

Analytical study of *Tila nal Paneeya Kshara*

Research Article

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Abstract

Kshara is mentioned only in post-Vedic literature. Whilst *Charaka Samhita* applies only to Detailed description of its preparation, classification, indication and description for *Kshara* In *Susruta Samhita*, contraindications are available. *Kshara* is defined as one of the *Upayantras* or *AnuSastras*. It is a medicine, prepared out of the dried plants water soluble ashes by a special process known as *Kshara kalpana*. It is considered to be between *Shashtra* and *Pradhan* because of its *Chedana*, *Bhedana*, *Lekhana* and, *Anushashtra Karma*, as it is said, to be *Tridoshaghna* and for special techniques to be used. *Susruta* has characterised "*TatraKsharanatKshananadva Kshara*" The medication has distinctive *Ksharan* or *Kshanan* properties. *Ksharan*, meaning either good or unhealthy, kills fleshy mass. *Paneeya Kshara* is indicated in good number of diseases by ancient *Acharyas*. *Tilanal Paneeya kshara* is mentation in *Rasatarangini* and used in various diseases.

Key Words: *Kshara*, *Paneeya Kshara*, *Pratisaraneeya Kshara*, pH, *Tila nal*.

Introduction

Kshara Karma procedure has been in started since 500 BC. The word "*Kshara*" has different derivations. *Kshara* means *Shatana* or destruction. It destroys unhealthy tissues. Derivation from *Ksharana* means violence i.e. violence on unhealthy tissues. *Kshar kalpana* is one of the important *kalpana* in *Ayurveda*. It is a medicine, prepared out of the dried plants water soluble ashes by a special process known as *Kshar kalpana*. *Kshar kalpana* has special importance as they have wide therapeutic utility and are required in low doses. Since the period of *samhita*, *ksharas* have been used in the management of many diseases. *Kshara* is supreme among *shashtra* (sharp instruments) and *anushashtra* (accessory instruments), because it performs functions like excision, cutting, scraping, mitigates all the *three doshas* and is suitable for being used by special methods: (1) The disease that cannot be cured by any other medicine or in subjects where surgery is not possible the *parasurgical* procedure such as *ksharkarma* is very effective. *Ayurveda* has shown various paths to use these resources in medical treatment since longtime year back. *Kshara* (alkaline substances), is one among them. *Kshara* is medicament obtained from ash of one or more plants, animal and mineral products(2) As per *Sushruta*, the *Kshara* is prepared from 22 plants such as *Kutaja*, *Palasha*, *Ashvakarna*, *Nimba*, *Arka*, *Snuhi*,

Apamarga, *Kadali*, *Chitraka*, *Tila* etc(3). There are two types of *Kshara* – *Paneeya Kshara* (for internal use) and *PratisaraneeyaKshara* (for external application). The *Pratisaraniya Kshara* is further divided into three types, i.e., *Mridu*, *Madhya* and *Tikshna*. It is used externally as well as internally as a medicine in various diseases. Due to its *gunakarma*, *kshar* has great importance in *Kaya chikitsa* and *Shalya chikitsa*.

Aim and objectives

- Preparation of *Tila nal paneeya kshara* GMP certified pharmacy as per classical explanation.
- Observe the Physicochemical, Qualitative Characters of *Tila nal paneeya kshara*.
- Observe the organoleptic characters of *Tila nal paneeya kshar*.

Materials and Materials

Materials

Tila Panchanga was collected in the month of July- August in 2020 from village area of Gujarat and their authentication was done by the *Dravya guna* department of Parul Institute of *Ayurved*.

- Preparation method: Open Method.
- Apparatus required: Big steel vessel, Cloth filter, Big long tube, Gas stove.

Methods

The whole procedure was further divided into three phases:

Phase 1: Preparation of Ash of *Tila Panchanga*.

Phase 2: Preparation of *ksharjala*.

Phase 3: Preparation of *kshar*.

Preparation of Ash of *Tila Panchanga*

Fresh and measured raw materials were collected and weighed using a weighing machine and

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were Permitted to dry in the sunshine. Physical impurities have been extracted from dried *Tila panchanga* Weighted was taken and burnt in a large iron pan. Entirely White-greyish ashes were gathered and weighted after self-cooling. (Table no. 1)

Preparation of Ksharjala

In a steel vessel, one part of the ash was collected and six times the water was added. The contents were thoroughly crushed with hands and left for 8 hours undisturbed .The clear supernatant liquid was subsequently decanted through the saline tube. It was filtered then twenty one time by 3-4 folded cotton cloth. (Table no. 2)

Preparation of Kshara

The filtrate (*Ksharjala*) was taken in a steel vessel and subjected to heat over the gas stove until. The whole portion of water is evaporated. Slight dull white coloured *Kshar* after evaporation has been received. *Kshara* was then gathered and powdered after it was weighed and placed in an air tight container of glass. (Table no. 2)

Tila nal kshara was subjected to an assessment of organoleptic and physicochemical characteristics such as water solubility(4), drying loss determination at 105 °C(5), ash value determination(6), insoluble acid ash determination(7), pH determination using pH meter(8), presence and absence of sodium and potassium, calcium and Magnesium determination(9).

Quality of properly prepared Tila Nal Paneeya Kshara (10)

1. NaatiTeekshna	4 Shlakshna	7. Shighrakarita
2. NaatiMridu	5. Pichhila	8. Shiva
3. Naati Shukla	6. Avishyanda	

Undesirable qualities of Tila Nal Paneeya Kshara (11)

1. Atimridu	4. Atiteekshna	7. Ativisarpita
2. Atiushna	5. Atipichhila	8. Heendravayata
3. Ati Shukla	6. Atisandrata	9. Apakvata

Observations and Results

Tila nal panchanga burnt easily as it was completely dried. Comparatively, seeds took more time to burn. The powder of ash thus obtained was whitish gray with a characteristic taste. 54.85% Weight loss was observed after drying of *Tila Panchanga* and total 15.08% ash was obtained from dried *Panchanga*. After addition of water, the contents tasted salty, had characteristic odour and were yellowish in colour. On an average, 60% *Ksharajala* was obtained after the wash [Table 2]. On evaporation of moisture on heat, the yellowish liquid was turned to brownish semisolid mass with aggregation and creaking sounds.

Figures of Preparation of Tila Nal Paneeya kshara



Figure 1:
Dried Raw drug of Tila nal

Figure 2:
Burnt the dried tila nal

Figure 3:
Ash of the Brunt Tila Nal

Figure 4:
Mix the Ash with 6 times of water

Figure 5:
Tila Nal kshara jal

Figure 6: Tila Nal paneeya kshara in solid form

Figure 7: Prepared Tila Nal Paneeya kshara in Powder form

Figure 8: Prepared Tila Nal Paneeya kshara in Powder form Packed

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Table no.1: Showing result obtained during preparation of ash of Tila Nal kshara

Materials of Plant	Tila nal (whole plant)
Fresh (weight) (Kg)	350
After dried (weight) (Kg)	158
Weight of ash (Kg)	25
Weight of ash in (%)	15.82
Percentage loss after drying	54.85
Duration for ash preparation	12 hours

Table No.2: Showing result of the preparation of Ksharjala and percentage of obtained Tila panchanga kshara

Ash (kg)	25
Water (litre)	150
Dissolution	8
Filtrate	90
% of filtrate	60
Heating time	14
Kshara	3
% of obtained	12

Table No.3: Showing organoleptic characters of Tila nal paneeya kshar

Colour	Touch	Appearance	Taste	Odour
White	Soft	Fine powder	Saline, bitter	Faint

Table No.4: Physio-Chemical Parameters of Tila nal Paneeya kshara

Sr. No.	Sample	Tila nal Paniya kshara
1	Loss on drying at 105 °c (%w/w)	16.08
2	Total Ash Value (%w/w)	85
3	Acid Insoluble Ash (%w/w)	0.70
4	Water Soluble Extractive (%w/w)	82
5	Alcohol Soluble Extractive (%w/w)	0.27
6	pH Value	10
7	Bulk density	0.9998

Table No. 5 Qualitative Analysis of Tila Nal Paneeya Kshara

Sr. No	Solvent	Tila Nal Paniya Kshara present(+)/Absent(-)
1	Sodium	+
2	Potassium	+
3	Calcium	+
4	Chloride	+
5	Carbonate	+
6	Magnesium	+

Discussion

Kshara therapy not only minimizes complication but also reduces recurrence of diseases. Kshara can reduce the chances of post-surgical infections due to its alkalinity. Kshara has the top most place in all surgical and parasurgical measures(13)

According to Ashtang Hridaya Arundutt, a commentator on Ashtang Hridaya, kshara is easy to apply and encourages outcomes even though Agnikarma and

Shashtrakarma are contraindicated or difficult to conduct in these diseases,

The classical testimony to assess Mridu, Madhyam, Tikshana Kshara by thus behaving more correctly on Kamala Naal told to (14) compared to the deciding pH scale of the Tikshnata of Kshara.

Paniya Kshara is indicated in Gara Visha (artificial poison), arochak (tastelessness), Krimi, Gulma (tumors), Anaha (constipation), Visha, Udararoga (GIT disorders), Arsha, Agnimandya (loss of appetite), Ashmari (calculi), Ajirna (indigestion)(15) Arsha, Bhagandar, Ashmari, Gulma, and Udararoga .

Tila kshara along with Madhu & Takra is given to drink in the management of Ashmari.

Tila nal Paneeya Kshara was analysed using physicochemical, techniques at Central research laboratory Parul Institute of Ayurved, Parul University vadodara. The common parameters mentioned for kshara from API(16) and CCRAS(17) are taken as guidelines.

Conclusion

Pratisaraneeya Kshara and Paneeya Kshara have different terminal processing components. The classification of Mridu, Madhyam and Tikshana Kshara cannot be standardized on the pH scale. Classical testimony to be considered as a gold standard to measure Mridu, Madhyama, Tikshana of Kshara. In this study the Tila nal kshar have pH was seen 10. Loss on drying was seen as 16.08% above moisture contents were within normal limits Total ash was seen 85% . Acid insoluble ash was seen 0.70% .The above acid insoluble ash were within normal limits. Sodium, potassium, calcium, chloride, carbonate and magnesium were present in the Tila nal Paneeya kshara.

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