



# Indian Journal of Agriculture and Allied Sciences

A Refereed Research Journal

ISSN 2395-1109

e-ISSN 2455-9709

Volume: 3, No.: 1, Year: 2017

www.mrfsw.org

Received: 17.03.2017, Accepted: 25.03.2017

## A CRITICAL REVIEW OF KSHARA KARMA

**Uzma Fatmi**

PhD Scholar, Dept of Shalya Tantra, Faculty of Ayurveda, Institute of Medical Science, Banaras Hindu University, Varanasi, U.P. India, Mobile: 09451006029, Email: druzmafatmi@gmail.com@gmail.com

**Abstract:** There are certain fundamental meritorious principles underlying the ayurvedic methods which have stood the test of time. Their advantage demands their continuous use even in these days. Kshara karma is one of them. It is best parasurgical method described in ayurvedic surgical discipline. It is said to be capable of allaying all the three doshas and can be taken orally or applied locally. The kshara is a herbomineral preparation, alkali in nature, obtained from the plants, animal and minerals. It has been described vividly in both vrihadtrayee, laghutrayee and other similar ayurvedic classics. In this article an effort was made to compile the various aspect of kshara and kshara karma viz. method of preparation, types, merits, demerits, indications, contraindications, dose and adverse effects and to establish its importance in surgical as well as medical discipline,. Study reveals that it is used for more than fifty clinical conditions, not only used in surgical diseases but equally potential and useful in the field of medicinal cases also and hence, may be regarded as a wonder drug.

**Keywords:** Kshara; kshara karma; parasurgical method; herbomineral preparation.

**Introduction:** Kshara is a kind of medication described in Ayurveda Texts for the management of various disorders. The word Kshara is derived from the root Kshar, means to melt away or to perish. Acharya Sushruta defines as the material which destroys or cleans the excessive/the morbid doshas <sup>[1]</sup> (Ksharanat Kshananat va Kshara). The drug which has the characteristics of Kshanan or Ksharan literally means that which destroys fleshy mass either healthy or unhealthy is Kshara. Charaka says Kshara is one which scrapes the abnormal tissue from its location and destroys it after dissolving it, because of its corrosive nature. The kshara is prepared out of the plants after burning and making ash. A group of plants is being used for the preparation of kshara, these plants are ranging from shrub to big tree. Either one or more is used for the preparation of kshara as stated by Sushruta. The study comprises its method of preparations, types, qualities, functions, indications, contraindications, and adverse effect.

**Methods of Preparation:** Big, black, middle aged <sup>[2]</sup>, undamaged plants <sup>[3]</sup> grown on auspicious land on hill top with formal rituals should be collected in autumn and cut into small

pieces then mixed the lime gravels and dried stalk of sesamum and burned at the place devoid of air. When the fire is extinguished, the ash along with gravels collected and dissolved in 6 times of water/urine. In Ashtang Hrudaya, ½ part water and ½ part urine of animals is mentioned <sup>[4]</sup>. Decanting it 21 times, followed by cooked in a big pan with continuous stirring slowly with laddle. Vagbhatta has used the iron vessel for preparation <sup>[3]</sup>. When it becomes clear, red, sharp and slimy strained through a large piece of cloth. Again put on fire, isolating the refuse (solid portion) from alkaline water. 160 or 240ml should be taken out. The gravel of lime and ash, oyster shell and core of conch shell etc. after heating red, should be macerated in the iron pan with the same alkaline water. And along with the same eight palas each of the core of conch, shell etc Should be put in two dronas of liquid and cooked carefully, constantly stirring till it attains the qualities of kshara <sup>[5]</sup>. It should be brought down and preserved in an iron vessel, keeping its mouth closed. This is a moderate type. The fine powder of excreta of cock, peacock, falcon, pigeon and bile of quadruped animals and birds ala, orpiment and salt are taken and well ground into slimy paste and mixed in the boiling liquid.

The procedure of preparation of *Paneeya Kshara* (savyuhim) is similar to *Pratisaraneeya Kshara* up to *Ksharodaka*. This *Ksharodaka* is then boiled till 1/3rd of it remains. This is called

*Paneeya Kshara* <sup>[6]</sup>. In *Gulmapratishedha adhyaya* from *Sushruta Samhita*, another method of preparation of *Paneeya Kshara* is mentioned, it is of *avaleha type* <sup>[7]</sup>.

#### List of Plants Used for Kshara Preparation <sup>[3]</sup>

Kutaja	Hollarrhena antidysentrica	Apocyanaceae
Palasha-	Butea monosperma	Fabaceae
Apamarga	Achyranthes aspera	Amaranthaceae
Snuhi	Euphoria nerifolia	Euphorbiaceae
Arka	Calotropis procera	Asclepiadaceae
Tilwaka	Symplocos racemosa	Symplocaceae
Aragvadha	Cassia fistula	Caesalpinnoideae
Mushkaka	Elaeodendron glaucum	Celastraceae
Bibhitaka	Terminalia bellerica	Combretaceae
Paribhadra	Erythrina veriegata	Fabaceae
Ashwakarna	Dipterocarpus turbinatus	Dipterocarpaceae
Naktamal	Pongamia pinnata	Fabaceae
Patla	Stereospermum suaveolens	Bignoniaceae
Vrusha-	Adhatoda vesica	Acanthaceae
Kadali	Musa sapientum	Musaceae
Chitraka	Plumbago zeylanica	Plumbagenaceae
Putika	Holoptela integrifolia	Ulmaceae
Asphota	Hemidesmus indicaceae	Asclepiadaceae
Ashwamaraka	Nerium indicum	Apocyanaceae
Saptachada	Alstonia scholaris	Apocyanaceae
Agnimantha-	Premna mucronata	Verbenaceae
Gunja	Abrus precatorius	Fabaceae
Koshataki	Luffa acutangula	Cucurbitaceae

\*Other plants used in Ashtanga Hridaya <sup>[5]</sup> are Shyamaka, Shooka, Nala, Kakajangha

**Animal Products or Animals Used For:** Seepa (sea shell), shankha nabhi(pila), cock, crow, peacock, pigeon, vulture and bile of cow etc.

**Minerals Used for Kshara:** Hartala (As<sub>2</sub>S<sub>3</sub>), manahshila(As<sub>2</sub>S<sub>2</sub>), Calcium carbonate, (CaCO<sub>3</sub>), Abhraka, Vidlavana etc.

#### Classification: On the Basis of Origin

(A) Plant based- Kutaj, Apamarga etc.

(B) Animal based- Shankha bhasma

(C) Others-Tankada kshara-(Na<sub>2</sub>B<sub>4</sub>O<sub>7</sub>.10H<sub>2</sub>O) Sarjikshara

#### On the Basis of Mode of Application

1. Pratisaraniya (local application)

2. Paniya Kshara (systemic application)

**Table 2: Qualities of Kshara** <sup>[8]</sup>

<i>Na ati tikshna</i>	Not excessively sharp
<i>Na ati mrudu</i>	Not excessively soft
<i>Na ati shukla:</i>	Not excessively <i>ushna</i> so that it can be used in <i>Pittaja vikara</i>
<i>Shlakshna:</i>	Better to touch
<i>Pichhila:</i>	Slimy
<i>Avishyandi:</i>	Immovable
<i>Shiva or sama</i>	Not so tough or soft
<i>Shighra</i>	Having rapid action
* <i>Shikhari</i> <sup>[9]</sup>	Do not move when placed in pile
<i>Sukhanirvupaya</i>	<i>kanjikadinam sheeti kriyate</i>
** <i>Tikshna</i> <sup>[10]</sup>	Sharp penetrating action
<i>Ushna</i>	Hot and ability to produce perspiration
<i>Laghu</i>	Light

\*Ashtanga hridaya 10 qualities

\*\*Charaka Samhita 11 qualities

**On the Basis of Potency:** 1. Mridu 2. Madhya 3. Teekshna

**On the Basis of Quality:** 1. Uttama 2. Madhyama 3. Adhama

They have classified in Various Groups also <sup>[6]</sup>

**Ksharadwaya:** Yavakshara and sarjikshara

**Ksharatraya:** Tankada, yavakshara (barley-Hordeum vulgare) and sarjikshara (Na<sub>2</sub>CO<sub>3</sub> - prepared from the burning of a plant named lana-Begonia lana )

**Ksharapanchaka:** Palash, mushka, yava, tilnala, suvarchika.

**Ksharaashtaka:** Palash, snuhi, apamarga, chinch, arka, tilnala, yavakshara and sarjikshara. <sup>[7]</sup>

**Functions and Importance of Kshara:** The kshara is performing the action of *Chhedana* (to excise) <sup>[11]</sup> cutting of *apaki*, *kathin* (hard), *sthir* (immobile), *snayukotha* (gangrenous part) conditions e.g. in cases of *vrana* (wounds) it debrides the unhealthy slough tissue. *Bhedana* (to incise) it may create an opening after suppuration of doshas by local application in cases of carbuncles, sinuses. *Lekhana* (scrapping) of *utsanna mamsa* (excessive growth of granulation tissue at wound margin, *kathina* (hard margins), *sthum vrutta oshtha* (elevated, everted wound margins, *Tridoshghnatva* as during preparation of *Kshara* many plants are used in combination. It results into combination of *vinshati guna* in it. Hence results in *tridoshghnatva*. *Vishesha kriya avcharana* it can be used in *pitta dosh pradhan* conditions also though it is *ushna* and *tikshna*; in *pittaj* condition *mrudu Kshara* eg the *kamalanala kshara* may be used. *Dahana* is like a chemical cauterization at the site of bleeding. *Pachana*: in case of *Pratisaraneeya Kshara*: *vranashotha pachana* and in case of *paneeya Kshara*: *aama pachan* in conditions like *agnimandya*, *ajirna*. *Vilayana*: as it is prepared by *ushna aushadhi*, it is *ushna*, *tikshna*, hence it can melt *kapha vata vibandha* in many diseases. *Darana* (suppuration and incision) it helps in bursting of wounds in which large pus pockets are present, having number of opening but not adequate for drainage, especially in those where we cannot perform surgical interventions like wounds in children, female, weak and panic patients and wounds over sensitive and vital parts. *Vrana Shodhana* (cleaning) and *ropana* (healing of wounds) in *dushta vrana* (infected or chronic wounds), where the flies get attracted and lay a lot of eggs, maggots formation. These maggots engrave wound surface and results into painful inflammation and delayed wound healing e.g. in diabetic foot, It can be managed with by irrigation of wounds by *Ksharodaka*. It cleans the wound as well as improves healing process. *Vrana kleda Shoshana* it decreases the discharge from wound, in *kanduyukta vrana* decrease itching, *Stambhana* at the site of excessive bleeding i.e. chemical cauterization of bleeding capillaries.

In *Charaka samhita* <sup>[12]</sup> functions of *Kshara* are *Kledana* then *vishoshana* it has ability to generate exudates and cleans up by *Pachana*, *Dahana* and *Bhedana*.

### Indications of Kshara <sup>[13]</sup>

**Local application of Pratisaraniya Kshara:** Skin disorders Like Dermatitis, Hyperkeratosis, Ring worms, Eczema, Circular patches, Leukoderma, Vitiligo, Corns, Moles, Birthmarks, Facial hyperpigmentation, Warts. etc  
**Diseases of Oral Cavity:** *Upjihva*, *adhijihva*, *upakusha*, *dantavaidarbha*, three types of *rohini* etc.

**Other Conditions:** Fistula in ano, Hemorrhoid, Sinuses, External abscess, Tumor, Infected and chronic wound having poisons or maggots, Numbness, after the excision of glandular swelling and tumour. <sup>[14]</sup> *Raktaja gulma* or abdominal swelling <sup>[15]</sup>.

### Systemic Use of Kshara

**Gastrointestinal Disorders:** *Raktapitta*– kshara of tuber of lotus <sup>[16]</sup>, *kaphaja gulma* <sup>[17]</sup> *raktaja gulma* for vaginal cleaning per vaginal use of (*yavakshara* + *palala*) <sup>[18]</sup> *Ksharavatika* <sup>[19]</sup> is used in case of *kaphaja udar roga*, *Vidangadikshara* in *pleehodara* (splenomegaly) In *grahani* <sup>[19]</sup> or IBS (irritable bowel syndrome) kshara is used in different forms e.g. *kshara ghrita*, *kshara gutika*, *pippalimuladyakshara*, *bhallatakakshara*, *duralabhadyakshara*, *bhoonimbadiakshara*, *haridradya kshara*, *ksharagutika*, *chaturtha kshara*, *panchama kshara* etc., *Hemorrhoid*, <sup>[20]</sup> *Agnisada*, *Gulma*, *Diorrhoea*, *Aruchi*, *Agnisanga*, *Ajeerna* (indigestion), *Anaha*, *Internal abscess*, *Krimi*, *Sannipataja Udara roga*, *yakritashoola*, *parinama shoola*, *tridoshaja shoola*, *annadravashoola*, <sup>[21]</sup> in *Bhaishajya ratnavali Sarjikshara* and *palashkshara* are used in *gulma*, and *vajrakshara* is used in *udara roga*, *gulma*, *shoola*, *agnimandya*, *ajeerna* etc.

**Renal Disorder:** *Ashmari*, <sup>[22]</sup> *Urolithiasis* (*Sharkara*), *Yavakshara* used in *mutrakrichra* <sup>[21]</sup>

**Respiratory Disorders:** *Yavaksharadi churna* used in cough <sup>[23]</sup>

**Other:** *Timira*, Generalised swelling, poisoning, Fever, Brain diseases, Heart diseases,

**Musculoskeletal Disorders:** *Rheumatoid arthritis* <sup>[21]</sup> (*shankhadi choorna*)

### Demerits of Kshara in Long Term Use

**Local Use:** excessive burning, suppuration, redness, discharge, bodyache, exhaustion, thirst, fainting or even death <sup>[24]</sup>.

**Systemic Use:** Hair fall and graying of hairs, diminished vision, impotence, cardiac complications, impotence, burning sensation, bleeding, fainting, and fever etc. <sup>[25-27]</sup>. If excessively used in anal region gives the symptom of burning in anal region particularly

obstruction to the passing of urine, stool or excessive passing of stool and urine, **in nose** it produces excessive burning, severe lesion of nasal bridge, contraction and loss of sensation.

**Contra Indications of Kshara: Related to persons-**Weak patients or physically debilitated patients, Children, Old patients, Patient who afraid for medical procedures, having generalized oedema, Ascitic patients, *Pitta prakruti*, **Related to Disease/conditions:** *Timira* (eye disease), Pregnancy, During Menstruation, High grade fever, Diabetic patients, *Ruksha*, **Dose of Paneeya Kshara** <sup>[29]</sup>

<i>Uttama matra</i>	1 pala ~ 40 ml
<i>Madhyama matra:</i>	3 karsha ~ 30 ml
<i>Heena matra:</i>	½ pala ~ 20ml

But dose should be calculated by *Vaidyas* according to *Dashavidha Pariksha*.

**Pratisaaraneeya Kshara:** As per requirement. In the reference of haemorrhoid it was told to use one, two and three *nakhutsedh prmana* as per dosha involvement. <sup>[31]</sup>

**Process of Application of Pratisaaraneeya Kshara:** The area, where *Kshara* is to be applied, is roughened or small cuts are taken. The *Kshara* is applied with the help of stick (*shalaka*) and kept for 100 *matra* (~ 100 seconds). The area like *nasa* (nose) or eyelid, the time of *Kshara* application is about 50 *matra* (~50 seconds), then washed with *amla varga dravya* and ghee, honey is applied for healing. The *samyakyoga*, *ayoga*, *atiyoga* are explained in *Sushruta Samhita*.

**Discussion:** In the description of *kshara acharya vagbhata* has told that the diseases which are difficult to treat by other means can be cured by *Kshara* therapy <sup>[30]</sup>. *Kshara* is used in tumours due to teeksna and sheghra quality, with the *Ushna*, *Shighra* and *Tikshna* qualities it can treat the sinuses, carbuncles. In skin disorders where the *Lekhana chikitsa* is indicated *Kshara* can be used. In case of *kapha dosha anubandhi Raktapitta* (bleeding disorder) *Kshara* is used as it contain *Vishesha kriya avcharana* quality. *Kshara* can be used for arrest of bleeding due to its styptic nature. Severe indigestion which is difficult to treat with other medicines can be easily cured with *Kshara chikitsa*. The healing of wounds having discharge is very difficult, but few qualities of *Kshara* like *Vrana Shodhana* and *Vrankledshoshana* in *kanduyukta vrana*, *Kledana* then *vishoshana* and *Stambhana* serves as a medical debridement for wound thus preparing the wound bed and by its *ropana* action it promotes healing of wound. The study of *Kshara* reveals that the *Kshara* therapy not only

*Kshatksheena*, Thirst, *Moorchha* (unconscious), Impotent, *Apavrutta yoni*, *Udvrutta yoni*, *Phalayoni* The conditions like whole body oedema, bone pain, dysguassia, heart pain, joint pain.

**Related to sites:** When the sites of diseases are *Marma*, *Sira*, *Snayu*, *Sandhi* (joints), *Tarunasthi* (cartilaginous bones), *Sevani*, *Dhamani*, *Gala* (Throat), *Naabhi* (Umbilicus), *Nakhaanta*, *Shepha* (penis), *Srotas*, thin musculature, Eyes except eyelid diseases.

minimizes complication but also reduces recurrence of diseases. It also enables patient to resume work with less discomfort by reducing the healing time. *Kledashoshana* activity of *Kshara* can reduce the chances of post surgical infections. This therapy is also cost effective. The role of *Kshara* in medicine can reduce chances of surgery in future. These references from medicine can help to establish the importance of *Kshara*.

**Conclusion:** The review of *Kshara* suggests that the *Kshara karma* is one of the best parasurgical procedure for treating the various disease conditions. Most of the time the therapy is used only to treat Haemorrhoids and Fistula externally but the study reveals that it is used for more than fifty clinical conditions, not only used in surgical diseases but equally potential and useful in the field of medicinal cases also and hence, may be regarded as a wonder drug. Its internal use as a *paniya kshara* is mentioned in various gastroinestinal disorders viz. *udara roga*, *aruchi* or anorexia, indigestion, in *grahani* (irritable bowel syndrome). To establish the importance of *Kshara* in medicinal treatment the detail review of *Charaka Chikitsa Sthana* has been taken. 133 references, 105 *Kshara kalpa* in 19 *Adhyaya* of *Charaka Chikitsa sthana* suggest that the cautious use of *Kshara* can treat many conditions which are unable to treat with the other kind of therapy. Not only in *vrihadtrayee* but in other treatise viz *laghutrayee* *kshara* is used because of its dramatic action. In *rasashastra* *kshara* is used for *shodhana* of many drugs. The *Kshara* is such a rare combination that we can find different properties in a single formulation. We can modify the properties of *Kshara* by making change in the drugs used for its preparation.

*Kshara* has rapid action and it is safer when used in proper dose and cautiously.

### References

1. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Volume-1 Sutrasthana 11 /4, pp.113
2. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Volume -1 Sutrasthana 11 /11, pp.116
3. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; 2004. Volume -1 Sutrasthana 11 /11, pp.116
4. Murthy, K. R. S. (2014). *Vagbhata Astangahrdayam*, Chaukhamba Krishnadas Academy, Varanasi, Sutrasthana 30/ 8. pp.344
5. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Volume -1 sutrasthana 11/16, pp.119
6. Tripathi, I. (2006). *Vagbhata (Rasaratna samuchchaya)* Chaukhambha Sanskrit Bhawan, Varanasi, 10:68-69.
7. Sitsram Bulusu. (2006). *Bhavaprakash*, Chaukhamba prakashan, Bhavaprakasha Haritaki. pp.259.
8. Murthy, K. R. S. (2014). *Vagbhata Astangahrdayam*, Chaukhamba Krishnadas Academy, Varanasi, Sutrasthana 30/8-9. pp.344
9. Murthy, K. R. S. (2014). *Vagbhata Astangahrdayam*, Chaukhamba Krishnadas Academy, Varanasi, Sutrasthana 30/8-12. pp.344
10. Shastri, K. Chaturvedi, G. (2014). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Vimansthana 1/17, pp.678
11. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Volume I Sutrasthana 11/5, pp.114
12. Shastri, K. Chaturvedi, G. (2014). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Vimansthana 1/17, pp.678
13. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Sutrasthana 11/7, pp.115
14. Murthy, K. R. S. (2014). *Vagbhata Astangahrdayam*, Chaukhamba Krishnadas Academy, Varanasi, Sutrasthana 30/ 8. pp.344
15. Shastri, K. Chaturvedi, G. (2012). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Chikitsasthana 5/52, pp. 209
16. Shastri, K. Chaturvedi, G. (2012). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Chikitsasthana 4/93, pp. 193
17. Shastri, K. Chaturvedi, G. (2012). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Chikitsasthana 5/52, pp. 209
18. Shastri, K. Chaturvedi, G. (2012). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Chikitsasthana 5/174, pp. 225.
19. Shastri, K. Chaturvedi, G. (2012). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Chikitsasthana 13/157,162 & 15<sup>th</sup> ch. pp.407
20. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Volume-2 Chikitsasthana 6/4, pp.329
21. Shastri, A. Mishra Brahmashankar.(ed) (2012). Bhaishajya Ratnawali, Shri Govind Das Ji chaukhamba Prakashan, Chap. 32/16, 40/30 pp.671, 756
22. Murthy, K. R. S. (2014). *Vagbhata Astangahrdayam*, Chaukhamba Krishnadas Academy, Varanasi, Sutrasthana 30/ 2-3. pp.343
23. Tripathi B.. (2015). *Sarangadhara Samhita*, by Sarangdharaacarya Chaukhambha Surbharti Prakashan, *Sharangadhara madhyama khanda*, pp.120
24. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Sutrasthana 11/26 pp.121.
25. Shastri, K. Chaturvedi, G. (2014). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Vimansthana 1/17, pp.678
26. Shastri, K. Chaturvedi, G. (2014). *Charaka samhitha*, Agnivesha (Ed.), Chaukhambha Bharti Academy, Varanasi; Vimansthana 1/17, pp.678
27. Murthy, K. R. S. (2014). *Vagbhata Astangahrdayam*, Chaukhamba Krishnadas Academy, Varanasi, Sutrasthana 30/ 13. pp.344
28. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Sutrasthana 11/28-30. pp. 122
29. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Volume-1 Sutrasthana 11 /7, pp.115
30. Murthy, K. R. S. (2014). *Vagbhata Astangahrdayam*, Chaukhamba Krishnadas Academy, Varanasi, Sutrasthana 30/ 2. pp.343
31. Sharma, P. V. (Ed.). (2013). *Sushruta Samhita*, Varanasi: Chaukhambha Vishwabharti Prakashan; Volume-2 Chikitsasthana 6/9, pp.330