

EFFECT OF VIDANGAADI CHURNA IN POST OPERATIVE COMPLAINTS AFTER KSHARASUTRA LIGATION IN BHAGANDARA W.S.R. TO FISTULA- IN- ANO- A REVIEW

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ABSTRACT

Background: Ayurveda provides the immense potential in solving many challenges and unresolved problems of medical science. Fistula-in- ano being the second most prevalent anorectal disorder after haemorrhoids can affect anyone, anytime and anywhere. Fistula- in- ano have plagued humankind since time immemorial, yet many challenges still exist in present era after introduction of various treatment modalities. *Ksharasutra* is best renowned and highly practiced method of treatment for fistula-in-ano worldwide. But still it comes with few complaints in the patients after the procedure which includes pain, burning sensation, itching and inflammation. *Vidangaadi Churna* possess various active principles which are helpful in reducing this post-operative complaints. The pharmacological effect of *Vidangaadi Churna* have anti- helminthic, anti- inflammatory,

analgesic etc effects. It also possess better potential of wound healing which fastens the rate of cure of disease. Taking into consideration the chemical constituents and its effect *Vidangaadi Churna* can be considered as a new evolution for the relief of complaints raised after the *Ksharasutra* ligation therapy.

KEYWORDS: *Ksharasutra* therapy, Fistula- in- ano, *Vidangaadi Churna*.

INTRODUCTION

Fistula-in-ano also termed as *Bhagandara* in Ayurvedic Science is the second most prevalent ano-rectal disorder in the global world. It has nothing to do with the socio-economic status it is completely independent of it. It mostly effects adult age group. Its prevalency led to discover many treatment modalities. In present scenario many treatment options are present to treat fistula-in-ano but they all fail to show better result and have high recurrence rate and complaints of incontinence. This failure efforts of treating *Bhagandara* was overcome by a Para-Surgical procedure *Kshara-Sutra* Therapy which evolved as an evolution to the medical science in treating Fistula-in-ano. It do not possess the treatment failure as other treatment modalities, but it has got few complaints after the ligation procedure like Pain, Burning sensation, Itching etc. and long duration of healing process. To overcome these issues in our *vedic* texts a Herbal preparation is mentioned as *Vidangaadi Churna* which possess many chemical constituents such as Embelin etc. which has got Anti-Inflammatory, Analgesics, Anti-Helmenthic etc. properties which can be proved as highly effective in treating the post-operative complaints of *Kshara sutra* therapy and enhance the healing activity.

Disease Review

The word Fistula is Latin by origin, which means a reed, pipe or flute. In surgery, it means a chronic granulating abnormal tract connecting two epithelial lined surfaces. These surfaces may be cutaneous or internal layers of organs such as the digestive tract. It is an abnormal tract, generally chronic- except in traumatic fistula, with an external opening over the skin of the perianal region and an internal opening in the skin or mucosa of the anal canal or rectum. The fistulous tract is often found with unhealthy granulation tissues and many a times, epithelisation is seen in the tract preventing its closure. Surrounding the wall of the tract, there are thick fibrous tissues which makes the tract indurated.

Bhagandara is a common ano-rectal disorder usually results to a pre-monitory condition of *Bhagandara Pidaka*. *Bhagandara* etymologically derived from the word '*bhaga*' and '*dharana*'. *Bhaga* means vagina or perineum. The disease in which there is *Vidaran* of *Bhaga*, *Guda* and *Basti Pradesha* is known as *Bhagandara*. *Pidaka* is formed in *Apakvaavastha*, whereas *Pakvaavastha* leads to *Bhagandara*. In the perineal region when any kind of *Pidaka* is formed which is inflamed and less painful but it subside soon is known as *Pidaka*, but it cannot be considered as *Bhagandara*. The elaborated description of this disease was first described by *Acharya Sushruta* in his *Ayurvedic* text *Sushruta Samhita*.

Drug Review

In Ayurvedic literature *Vidangaadi Churna* is indicated for the treatment of *Kushtha*, *Krimi-roga*, *Nadi- vrana*, and *Bhagandara*.

विङ्गत्रिफलाकृष्णाचूर्णं लीढं समाक्षिकम्।

हन्ति कुष्ठाकिमीन् मेहनाडीव्रणभगन्दरान् ॥ (भै.र. 50/13)

CONTENTS OF VIDANGAADI CHURNA

S. No.	Drugs	Botanical Name	Family	Part Used
1.	<i>Vidanga</i>	<i>Embelia ribes</i> Burm.	<i>Myrsinaceae</i>	Fruit
2.	<i>Triphala</i> <i>Haritki</i> <i>Vibhitki</i> <i>Amalaki</i>	<i>Terminalia chebula</i> Retz. <i>Terminalia bellirica</i> Roxb. <i>Emblica officinalis</i> Gaertn.	<i>Combretaceae</i> <i>Combretaceae</i> <i>Euphorbiaceae</i>	Fruit
3.	<i>Pippali</i>	<i>Piper longum</i> Linn.	<i>Piperaceae</i>	Fruit

VIDANGA (*Embelia ribes* Burm.)**Pharmaco-Therapeutic properties**

RASA- Kattu, Kashaya **GUNA-** Laghu, Ruksha, Tikshana **VIRYA-** Ushana **VIPAKA-** Katu

Chemical Constituents: Embelin, Quercitol, Tannin, Christembine, Embelic acid, Resinoid, Volatile oil and Vilangin (fruit), Potassium embelate, 2,5- dihydroxy, 3-undecyl-1, 4-benzoquinone (plant).

Pharmacological activities: Nematicidal, Estrogenic, Hypoglycaemic, Anti-helminthic, Anti-bacterial activity, Anti-tubercular, Anti-fungal, Anti-implantation, Anti-ovulatory, Antifertility, Anti-inflammatory, Hypotensive, Antipyretic, Diuretic, Hepatoprotective, Anti-leishmanial, Resorptive, Anti-spermatogenic, Anti-androgenic, Anti-cancer, Immunostimulant.

AMALAKI (*Emblica officinalis* Gaertn)**Pharmaco-Therapeutic properties**

RASA- Panchrasa (lavanarahit) **GUNA-** Laghu, Ruksha **VIRYA-** Ushana **VIPAKA-** Madhur.

Chemical constituents: Vitamin C, Carotene, Nicotinic acid, Riboflavin, D-glucose, D-fructose, Myoinositol and a pectin with D- galacturonic acid, D- arabinosyl, D-xylosyl, L-

rhamnosyl, D-glucosyl, D-mannosyl and D-galactosyl residues, Embicol, Mucic, Indole acetic acid and four other Auxins.

Pharmacological activities: Spasmolytic, Mild CNS depressant, Hypolipidaemic, Antiatherosclerotic, Antimutagenic, Antimicrobial, Antioxidant, Immunomodulatory, Antifungal, Antitumour, Hypoglycaemic, Anti-inflammatory, Anti-bacterial, Anti-ulcer, Adrenergic potentiating, HIV-1 reverse transcriptase inhibitory action, Rasayana activity. VIBHITAKI (*Terminalia bellirica* Roxb.).

Pharmaco-Therapeutic properties

RASA- *Kashaya* **GUNA-** *Ruksha, Laghu* **VIRYA-** *Ushana* **VIPAKA-** *Madhur*.

Chemical constituents : Chebulagic acid, Ellagic acid (also from bark, heartwood) and its Ethyl ester, Gallic acid (also from seed coat); fructose, galactose, glucose and its galloyl derivative, mannitol and rhamnose, beta- sitosterol and bellericanin (fruits) protein and oxalic acid (seed); oxalic acid and tannins (bark); palmitic, oleic and linoleic acids(kernel and its oil).

Pharmacological activities : Purgative, blood pressure depressants, antifungal, antihistaminic, activity against viral hepatitis and vitiligo, antiasthmatic, broncho-dilatory, anti-spasmodic, antibacterial, CNS stimulant, amoebicidal, antistress and endurance promoting activity.

HARITAKI (*Terminalia chebula* Retz)

Pharmaco-Therapeutic properties

RASA- *Panchrasa (lavanarahit)* **GUNA-** *Laghu, Ruksha* **VIRYA-** *Ushana* **VIPAKA-** *Madhur*.

Chemical Constituents

Fruits- Anthraquinone glycoside, Chebulinic acid, Tannic acid, Terchebin, Vitamin C.

Fruit kernel- Arachidic, Behenic, Lindeic, Oleic, Palmitic and Stearic acids.

Flowers- Chebulin.

Pharmacological activities: Anti-microbial, Anti-fungal, Anti-bacterial, Anti-stress, Anti-spasmodic, Hypotensive, Indurance promoting activity, Anti-hepatitis B virus activity, Hypolipidaemic, Inhibitory activity, Against HIV-1 protease, Anti-helminthic, Purgative, Anti-oxidant activity.

PIPPALI (*Piper longum*)**Pharmaco-Therapeutic properties**

RASA- Katu **GUNA-** Laghu, Snigdha, Tikshna **VIRYA-** Anushnashit **VIPAKA-** Madhur

Chemical constituents: Essential oil, Mono and sesquiterpenes, Caryophyllene (mainly), Piperine, Piplartine, Piperlongumine, Piperlonguminine, Pipernonaline, Piperundecalidine, Piperide, Sesamin, Beta- sitosterol, four aristolactans (cepharanone B, aristolactum AII, piperlactum A and piperolactam B); five,- dioxoaporphines etc.

Pharmacological Activities : Antibacterial, Anti-inflammatory, Insecticidal, Antimalarial, CNS Stimulant, Antitubercular, Antihelmenthic, Hypoglycaemic, Antispasmodic, Cough Suppressor, Antiigiardial, Immunostimulatory, Hepatoprotective, Analeptic, Antinarcotic, Antiulcerogenic, Anti-pyretic activity, Analeptic activity.

Vidangaadi churna will be prepared by making the powder form of *Vidanga*, *Triphala*, *Pippali* raw drugs and mixing it in the equal ratio as mentioned in the related *Ayurvedic* texts.

CONTENTS	QUANTITY
<i>Vidanga</i>	01 PART
<i>Triphala</i>	03 PART
<i>Pippali</i>	01 PART

DISCUSSION

There were many issues during the *Kshara Sutra* therapy, patients suffered some discomfort due to presence of *Apamarga Kshara* & *Snuhi Ksheer* like pain, burning sensation, inflammation and itching. So, there was a need for search of the adjuvant drugs which may play a better role in managing certain problems occurred after applying the *Ksharasutra* and enhance the healing to be faster and without any further infection and complications. So in this case *Vidangaadi Churna* was considered more efficient in terms of healing process, anti-inflammatory, anti-helmenthic and analgesic action to be used along with the *Kshara sutra*.

The fruits of *E. ribes* contains embelin, embolic acid and rapanone which possess anti-helminthic, anti-tumour, analgesic, anti-bacterial, anti-inflammatory like activities. Whole plant contains embelin as a chemical constituents which exhibits the anti-inflammatory effects. The seeds of *E. ribes* possess antibiotic and anti-tuberculosis effect due to presence of embelin chemical into it.

Pitta-shamaka action of *Amalaki* is due to *Sheet Virya* and *Madhura Vipaka*. *Ropana* property is due to *Brigahan*, *Urjya* and property. The Analgesic activity is due to Ascorbic acid of fruit extract. Its fruit is found to have very potent anti-microbial activity due to its substance Phyllembelin. Anti-inflammatory activity is due to Ascorbic acid.

Shodhan property of *Haritaki* is due to *Ruksha* and *Laghu Guna* as it has *Shoshan* & *Lekhan* property respectively. *Vednashamak* property of *Haritaki* is due to its *Ushna Virya*. Its *Krimighna* (antimicrobial) property is due to *Katu* and *Tikta rasa*. *Shothahara* property is due to *Katu-Tikta rasa* as *Katu rasa* act as *Vrana-avsadak* and *Tikta rasa* has *Vishghna* property. *Ropan* property is due to *Kashaya rasa*.

Ascorbic acid, Ellagic acid, Gallic acid, Linoleic acid, Oleic acid and Corilagin acid are found to be responsible for Analgesic, Anti-inflammatory action, Anti-septic effect and Anti-microbial and Anti-fungal action is due to Ascorbic acid, Chebulinic acid, Chebulagic acid, Ellagic acid and Pectin acid.

Vedna-nashak property of *Vibhitaki* is due to its *Ushna Virya*. *Shoth-hara* property is due to *Kashaya rasa* and *Ruksha guna*. Analgesic property and anti-inflammatory action is due to presence of Gallic acid in it. It is found to have significant activity against both gram positive and gram negative bacteria. In addition it showed antifungal activity due to Chebulagic acid.

Krimighna property of *Pippali* is due to *Katu rasa* and *Tikshna guna*. The pellitotrine type of isobutalamide was found to exhibit anti-bacterial activity. It shows significant analgesic effect due to their constituents Piperine, Piperlongamine and Piplartine. It shows Anti-inflammatory effect due to their constituents Beta-bisabolene and Beta-carophyllene.

Thus considering all these facts in brief, the overall effects of *Vidangaadi Churna* observed in this research work are as follows – *Vranashodhana*, *Vranaropana*, *Shothahara*, *Vednasthapana*, *Varnya*, *Lekhana Vatanuloman*, *Mridu-virechan*, *Dipana*, *Pachana*, *Arshoghna*. Anti-inflammatory, Anti-helminthic, Analgesic, Anti-oxidant, Anti-bacterial, Anti-microbial, Hepatoprotective, Anti-diabetic and Anti-tuberculosis effect.

CONCLUSION

From the above discussion and reviews we come to a conclusion that *Vidangaadi Churna* can be very effective in reducing the post ligation complaints of *Ksharasutra* and also enhance the healing capacity of the fistulous tract and wound. It has also got its systemic effects which is

of great benefit in reducing the time taken to heal the tract and prevents cryptoglandular infections.

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