

## EFFECT OF SAPTANG GUGGULU IN POST OPERATIVE COMPLICATION AFTER KSHAR SUTRA LIGATION IN BHAGANDARA (FISTULA IN ANO) – A REVIEW

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### ABSTRACT

**Background:** *Acharya Sushruta* has described *Bhagandara* under one of the eight grave disorder i.e. *Ashtamahagada*, which are difficult to treat and have higher chances of complications.<sup>[1]</sup> Nowadays, Fistula-in-ano has highest prevalence in ano rectal disorders after haemorrhoids.<sup>[2]</sup> Though because of high prevalence rate, numerous options are being practiced worldwide for its management but none of them ever provided absolute result to the mankind because of their complications such as fecal incontinence and recurrence. *Ayurveda* has given the golden concept of *ksharsutra* for its management which is having the highest successful rate amongst all other procedures.<sup>[3]</sup> But still, comes with few complications to patients after *Ksharsutra* ligation like pain, itching, burning sensation, inflammation and delayed

healing. *Saptanga Guggulu* have various ingredients and active principles which can help in reducing these post-operative complications.

**KEYWORDS:** *Ksharsutra* therapy, *Bhagandara*, *Ashtamahagada*, *Fistula-in-ano*, *Saptanga Guggulu*.

### INTRODUCTION

Fistula-in-ano is a consequential disease, which have second highest prevalence after haemorrhoids, in ano rectal disorders. It mostly affects adult age group and male gender.<sup>[4]</sup> In *Ayurvedic* transcripts, it is termed as *Bhagandara* and firstly detailed described by *Acharya Sushruta*. Nowadays there are so many surgical techniques available and practiced globally

for this troublesome disease, but all shows failure with either high recurrence rate or additional incontinence. To overcome this challenging problem, *Ayurveda* stands with a para-surgical procedure, i.e. *Ksharasutra* therapy,<sup>[5]</sup> which brought an evolutionary change in fistula-in-ano management. This method do not possess the treatment failure by either high recurrence rate or additional incontinence like other conventional surgical methods,<sup>[6]</sup> but it has got some minor complications to patients after *ksharsutra* ligation procedure like pain, burning sensation, itching etc. and also long duration healing process. *Saptanga Guggulu* is a polyherbal prepration, mentioned in *Ayurvedic* texts, i.e. *Bhaisajyaratnavali*.<sup>[7]</sup> Its ingredients shows various properties i.e. Antibacterial, Antiinflammatory, Analgesics etc. which can helps in reducing these post-operative complicitans of *Ksharsutra* ligation as well as promotes healing activity.

## DIEASE REVIEW

The word Fistula is from Latin origine, means reed, pipe or flute. Fistula-in-ano is a chronic abnormal communication, usually lined to some degree by granulation tissue, which runs outwards from the anorectal lumen to an external opening on the skin of perineum or buttock.<sup>[8]</sup> The fistulous tract is mostly found with unhealthy granulation tissue with fibrous tissure over surrounding of tract wall, making the tract indurated. Epithelisation is present in tract preventing its clousure.

*Bhagandara* is derived from two words i.e. ‘bhaga’ and ‘darana’. The word *Bhaga* means all the structures around the *Guda* (anus) which includes *Yoni* (vagina) and the *Basti* (urinary bladder) and the word *Darana* means tear of the surface associated with pain.<sup>[9]</sup> So in *Bhagandara*, there is *Vidarana* of *Bhaga*, *Guda* and *Basti* present. In *Apakavaavastha*, there is a *pidika* formation which leads to *Bhagandara* in *Pakkaavastha*. *Acharya Sushruta*, firstly described *Bhagandara* in detail in *Sushruta Samhita Nidana Sthana*, where he has mentioned 5 types of *Bhagandara* with their symptoms<sup>[10]</sup> and their detailed management in *Chikitsa Sthana*.

## DRUG REVIEW

In *Ayurvedic* literature, *Saptanga Guggulu* is indicated for the treatment of non healing ulcer, pain and *bhagandara*.

गुग्गुलुस्त्रिफलाव्योषैः समांशैराज्ययोजितः ।

मांसदुष्टव्रणे शूले युज्यते च भगन्दरे ॥

(भै.र.नाड़ीव्रणचिकित्साप्रकरण 50 / 19)

## CONTENTS OF SAPTANGA GUGGULU

Drug	Latin Name	Family	Part Used
<i>Guggulu</i>	<i>Commiphora mukul</i>	Burseraceae	Resin
<i>Amalaki</i>	<i>Embllica officinalis</i>	Euphorbiaceae	Fruits
<i>Haritaki</i>	<i>Terminalia chebula</i>	Combretaceae	Fruits
<i>Bibhitaki</i>	<i>Terminalia abellerica</i>	Combretaceae	Fruits
<i>Shunthi</i>	<i>Zingiber officinale</i>	Zingiberaceae	Rhizome
<i>Maricha</i>	<i>Piper nigrum</i>	Piperaceae	Seed
<i>Pippali</i>	<i>Piper longum</i>	Piperaceae	Fruit

*Guggulu* (*Commiphora mukul*)<sup>[11,12,13]</sup>

**Pharmaco-Therapeutic properties**

**Rasa-** Tikta, Katu **Guna-** Laghu, Ruksha, Tikshna, Vishada **Virya-** Ushna **Vipaka-** Katu

**Doshaghnata-** Vatakapashamaka

**Karma-** Shothahara, Vedanasthapana, Vranshodhana, Varnya.

**Chemical constituents-** Z-guggulsterol, guggulsterol VI, and several pregnane derivatives, hypolipaeic agents, stigmasterol, diterpenoids, triterpenoids, steroids, methanolic extract, volatile oils.

**Pharmacological Activities-** Antibacterial, Antiinflammatory, Antiviral, Atherosclerotic.

*Amalaki* (*Embllica officinalis*)<sup>[14,15,16,17]</sup>

**Pharmaco-Therapeutic properties**

**Rasa-** Panchrasa (lavanarahit) **Guna-** Laghu, Ruksha **Virya-** Sheeta **Vipaka-** Madhur

**Doshaghnata-** Tridoshashamaka, especially Pittashamaka

**Karma-** Dahaprashmana, Chakshushya, Medhya, Yakriduttejaka, Deepana, Rochana, Anulomana, Pramehaghna, Vrishya, Kushthaghna

**Chemical constituents-** Vitamin C, carotene, nicotinic acid, riboflavin, D-glucose, D-fructose, D-galacturonic acid, leucodelphinidin, procyanidine, tannin, 3-O gallated prodelphinidine, oleanolic aldehyde

**Pharmacological Activities-** Anti-inflammatory, Antibacterial, Antitumor, Antiulcer, Antimicrobial, Spasmolytic, Hypolipidaemic, Antiatherosclerotic, Antioxidant.

*Haritaki* (*Terminalia chebula*)<sup>[18,19,20,21]</sup>

**Pharmaco-Therapeutic properties**

**Rasa-** Panchrasa (lavanarahit) **Guna-** Laghu, Ruksha **Virya-** Ushna **Vipaka-** Madhur

**Doshaghnata-** Tridoshashamaka

**Karma-** Shothahara, Vedanasthapana, Vranashodhana, Vranaropana, Anulomana, Deepana, Pachana, Kaphaghna, Srotah-shodhana, Medhya, Grahi, Rasayana.

**Chemical constituents-** Anthraquinone glycoside, chebulinic acid, chebulagic acid, tannic acid, terchebin, tetrachebulin.

**Pharmacological Activities-** Antimicrobial, Antistress, Antifungal, Antispasmodic, Hypotensive, Purgative, Hypolipidaemic.

**Bibhitaki** (*Terminalia abellerica*)<sup>[22,23,24,25]</sup>

#### Pharmaco-Therapeutic properties

**Rasa-** Kashaya **Guna-** Laghu, **Ruksha Virya-** Ushna **Vipaka-** Madhur

**Doshaghnata-** Tridoshashamaka, especially Kaphashamaka

**Karma-** Shothahara, Vedanasthapana, Raktastambhana, Deepana, Anulomana, Rechana, Bhedana, Grahi, Kaphaghna.

**Chemical constituents-** Chebulagic acid, ellagic acid, gallic acid, fructose, galactose,  $\beta$ -sitosterol and bellericanin (fruits), protein and oxalic acid (seed).

**Pharmacological Activities-** Antispasmodic, Antibacterial, Purgative, Blood pressure depressant, Antifungal, Antistress, Amoebicidal, Antiasthmatic, Activity against viral hepatitis and vitiligo.

**Shunthi** (*Zingiber officinale*)<sup>[26,27,28]</sup>

#### Pharmaco-Therapeutic properties

**Rasa-** Katu **Guna-** Laghu, **Snigdha Virya-** Ushna **Vipaka-** Madhur

**Doshaghnata-** Vatakaphashamaka

**Karma-** Shothahara, Vedanasthapana, Vataashamaka, Rochana, Deepana, Pachana, Triptighna, Vatanulomana, Shoolaprashmana, Bhedana, Grahi, Shlesmahara.

**Chemical constituents-** Heptane, octane, isovaleraldehyde, ethyl pinene, myrecene, shogaol, gingerol, zingerenone B, isogingerenone B.

**Pharmacological Activities-** Antiinflammatory, Hypolipidaemic, Antiatherosclerotic, Antiemetic, Antiulcer, Antipyretic, Cardiovascular, Antitumoral, Hypoglycaemic, Hepatoprotective, Antidepressant, Hepatoprotective.

**Maricha** (*Piper nigrum*)<sup>[29,30,31,32]</sup>

#### Pharmaco-Therapeutic properties

**Rasa-** Katu **Guna-** Laghu, **Ruksha, Teekshna Virya-** Ushna **Vipaka-** Katu.

**Doshaghnata-** Kaphavatashamaka

**Karma-** Raktotkleshaka, Lekhana, Uttejaka, Nadibalya, Nadiuttejaka, Deepana, Pachana, Kaphaghna, Srotahshodhana.

**Chemical constituents-** Piperidine, Piperanol, Piperine,  $\beta$ -caryophyllene, Pellitonine.

**Pharmacological Activities-** Antioxidant, Anticonvulsant, Analgesic, Muscle relaxant, Antipyretic, Hepatoprotective, Antimicrobial, Antiulcer, Antifungal, Lipolytic.

**Pippali** (*Piper longum*)<sup>[33,34,35,36]</sup>

### Pharmaco-Therapeutic properties

**Rasa-** Katu **Guna-** Laghu, Snigdha, Teekshna **Virya-** Anushna sheeta **Vipaka-** Madhura.

**Doshaghnata-** Kaphavatashamaka

**Karma-** Vatahara, Deepana, Vatanulomana, Shoolaprashamana, Kushthaghna.

**Chemical constituents-** Piperlogumine, Piperlonguminine, n-heneicosane, Piperine, glycosides.

**Pharmacological Activities-** Antibacterial, Antiinflammatory, Antitubercular, Hypoglycaemic, Antispasmodic, Hepatoprotective, Insecticidal, Cough suppressor.

### Method of preparation of Saptanga Guggulu -

*Saptanga Guggulu* is prepared by mixing all the raw drugs in equal parts by trituration or mardana with goghrita and rolled into pills.<sup>[37]</sup>

CONTENTS	QUANTITY
<i>Guggulu</i>	01 Part
<i>Triphala (Amalaki, Haritaki, bibhitaki)</i>	01 Part
<i>Vyosh (Sunthi, Pippali, Maricha)</i>	01 Part

### DISCUSSION

Although *Ksharsutra* ligation proven itself a very effective techniques in managing fistula-in-ano but patients felt some discomfort i.e. pain, burning sensation, itching, inflammation etc. So there are need of some adjuvant drug which can manage all these problems in a better way and also promote healing process. After observing properties of all the ingredients, *Saptanga Guggulu* can work as Anti-inflammatory, Analgesic, Anti-microbial and Anti fungal agent. Due to *Sheeta virya* and *Madhura Vipaka* of *Amalaki*, it shows *Pitta Shamak* action and helps in recuding post *Kshar sutra* ligation burning sensation. *Vata-Kapha Shamaka* activity due to *Ushna Virya* of *Haritaki*, *Bibhitaki*, *Guggulu*, *Shunthi* and *Maricha*, which can help in recuding pain and itching *Saptanga Guggulu* can shows *Vranashodhana* And *Vranaropana*

Properties due to *Guggulu* and *Haritaki*. So in conclusion, *Sapatanga Guggulu* can be considered effective in managing all these problems and can be used along with *Ksharsutra* therapy.

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