Review Article

AYURVEDIC DRUGS USED IN THE PREPARATION OF KSHARA-SUTRA IN ANO RECTAL DISORDERS W.S.R. PILES,FISTULA

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ABSTRACT

It is quite common for a patient to seek treatment of this disease through surgical intervention because this is only alternative known to the modern medical practitioners and the public in general.

In modern surgery the only form of treatment of anal disorders that affords any reliable prospect of cure is operation. The operative treatment of anal diseases is often far from simple and calls for caution and boldness based on wide experience of the disease in its various patterns and confident appreciation of anal anatomy.

The surgeries of anal diseases have an unenviable reputation for subsequent recurrences faecal soiling, imperfect control of flatus, chronic wound healing, more hospitalization etc. These are few operations in surgery where the quality of the result is so much influenced by the technical skill of the surgeon.

Man always strives for the best that is why the advancements and research has become a continuous process. Today, not only medical fraternity but common man also wants to verify the ancient claims which are time tested since centuries, on present day available scientific parameters.

Kshara and Kshara-sutra will definitely play a key role in the development of Shalya Tantra branch. Kshara Sutra is a unique and an established procedure for difficult surgical diseases.

It has brought revolution in the Indian system of surgery. Kshara Sutra ligation therapy in the management of Ano rectal disorders has proved boon for the humanity. It effectively substitutes the modern surgical procedure as it has: Less economical, Pt. is ambulatory, Less discomfort, No damage of splanchnic and soft tissues, No need of long duration hospitalization.

Other complications of the operation that mentioned priority has never been reported in K.S. therapy.

The content of standard Kshar sutra (Snuhi Ksheer (Euphorbia nerifolia), Apamarg kshara (Achyranthus aspera), Haridra (Curcuma longa) etc.

Keywords: Snuhi, Adhobhaghar, Shyamadi

INTRODUCTION

SNUHI

Ayurvedic Classification

In ayurveda classics, snuhi is mentioned under following gana.

Sadsudhantree (ksheertraya), Virechan-Charak

Adhobhaghar, shyamadi-sushruta

Kaphavatagha varga-

Botanical Name - Euphorbia nerifolia

Family - Euphorbiaceae

Sanskrit Name - Snuk, Gudha, sudha, Snuhi, Samantdugda, Vajri

Hindi Name - Thuhar, Sehunda, Seej

English Name - Common milk hedge

Distribution: It is found throughout India especially in South India.

Description:

Macroscopic - stem green, cylindrical, showing spiral ridge portion only, dried stem tough with pairs of sharp stipular thorns with hollow space in centre containing white reticulate mass taste acid.

Microscopic - Transverse section shows a single layered epidermis composed of squarish, thin walled, parenchymatous cells, followed by a thick zone, consisting of about 30–40 layer of thin walled, Oblong or ovoid elongated parenchymatous cells having a number of rounded and oval latex cells. Some contain dark yellowish latex, the number of latex cell gradually group of fibers towards cortex. Xylem consist of vessels, tracheids, fibers and xylem parenchyma pith consists of thin walled, rounded or oval, parenchymatous cell, starch and calcium oxalate crystal absent.

Part used: Root stem leaves, Ksheer (Euphorbia nerifolia), Apamarg kshara (Achyranthus aspera), Haridra (Curcuma longa)

Identity, Purity and Strength:

- Foreign matter: Not more than 2%
- Total ash: Not more than 8%
- Acid - insoluble ash: Not more than 1%
- Alcohol - soluble extract: Not less than 5%
- Water - soluble extract: Not less than 15%

Pharmacodynamic Properties of SNUHI

<table>
<thead>
<tr>
<th>Properties</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Rasa</td>
<td>Katu</td>
</tr>
<tr>
<td>Guna</td>
<td>Laghu, Tikshna</td>
</tr>
<tr>
<td>Veerya</td>
<td>Ushna</td>
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<tr>
<td>Vipaka</td>
<td>Katu</td>
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<td>Karma</td>
<td>Bhedana, Tiksnavirecana</td>
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Chemical Composition: It contains euphorior, resin, gums, rubber, calcium maleate etc. The latex contains water soluble 69.4-93.3% and catatksine 2-2.6%. The latex is also believed to contain an enzyme which is proteolytic in nature.
Constituents: Resin, gum and triterpenes.

Action: Doshik - Alleviates Kapha and Vata.

External - The juice of leaves applied externally to produce mild analgesic. The latex is irritant, rubeficient and powerful caustic when applied to a raw surface.

Internal Digestive System - The latex given orally act as a drastic purgative.

Respiratory system - Act as an expectorant.

Therapeutic uses:

Externally - Bandaging of leaves are useful in painful swelling swarasa is useful in otalgia. Latex is useful in toothache and skin disorder. The latex is used to remove warts and similar excrescence. Turmeric powder mixed with latex of snuhi is recommended to apply to piles masses. Thread steeped in above mentioned mixture is used for ligating pile masses and Fistula-in-ano.

Internally - The latex of snuhi used in chronic constipation, leprosy, anasarca, ascites etc. The snuhi is also useful in gout arthritis, syphilis, cough, dyspnoea etc.

Collection of Latex: The latex is collected in the end of sishir by piercing the stem of snuhi with the help of a sharp knife on a 2-3 year old plant which is full of thorn.

APAMARGA

Ayurvedic classification

Apamarg is mentioned under

Sirvirechana & krimighna gana - Charak
Arkadi gana - Sushruta
Botanical Name - Achyranthes aspera
Family - Amaranthaceae
Sanskrit Name - Prayatkapushapa, Shikhari, Kharmanjari, Mayuraka, Adhalasha, Kimhi
Hindi - Chuchini, Chutchita, Latjeera
English - Prickly chaff flower

Distribution: It is found in all parts of India.

Description: It is annual perennial herb often with a woody base. Stems simple or branched from the base, often tinged with reddish, purple, ribbed viscid-pubescent. Leaves are ovate to elliptical or obovate rounded with a cuneate or rounded base, acute or acuminate or obusate, crispy undulate, glabrous to pubescent. 3-10 (-15) x 2-6 (-7) cm. Petiole 0.5-2cm. long.

Spikes up to 75 cm long. Bracts and bracteoles sub equal, ovate spinescent. Tepals 5 sub equal, greenish, ovate, lanceolate, sharply acute, 0.35-0.6 x 0.1-0.15 cm.

Pseudostaminoids or truncate or irregularity dentate at apex. The plant is very variable in habit, degree of hairiness, size and shape of leaves and length of spikes

Flowering and fruiting time: Winter to summer seasons.

Useful part: Whole plant (panchang), root, spikes and leaves.

 Pharmacodynamics

Rasa - Katu, Tikta
Guna - Laghu, Ruksa, Tikshna
Veerya - Katu
Doshik karma - Kapha vata shamaka, Kapha pitta shamishodhaka

Chemical composition

The plant and seeds contain alkaline substance specially potash.

It contains sodium, potassium, calcium, iron, magnese, aluminium, carbon, phosphorus etc. Prof. Basis and coworkers (B.H.U.) isolated a water soluble alkaloid ‘Achyrothene’. K.N. Chopra (1969) reported the work done on plant by different workers, he quoted that alcoholic extracts of seeds yield saponin 2%, sapogenin 1.1% and total extract of root contains oleancolic acid.

Betaine is the basic constituent identified besides achyranthene alkaloid.

Action and properties: It has anti-inflammatory, analgesic and curative properties. Ash of the apamarga is hygroscopic in nature and is a powerful caustic when applied to wound surface.

When used internally, it act as an appetizer, digestive stimulant, cholagogue and mild laxative. It also improves the tone of cardiac muscle.

Therapeutic uses

The plant posses various medicinal properties and useful as pungent laxative, antidermatoss, wound healer, blood purifier, poison antidote, a cholagogue and also for other activities.

Apamarg kshar mixed with tila taila (sesamum oil) and used externally over wounds, ulcers and warts of pens and also other parts of the body. It is also used in otalgia.

Kshar being appetizer is used in anorexia, indigestion, abdominal pain, warm infestations, piles and typhlomelitis. As an alkaline diuretic it is used in renal and vesicle calculus, cystitis and early stages of nephritis.

Its antibacterial activity against few microorganisms was reported by Srivastava & Niyogi (1953). Oxford cup method was adopted for the purpose and growth of the streptococcus haemolyticas, s. aurus and Bacillus typhosus was found retarded.

HARIDRA

Ayurvedic classification

In ayurvedic classics Haridra is mentioned under following gana

Haridradi, Mustadi and Sleshma sanshman- Sushrut
Kusthagha, Lekhantiya, Kandughna, Vishaghna - Charaka

Botanical Name - Curcuma longa
Family - Scitamnaceae
Sanskrit Name - Haridra, Kanchani, Nisha, Gaurn, Krimighana, Hattavilasini
Hindi Name - Haldi, Haridra
English Name - Turmeric

Distribution

It is cultivated throughout the tropical and other regions in India.

Description

Macroscopic - Rhizomes ovate, ablong or pyriform (round turmeric) or cylindrical, often short branched (long turmeric), former about half as broad as long, latter 2-5 cm long and about 1-1.8cm thick, externally yellowish to yellowish brown with root scars and annihilations of leaf bases, fracture horny, fractured surface orange to reddish brown, central cylinder twice as broad as cortex, odour and taste characteristic.

Microscopic - Transverse section of rhizome shows epidermis with thick walled, cubical cells of various dimension, cortex characterised by the presence of mostly thin-walled rounded parenchyma cell scattered collateral vascular bundles, a few layers of cork developed under epidermis and scattered oleo-resin cells with brownish contents, cork generally composed of 4-6 layer of thin walled, brick shaped parenchyma, cells of ground tissue contain starch grain of 4-15µ in diameter. Oil cell with suberised walls containing either orange-yellow globules of volatile oil or amorphous resinous matter, vessels mainly spirally thickened a few reticular and annular.

Flowering and fruiting seasons: Farming seasons

Part used: Rhizome.

 Pharmacodynamic properties

Rasa - Tikta, Katu
Guna - Ruksa, Laghu
Veerya - Usna
Chemical composition

Analysis of Indian turmeric gives following results – moisture 13%, protein 6.5%, water 3.5%, fiber 2.6%, carbohydrate 69.4%, Vit A 50 IU per gm. A ketone C₅H₁₀ and an alcohol C₆H₁₃OH, identified as polymethyl carbinol, have been obtained from the volatile distillate.

Its rhizome contains a volatile oil, an active principle curcumin, a yellow colored matter and turmeric oil of specific odor and taste.

The antioxidant property of curcuma powder is probably due to phenolic character curcumin. The choroleptic action of the essential oil is attributed to poly methyl carbinol. The dyestuff act as a chologogue stimulating the contraction of gall bladder. (Indigenous darg of India, IInd Ed.).

Action and Properties

External

It causes vasodilation when applied on the mucous membrane. The paste of haridra is anti-inflammatory, analgesic, kushaghana and vranashadhak -ropak. Fumes of haridra useful is hicough and asthma.

Internal

It is carminative, cholegague and wormicidal. It act as a blood purifier and helps in diuresis. The result obtained after fractional test meal on different individuals shows that the administration of curcuma oil is followed by a marked diminution of secretion of the acids in the stomach.

Therapeutic uses

External

Paste is useful in traumatic inflammatory and painful swellings. It is very useful for the suppuration of unsuppurated wounds. Powder of haridra is very effective in wound healing.

Internal

It is used as stomachic & blood purifier. Fresh juice from the rhizome or decoction is used in the treatment of leprosy, snakebite, skin disease, inflammation of joints and allergies. According to Vagbhatta, haridra is the drug of choice of prameha.

The antibacterial properties of the oil were tested on Staphylococcus aureus, S. albus and Bacillus typhosis. Growth of the cultures of above mentioned bacteria’s were inhibited in concentration up to 1:5000. The growth of cultures of B. typhosis was not inhibited in a concentration up to 1:1000.

Anti-inflammatory activity of haridra was reported by several researchers. Wagner (New Natural Products, 1977 page 222) claims that curcumin posses local and systemic anti-inflammatory properties.

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