ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A REVIEW STUDY OF THE ROLE OF HINGVASTAKA CHURNA IN AGNIMANDYA

Vishnu Kanth S¹ Harihara Prasad Rao²

¹Pg Scholar, Department of PG Studies in Rasashastra and Bhaisajya Kalpana, Karnataka ayurveda medical college Mangalore, Karnataka, India.

²HOD and Professor, Department of PG Studies in Rasashastra and Bhaisajya Kalpana, Karnataka ayurveda medical college Mangalore, Karnataka, India.

ABSTRACT

The science of Ayurveda involves 8 branches. In classics of Ayurveda, we do not find Bhaishajya Kalpana separately mentioned in any of its 8 branches because the essence of Bhaishajya Kalpana is scattered in all the eight branches of Ayurveda¹. It involves preparation of various medicinal formulations told in Ayurveda². Bhaishajya is a substance or preparation used in the treatment of illness and Kalpana is the process employed for the preparation of pharmaceutical products. The Churna Kalpana is an upakalpana of Kalka Kalpana. Many poly herbal ayurvedic formulations are processed in the form of churna. Among them, Hingvastaka churna possess a significant position among herbo mineral drugs. Hingvastaka churna is mentioned in Ashtanga Hridaya, Sarangadhara Samhita, Vangasena Samhita, etc. Most of the practitioners of Ayurveda use Hingvastaka churna as the prime drug of choice in Agnimandya. In this study, an attempt has been made to critically review the role of Hingvastaka churna in Agnimandya.

KEY WORDS: Bhaishajya Kalpana, Churna Kalpana, Upakalpana, Kalka Kalpana,

Hingvastaka Churna, Agnimandya

INTRODUCTION:

A churna is fine powder obtained by pounding and filtering the dry drugs³. Hingvastaka churna is an Ayurvedic polyherbal formulation sold in the form of powder. It is mentioned in Herbal Pharmacopeae of India

as well as in Ayurvedic Formulary of India. Tannins, phenols, alkaloids, glucosides are present in hingvastaka churna⁴. It is used as a digestive aid and is used to treat disorders of the digestive system. It also helps in treating the problems associated with flatulence and defeacation⁵. It also helps in the management of vata imbalances and vata related diseases⁶.

Agni is responsible for varna, bala and sukhayu of an individual. By properly maintaining a balance in agni, one can attain a long and a healthy life⁷. There are 4 types of Agni – Samagni, Mandagni, Teekshnagni and Vishamagni⁸. Samagni involves normal digestive metabolic power. Mandagni is reduced power of digestion and metabolism. Teekshnagni involves intense power of digestion and Vishamagni is irregular and it involves sometimes intense and sometimes reduced power of digestion and metabolism. Agnimandva is considered as the root cause of all diseases⁹. Weakening of the agni results in incomplete production of rasa dhatu which itself helps in the nutrition of the subsequent dhatus. Agnimandya can manifest itself as a symptom or a disease. Changes in lifestyle, diet and any other chronic disease conditions can cause Agnimandya. Aggrevation of kapha is an important cause of Agnimandya. This agnimandya results in the formation of ama which results in srotodushti and vimarga gamana. Therefore, protection of agni is of prime importance in the treatment of Agnimandya¹⁰.

The symptoms of indigestion include burning sensation in the stomach associated with abdominal pain, bloating, belching, nausea and vomiting¹¹. People who consumes too much alcohol, excessive use of pain killers, smoking, obesity, anxiety and depression are at high risk of indigestion. Hingwashtaka churna helps in expelling trapped wind, palliating flatulence and checking abdominal distension¹². It is indicated in Agnimandya, sula, gulma and vataroga¹³. Ingredients consists of Cuminum cyminum, Rock salt, Carum carvi, Apium leptophylum, Piper longum, Piper nigrum, Zingiber officinale, Ferula assafoetida.

DRUG REVIEW:

SHUNTHI

Botanical name¹⁴

Zingiber officinale

Family

Scitamineae

<u>Kula</u>

Ardraka

Sanskrit synonyms

Shunti, Rahuchatra, Mahaushadha, Visva bheshaja, Visva, Visvaushadha, Nagara, Sringavera, Ushana, Katugranthi, Katubhadra, Katuviddi, Katuthoya, Katukandh, katubhed, Katuthkat, Kaphari, Ahichathr, etc

English name

Ginger

Discription

It is tall, perennial with grass like leaves. Stem is erect and leafy with tuberous rhizome. Leaves are narrow, linear with a width of 1-2 cm. Spike inflorescence. Flowers are greenish, fruits are oblong and dehiscent capsule.

Habitat

Cultivated almost throughout India

Varieties

- Fresh ginger Ardraka
- Dry ginger Nagara

Medicinal properties¹⁵

Rasa

Katu

<u>Guna</u>

Laghu, Teekshna, Ushna

Veerya

Ushna

Vipaka

Katu

Karma

Deepana, Pachana, Amavataghna, Anulomana, Amadoshahara, agnimandyahara, Hridya,

Vibandhahara

Dosha karma

Vatakaphahara

Parts used

Rhizome

Chemical constituents

a-curumene, B-D-curcumene, Paradol, Gingerone A, Geraniol, Gingerol, Paradol, Zingerone,

D Camphene, Citronellol, d-Borneal, Citral, Zingiberol, a-zingiberenes, b-zingiberenes,

B Bourbornene, etc



Percentage

12.5

MARICHA

Botanical name¹⁶

Piper nigrum Linn

Family

Piperaceae

Kula

Pippali

Sanskrit synonyms

Ushana, Krishna, Teekshna, Veeram, Dharmapattanam, Kolam, Suvrutta, Sirovrutta, Vallija,

Vellaja, Vantari, Shakanga, etc

English name

Black pepper

Discription

It is a perennial vine. Flowers are greenish yellow. Upper surface of leaves is dark green while lower surface is whitish green in colour. Leaves are simple and alternate. Fruit is green in colour, oval drupe. Fruit contains seed.

Habitat

In India, Malaysia, Srilanka, Indonesia

Varieties

- Black pepper
- Green pepper
- Red pepper
- White pepper
- Orange pepper

Medicinal properties¹⁷

Rasa

Katu, Tiktha

Guna

Ruksha, Laghu, Teekshna

Veerya

Ushna

Vipaka

Katu

Karma

Shulahara, Amadoshahara, Krimihara, Ruchya, Deepaniya

Dosha karma

Kaphahara, Kaphavatajith, Pittakara, Pittapramathi

Parts used

Fruit

Chemical constituents

Piperine, Piperethine, Cryptone, Citronellol, Feruperine, Piperolein A, Piperolein B, Dihydrocarveol, Camphene, B - Caryophyllene, B - Alanine, Piperonal

Percentage

12.5

PIPPALI

Botanical name¹⁸

Piper longum Linn

Family

Piperaceae

Kula

Pippali

Sanskrit synonyms

Pippali, Kana, Vaidehi, Magadhi, Krishna, Chapala, Upakulya, Kola, Ushana, Teekshna tandula, Teekshna, Shoundi, Korangi, Syama, Dantaphala, Krikara, Shamahva, Katubeeja

English name

Long pepper

Discription

It is a slender climber. Leaves are 7 nerved, ovate, dark green on upper surface and pale dull green on lower surface. Flowers are arranged in cylindrical pubescent rachis. Fruit fleshy and red in colour.

<u>Habi</u>tat

In Himalaya, Assam, Khasi, Mikir hills, Western ghats

Varieties

According to Susruta and Vagbatta,

- Pippali
- Gaja pippali

According to Raj Nighantu,

- Pippali
- Gaja pippali
- Simhali pippali
- Vana pippali

Medicinal properties¹⁹

Rasa

Katu, Tiktha, Madhura

Guna

Laghu, Snigdha

Veerya

Anushna

<u>Vipaka</u>

Madhura

Karma

Deepana, Amadoshahara, Krimihara, Soolahara

Dosha karma

Tridoshagna, Vatakaphahara

Parts used

Fruit

Chemical constituents

Piperine, Piperlongumine, Pipernonaline, Piperundecaladine, Pipercide, Sesquiterpenes,

Sesamin, etc

Percentage

12.5

AJAMODA

Botanical name²⁰

Apium leptophylum

Family

Umbelliferae

Kula

Sanskrit synonyms

Ajamoda, Bastamoda, Lochakarkata, Karavi, Lochamarkata, Hridyaganda, Mayuri, Shikimoda, Hastimayuraka, Vallimoda, Kharahva, Vahanideepika, Modadya, Vishali moda, Gandapatrika, Ugragandha, Kharashva, Bhramakusha, etc

English name

Celery

Discription

It is an annual herb which grows upto a height of 3 feet. Leaves are pinnate or bipinnate. Flowers are small and white in colour. Seeds are ovoid to globose.

Habitat

Europe, America, Asia

Varieties

- Seseli indicum
- Thymus serpyllum

Medicinal properties²¹

Rasa

Katu, Tiktha

<u>Guna</u>

Laghu, Ruksha

Veerya

Ushna

Vipaka

Katu

Karma

Deepana, Shoolagna, Krimigna, Gulmanashaka

Dosha karma

Kaphavatahara

Parts used

Fruit

Chemical constituents

Glycosides, Steroids, Calcium, Iron, Furanocoumarins, Flavones, etc

Percentage

12.5



SAINDHAVA LAVANA

English name²²

Rock salt

Sanskrit synonyms

Saindhava, Sheetashiva, Sindhuja, Nadeya, Manimantha

Medicinal properties²³

Rasa

Lavana

Guna

Laghu, Sukshma, Snigdha

Veerya

Seeta

Vipaka

Madhura

Karma

Srotogamitwa, Chedana, Bhedana

Dosha karma

Tridoshagna

Chemical constituents

Major ingredient is Sodium chloride. It also contains Phosphorus, Magnesium, Lithium, Manganese, Chromium, Zinc, Iron, Strontium, etc

Percentage

12.5

SWETHA JEERAKA

Botanical name²⁴

Cuminum cyminum Linn

Family

Apiaceae

Kula

Satapushpa

Sanskrit synonyms

Swetha Jeeraka, Autharapadam, Deerkhakam, Peethabham, Deepaka, Ajaji, Jarana, Ruchyam, Medhya, etc

English name

Cumin seed

Discription

It is a slender annual plant. Leaf segments are filiform. Inflorescence is compound umbel with several bracts and bracteoles. Bracts are rigid and linear. Fruits are cylindrical with narrow tip and primary ridges are filiform and secondary ridges are hispidulous. Seeds are convex concave and dorsally compressed.

Habitat

In Kashmir and Gadwal

Medicinal properties²⁵

Rasa

Madhura

Guna

Guru, Snigdha

Veerya

Seeta

Vipaka

Madhura

Karma

Deepana, Amanashana, Agnimandya, Krimigna

Dosha karma

Tridoshagna

Parts used

Fruit

Chemical constituents

Cuminol, Thiamine, Carvone, Cuminol, Thymol, etc

Percentage

12.5

KRISHNA JEERAKA

Botanical name²⁶

Carum carvi Linn

Family

Apiaceae

Kula

Satapushpa

Sanskrit synonyms

Kashmira jeeraka, Bahu Gandha, Kali, Sugandha, Udgara sodhana, Jarana, Ruchya, etc

English name

Caraway seed

Discription

It is a biennial plant which is erect, 50 cm tall. Leaves have long sheathing foot stalks, pinnate with several pairs of segments which are sessile. The lowest segment of a leaf are 0.75 cm. Upper leaves are small and less divided.

Habitat

In India mostly in Rajasthan and Punjab

Medicinal properties²⁷

Rasa

Katu

Guna

Laghu

Veerya

Ushna

<u>Vipaka</u>

Katu

Karma

Deepana, Pachana, Ruchya, Grahani, Sothahara

Dosha karma

Kaphavatahara

Parts used

Fruit

Chemical constituents

Carvone, ketone, Terpene, Carvacrol, etc

Percentage

12.5

SUDDHA HINGU

Botanical name²⁸

Ferula asafoetida

Family

Umbelliferae

Kula

Satapushpa

Sanskrit synonyms

Hingu, Sahasravedhi, Jatuka, Ramatha, Ugragandha, Behleeka, Jantunasaka, Jantughna, etc

English name

Asafoetida

Discription

It is a perennial herb. Roots are fusiform. Leaves are pubescent in younger stages.

Inflorescence is terminal compound umbel. Fruit is reddish brown in colour.

Habitat

In Afghanistan, Baltistan

Varieties

- Ferula thomsoni
- Ferula sumol
- Ferula suaveolens
- Ferula persica
- Ferula Alliaceae

Medicinal properties²⁹

Rasa

Katu

Guna

Teekshna

Veerya

Ushna

Vipaka

Katu

Karma

Deepana, Pachana, Ruchya, Anulomana, Agnimandyahara, Krimihara

Dosha karma

Vatakaphaprasamana

Parts used

Resin of stem

Chemical constituents

Trisulphides, Disulphides, Pinene, Terpenes, Butyl propanyl disulphate, asaresinotanol, etc

Percentage

12.5

DISEASE REVIEW:

The impairment of agni results in agnimandya. 4 types of agni are mentioned in Ayurvedic classics. It includes Samagni, Teekshnagni, Mandagni and Vishamagni. A change in diet and lifestyle can cause agnimandya. Increase of kapha is also an important factor which can cause agnimandya. This agnimandya can lead to srotodushti and vimarga gamana. It can occur as a symptom or a disease. Agnimandya results in incomplete metabolism which can result in Ajirna. Ajirna can give rise to a toxic substance called Ama. Ajirna is classified

into 3 types based on the predominance of doshas involved. They are Amajirna, Vidagdhajirna, Vishtabdajirna. Amajirna is caused by the predominance of kapha dosa, Vidagdhajirna is caused by the predominance of pitta dosa and Vishtabdhajirna by vata osha.

Agni also plays an important role in enzymatic activities of the body. Healthy state of human body can be only achieved by maintaining a balance in agni of a person. Vital life force as well as the lifespan depends on proper functioning of Agni. The whole process of energy liberation through digestion and metabolism comes under the perspective of Agni. Acharya Charaka mentioned 13 types of Agni. It includes 1 Jataragni, 5 Bhootagni and 7 Dhatvagni. This agni can transform the food substances into various forms which later gets assimilated in the body. All Acharyas except Madhavacharya mentioned agnimandya not as a disease but as a root cause for all other diseases. Acharya Madhava mentions Agnimandya as a disease itself.

Nidana of Agnimandya:

- Intake of heavy meals and junk foods
- Suppression of natural urges
- Stress, anxiety, depression
- Excess intake of fluids

Samprapti of Agnimandva:

Because of the above mentioned nidanas, there will be prakopa of all the three dosas which results in Agnivaigunya. This agnivaigunya leads to srotorodha and production of ama in the body which causes agnimandya.

Symptoms of Agnimandya:

- Loss of appetite
- Heaviness of abdomen
- Excessive salivation
- Nausea and vomiting
- Diarrhea
- Bloating
- Sour eructation

Indigestion can be a sign of gastro oesophageal reflux disease or gall bladder disease³⁰. It can cause pain or discomfort in upper abdomen. There will be also a heartburn accompanying indigestion. Risk factors include excessive alcohol consumption, obesity, stress, drug abuse which include aspirin and other pain killers, smoking, anxiety, depression, etc. It can also leads to many diseases like GERD, chronic peptic ulcer disease, gastroparesis, Irritable bowel syndrome, pancreatitis, stomach infection and cancer³¹. 30% of people usually experiences abdominal pain and discomfort but an organic cause is found in very few people who seeks medical help³². Organic indigestion is due to diseases like gastritis, peptic ulcer disease, cancer, etc. Functional indigestion as no evidence of any underlying disease³³. Anxiety is associated with functional dyspepsia. Other diseases include motility disorders, hepato biliary tract disorders, intestinal angina, celiac disease, small intestine bacterial overgrowth, hernia, diabetic radiculopathy, etc³⁴. Diagnostic tests include blood, urine, stool test, X ray, Ultrasound, etc. An official diagnosis requires symptoms which is started at least 6 months ago with a requency of once in a week in the past 3 months³⁵.

MODE OF ACTION OF HINGVASTAKA CHURNA IN AGNIMANDYA:

Ingredients of Hingvastaka churna are Sunthi, Maricha, Pippali, Ajamoda, Saindhava lavana, Swetha jeeraka, Krishna jeeraka and Shuddha Hingu. The ingredient Sunthi has katu rasa and ushna veerya. It has the capacity to increase digestion³⁶. Because of katu asa, it has the capacity of purification of tongue and because of ushna veerya, it helps in increasing the agni of the person thereby curing Agnimandya. It has also teekshna guna which helps in the process of pachana. It also has the capacity to reduce and control gastric secretion. In Ayurveda, it is related to pitta dosa. Hence Sunthi is found to be very effective in vidagdajeerna. Phytoconstituent like gingerols can enhance gastro intestinal activity. It is HMG-Coa reductase inhibitor. Gingerols can suppress gastric contractions and can enhance gastric motility³⁷.

Maricha has ushna veerya, teekshna guna and katu vipaka. It also has pramathi guna which helps in srotosodhana thereby helps in pacifying agnimandya³⁸. Piperine in Maricha can increase absorbtion of Vitamin B, beta carotin and selenium³⁹. Pippali has Deepana karma and has the potency to tackle vishamagni. 1 year old pippali has the capacity for srotosodhana⁴⁰. It can inhibits ciliary contraction of

oesophagus thus preventing heartburn and nausea.

Another ingredient ajamoda helps in vatanulomana⁴¹. It can reduce the fullness of stomach.

Saindhava lavana can act as a catalyst and is hygroscopic in nature. It is ruchya. It also has the capacity to enhance the properties of other drugs with which it is mixed.

Shuddha hingu has Katu rasa, teekshna guna, Ushna veerya and katu vipaka. Hingu can reduce the acidity of the stomach and can also increase the pH of the gastric juice⁴². It also helps in vatanulomana.

Krishna Jeeraka has katu rasa and katu vipaka. It also possess ushna veerya. It acts as Deepana, pachana, ruchya while Swetha Jeeraka is an appetizer and a carminative⁴³.

CONCLUSION:

Hingvastaka Churna has 8 ingredients. The mode of action of each ingredient suggests that Hingvastaka churna has a significant effect in treating agnimandya. It can be taken as the first choice of medication or can be used as an adjuvant along with a primary edicament.

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