dictionary, Edition-4th, Delhi, Motilal Banarasidas Publications, 2004.
4. Radhakant, Shabdha kalpa druma, Varanasi, Choukhambha Publications,2005.
5. Acharya Charaka, Kashinath Shastri, Charaka Samhita, Chikitsasthana, 5/57. Varanasi, Choukhambha Publications,2004, Page-210.
6. Acharya Susruta, Anantram Sharma, Susruta Samhita Sutrasthana, 11/34, Edition-2nd, Varanasi, Choukhambha Publications, 2004, Page-78.
7. Acharya Somadeva, Siddinandana Mishra, Rasendra Chudamani, 9/5, Edition-3rd, Varanasi, Choukhambha Publications, 2004.
8. Acharya Sadanand Sharma, Kashinath shastri, Rasa Tarangini, 5/34, Varanasi, Choukhambha Publications, 2002, Page-81.
9. Acharya Govindha Bhagawatpada, Vaidyaraj Pavani Prasad sharma, Rasa Hrudaya Tantra, 2/11, Edition-1st, Varanasi, Choukhambha Publications,2003,Page-35.
10. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 11/70, Edition-2nd, Varanasi, Choukhambha Publications,2003, Page-260.
11. Acharya Sadanand Sharma, Kashinath shastri, Rasa Tarangini, 2/6-8, Varanasi, Choukhambha Publications, 2002, Page-12.
12. Acharya Sadanand Sharma, Kashinath shastri, Rasa Tarangini, 5/35, Varanasi, Choukhambha Publications, 2002, Page-18.
13. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 11/70, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-199.
14. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 2/65, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-31.

15. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 2/117, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-43.
16. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 3/68-70, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-67.
17. Acharya Sadanand Sharma, Kashinath shastri, Rasa Tarangini, 11/137, Varanasi, Choukhambha Publications, 2002, Page-267.
18. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 4/57-58, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-99.
19. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 2/124, Edition- 2nd, Varanasi, Choukhambha Publications, 2003, Page-45.
20. Acharya Madava, Gulraj Sharma Mishra, Ayurved Prakash, 2/184, Choukhambha Publications, Varanasi.1999,Page-306.
21. Acharya Madava, Gulraj Sharma Mishra, Ayurved Prakash, 6/60, Choukhambha Publications, Varanasi.1999,Page-493.
22. Acharya Rasa Vagbhata, Dr. A.D. Satpute, Rasaratna Samucchaya, 2/125-126, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-45.
23. Acharya Madava, Gulraj Sharma Mishra, Ayurved Prakash, 2/184, Choukhambha Publications, Varanasi.1999, Page-419.
24. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 3/53, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-63.
25. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 3/63, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-65.
26. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 2/28, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-24.
27. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 2/68, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-31.
28. Acharya Rasa Vagbhata, Dr.A.D.Satpute, Rasaratna Samucchaya, 4/64, Edition-2nd, Varanasi, Choukhambha Publications, 2003, Page-100.
29. Acharya Madava, Gulraj Sharma Mishra, Ayurved Prakash, 6/60, Choukhambha Publications, Varanasi.1999, Page-493.

Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Mahantesh B. Rudrapuri: Review Article: Phrmaceutical Utility Of Kshara (Alkalies) In Rasashastra. International Ayurvedic Medical Journal {online} 2018 {cited March, 2018} Available from: http://www.iamj.in/posts/images/upload/684_688.pdf