

# AN OVERVIEW ON: APAMARGA KSHARA

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## ABSTRACT:-

Apamarga (*Achyranthes aspera*, Amaranthaceae) is a vital healing dravya originate as a unwanted plant all over India. In conventional medication framework all pieces of this plant are utilized like beej, rmoola and shoots. In Atharvaveda, it is said to be kshetriya roga nasak and yatudhan Krimi nasak. In Yajurveda it is said to be used for hawan purpose due to its Rakshoghana Property. No other plant has better water removing property than Apamarga. Apamarga kshara is an alkaline Ayurvedic medicine, in powder form which is prepared from Apamarg- Prickly Chaff-Flower. Kshara is a caustic, alkaline in nature obtained from the ashes of Apamarga dravya. It is adaptable, because even in such places that are difficult in approach by ordinary measures can be treated by kshara. This alkaline preparation may be a amalgam of numerous dravyas or it can be a single dravya. It has a vast series of explanation about kshara explained through Acharaya Sushruta. Kshara has lots of therapeutic usages and also replace many surgical procedures. The large number of phytochemical elements have been extracted out from this plant which possess some properties like Arsha, Kusthaghana, paaproga nasak, Duhswapnanasana, unmade, Apasmara, Ashmari, Hikka-Swaas, Vish Chikitsa etc. The compacted form of herb is utilized in pneumonia and mixture of the root is utilized as gentle astringent in bowel disorders. Traditionally, it is used as anti-diabetic, anti-inflammatory and abortifacient.

KEYWORDS: Apamarga kshara, Rakshoghana, kushthaghana, Kshetriya roga, Yatudhan Krimi, Paaproga .

## INTRODUCTION: -

Kshara is the water-soluble ash of drug which is in the form of solutions, powders which is alkaline in nature. It is known as kshara because it has Ksharan (which is destruction of tissues) property which causes ksharan of mamsa and other dhatus. Acharya Sushruta described Kshara separately in detailed manner. He defines that Kshara have chedan (Excision), Bhedan and lekhan (Scraping) and tridosahar (equilibrium vata, pitta and kapha) properties. He also considers the scope of Kshara in Shalya Tantra. He has stated various drugs for the preparation of kshara and Apamarga is one of them from which Apamrga Kshara is prepared. He also mentioned that Kshara is prepared from 22 plants such as Apamarga(*Achyranthus aspera*), Snuhi(*Euphorbia nerifolia*), Amaltas(*Cassia fistula*), Kutaj (*Holarrhena antidysentrica*), Vasa(*Adhatoda vasica*), Arka(*Calotropis gigantea*), Tila(*Sesamum indicum*), etc. and kshara chikitsa has been in practice since 500 B.C.

Apamarga kshar is an alkaline preparation prepared from Apamarga (*Achyranthes aspera*) in powder form. Recently, there has been a remarkable increase in the use of herbal plants and herbal formulations in creating just as created nations which brings about raised development of natural items comprehensively. Nowadays, for medicine development and for the discovery of new drug molecules number of plants and their products and formulations are determined based on their conventional use. One of them which are being assessed for their restorative adequacy is Apamarga which is regularly known as Cheerchira (Hindi) and Prickly Chaff Flower (English). It has many therapeutic properties used as spermicidal (Shukra Stambhan), antipyretic (Jwarghan) & cardiovascular agent (Hridya).

## MORPHOLOGY:-

- Apamarga is a wild perennial herb which grows up to a height of 30 – 90cm and having tap root type of branched<sup>[3]</sup>.
- Stem:- It is herbaceous, hairy, above ground, erect and green in color<sup>[3]</sup>.
- Leaves:- Leafs have sudden pointed apex, opposite arrangement and semiorbicularis, petiolate<sup>[3]</sup>.
- Flowers:- They are bisexual, tetracyclic, small size, green in color and actinomorphic. Having spike with reflexed flower arrangement on long peduncle<sup>[3]</sup>.
- Fruit:- Indehiscent fruit enclosed within persistent perianth and bracteole<sup>[3]</sup>.

**GEOGRAPHICAL SOURCE: -**

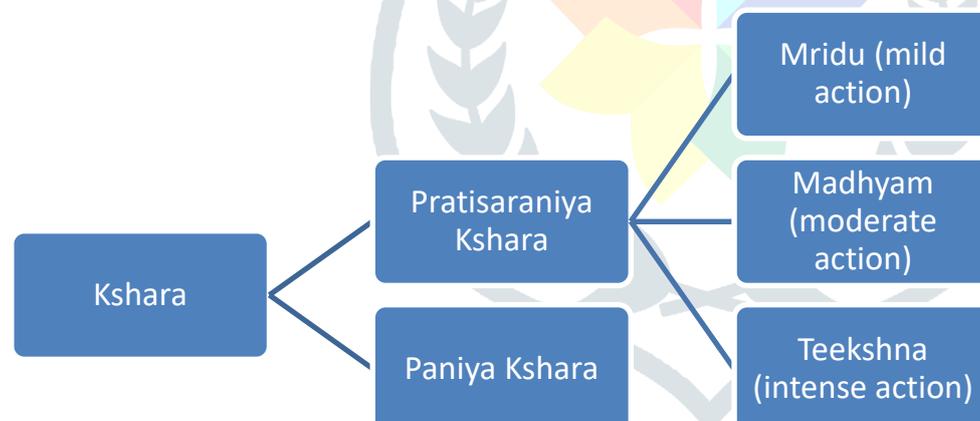
It happens close to street sides, stream banks, limits and waste places as a weed. It is dispersed all through India, in South Andaman Islands up to a height of 2,100 feet. It is additionally generally spread in Baluchistan, Ceylon, Tropical Asia, Africa, Australia and America<sup>[3]</sup>.

Kingdom	<i>Plantae</i>
Sub Kingdom	<i>Tracheobinota</i>
Super Division	<i>Spermatophyta</i>
Division	<i>Mangoliophyta</i>
Class	<i>Mangoliopsida</i>
Subclass	Caryophyllidae
Order	Caryophyllales
Family	Amaranthaceae
Genus	Achyranthes
Species	Aspera

**Table 1 :- Taxonomic Classification<sup>[20]</sup>**

**CLASSIFICATION OF KSHARA:-**

In Ayurvedic texts kshara are classified into two types on the basis of their mode of application. They are pratisaraniya kshara ( for external use ) and paniya kshara ( for internal use ). The pratisaraniya kshara are further categorised into three parts on the basis of its potential which is mridu (mild), madhyam (moderate) and teekshna (intense). This categorization is based on the strength of concentration of Kshara and applicable in external use<sup>[9]</sup>.



**Figure 1:- Classification of Kshara**

**MATERIAL AND METHOD:-**

- **Selection of Raw Materials:-**
  - The panchanga of the plant is used.
  - Drug authentication is done and approved.
  - Raw drug properly cleaned<sup>[18]</sup>.

## Drying of drug:-

The apamarga dried drug is taken and chopped into small pieces then dried under sunlight for 5 days (40 hours). To check the complete drying of drug break the plant part (stem/root). When plant part broke and produced 'katkat' sound without bending, then it confirms that the plant dried completely<sup>[18]</sup>.

## Burning of Apamarga Panchanga:-

- Dried apamarga panchanga is taken and ignited under the heap in a windless place.
- The time required for burning is 2 hours, for self cooling is 5 hours<sup>[18]</sup>.

## METHOD OF PREPARATION: -

- Apamarga panchang taken – 100mg
- Take dry drug panchang in a large iron pan and burnt into ash form till white color ash is obtained. Then, leave it for self cooling (swangasheeta). Water is added in a ratio (4,6 or 8) with 1 part ash and macerate well and the mixture was left overnight undisturbed for a specified period of time (3, 12 and 72 hours). The next morning, supernatant was collected by filtration and the dark color sediment was discarded. Then the supernatant was filtered two or three times till clear liquid is obtained known as Ksharodaka (alkaline liquid). It should have Gomutra vana (color like cow's urine). Then the liquid is put in an earthen or iron vessel and heated with moderate fire with alternating stirring for 3 hours till it turns into reddish-yellow color, it is called as Mridu kshara.
- Shukti was taken and it weighed around 1/10<sup>th</sup> piece of Apamarga Kshara was acquired and warmed scorching in an iron dish. At the point when it get intensely hot, it's pottali was arranged and dunked in Mridu kshara. At that point, it transforms into white shading when warmed on madhyam agni and ceaselessly blended till it get thick consistency. This is known as Madhyama Kshara<sup>[16]</sup>.
- Chitrakmula was taken and weighed around 1/tenth piece of Shukti was gathered. At that point the chitrakmula was stuck finely. At that point, the Madhyama Kshara was taken off from the fire and permitted to stand cool for 5-10 minutes. At that point, the chitrakmula glue was added to it and blended for uniform dispersion. The kshara in this manner acquired is known as Tikshna Apamarga Kshara. Later it is dried and Shweta Vrana Kshara (white shading soluble base) got<sup>[17]</sup>.



Figure 1:- Preparation of Apamarga Kshara

SAMPLE	AUTHOR	ASH AND WATER RATIO	TIME	FILTRATION OF KSHARNODAKA
A	Ayurveda Sara Sangraha	1:8	48-72 hours (2-3 days)	7 times
B	Rasa Tarangini	1:4	3 hours	Till clear liquid
C	Sharangdhara Samhita	1:4	Over night (12 hours)	Liquid decanted
D	Ayurveda Prakasha	1:4	24 hours	1 times
E	Yadavaji Trikamji and Acharya Sushruta	1:6	Over night (12 hours)	21 times

**Table 2:- Method of preparation carried out as per different references**

### Properties of Apamarga kshara:-

Rasa (Taste)	Katu (pungent) & Tikta (bitter )
Guna (Properties)	Laghu (lightness), Tiktsna (sharpness), Sara (moving)
Virya (Potency)	Ushna (hot)
Vipak (Taste after Digestion)	Katu (pungent )
Doshakarma (Action)	Pacify Kapha & Vata Dosha

**Table 3:- Properties of Apamarga Kshara<sup>[19]</sup>**

### THERAPEUTIC IMPORTANCE OF APAMARGA KSHARA:-

- In classical texts, it is mentioned that the disorders which are difficult to treat or cure can be cured by Kshara therapy. Vrana Shodhana (Purification of wounds) and Vrana Ropana ( Healing of wounds) are special properties of “Kshara”.
- For example:- Apamarga Kshara was used in “Dushta Vrana” treatment in which a patient having Utsanna Mamsa (Raised granulation tissue), Kathina (Hard), Kanduyukta (Itching), chirothana (Chronic) propertis and applied the apamarga kshara over injury for 100 matra kala or till Samyak Dagdha Lakshana (dark shading) are watched and washed the wound with nimbu swarasa<sup>[11]</sup>.

### CHARACTERISTICS AND PRESERVATION OF APAMARGA KSHARA: -

Kshara is of white color and when exposed to environment it become moist. So, it should be kept in air tight container. Then, it will be last for five years<sup>[10]</sup>.

**DOSE OF APAMARGA KSHARA:-** 125mg – 1gm<sup>[5]</sup>.

### INDICATIONS/USES OF APAMARGA KSHARA<sup>[12]</sup>:-

- Kustha (skin disorders)
- Arsha (piles)
- Visha (poison)
- Dushtavarna (non-healing ulcers)
- Dadru (fungal infection)
- Nadivrana (sinus)
- Mukharoga (mouth disorders)

- Arbuda (tumor)
- Bhagandar (fistula)
- Krimiroga (worms infestation)
- Gara visha (artificial poison)
- Arochak (tastelessness)
- Udararoga (GIT disorders)
- Anaha (constipation)
- Agnimandya (loss of appetite)
- Ashmari (renal calculi)
- Ajirna (indigestion)

#### CONTRAINDICATION OF APAMRGA KSHARA:-

- Raktapitta (bleeding disorders)
- Timira (eye disease)
- Ruksha (dryness)
- Moorchha (unconscious)
- Turmoil ascend at the site of marma (indispensable focuses), sira (head), snayu (tendons), sandhi (joints), tarunasthi (ligament bones), dhamani (courses)<sup>[13,14]</sup>.

#### MODERN CONCEPT: -

Herbal ashes contain sodium, potassium, carbon, calcium oxide, magnesium and silica in it. Apamarga Kshara is prepared by dissolving this ash in water and filtered it and dried by evaporation method. During filtration, insoluble substance like silica is separated and soluble substances like potassium and sodium remain in the solution. When so many substances come in contact with each other, some of them get decomposed and some new substances are formed which means Kshara having more hydroides and having more Ksharan shakti. The proportion of hydroides can be increased in the Ksharas by addition of lime stone and conch shell which are rich source of calcium. These reactions is set up in the Kshara, as a result the transformation of some of them into carbonates<sup>[15]</sup>.

#### FURTHER FORMULATIONS OF APAMARGA KSHARA:-

Apamarga kshara is used in the form of Churna (powder ), Kalka (paste) and Svarasa (fresh juice).various further formulations which are prepared from apamarga kshara are given below in table:-

S.NO.	NAME OF PREPARATION	DISEASE/CONDITION	REFERENCE
1.	Apamarga kshara taila	Karna roga (Ear diseases)	Cakradatta karnaroga Chikitsa / 26
2.	Apamarga ksharadi taila	Warts of penis	Cakradatta Arsa Chikitsa / 9
3.	Apamarga navanita	Suryavarta (Severe migraine)	Cakradatta shiroroga Chikitsa / 43
4.	Apamarga svarasa	Raktasrava in vrana (Haemorrhage from accidental wounds)	Cakradatta Vranshotha Chikitsa / 54
5.	Apamargadi taila	Krimi (worm infestation)	Cakradatta shiroroga Chikitsa / 37
6.	Agasthya rasayana	Rasayana (Rejuvenation), jwara(Temperature), kasa(cough), Hridayaroga	Ashtanga Samgraha Chikitsa 5/78-84

Table 4:- Various formulations of Apamarga Kshara

In addition, the ancient physicians of India have mentioned that caustics are superior to lancet for opening of the abscess. For the preparation of caustic pastes, ashes of many plants containing potash (more or less) were used and Apamarga is one of them. Ksara (alkaline ash) is prepared from Apamarga and it is used in different ailments in different forms (The Materia Medica of Hindus).

**CONCLUSION: -**

Apamarga Kshara is an alkaline preparation extracted from the water soluble ash of Apamarga panchanga and has wide range of therapeutic uses. But the processing technique in the preparation of Apamarga Kshara differs according to various authors and scholars which include ratio of water added to ash, soaking time duration, folds of cloth and number of filtration.

Recently, the ethno-botanical and traditional use of herbal compounds received more attention as they are well known for their wide range of therapeutic window and have safe use for human. It is the best old style approach in the quest of new particles for the treatment of different illnesses. Kshara is mentioned one of the essential dosage forms in Ayurveda to cure diseases like kushtha, gulma, Mutraghata and Kshara sutra is one of the important surgical procedure for the treatment of fistula.

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