A REVIEW ON LANGALI GUTIKA AND ITS CONTENTS

Sakshi Sharma¹, Guru Prasad Sharma²

¹MD. Scholar 2nd year, Rog Nidan Avum Vikriti Vigyan, RGGPG Ayurvedic College & Hospital, Paprola, Himachal Pradesh, India
²MD, Kaya Chikitsa, Jammu Institute of Ayurveda & Research, Jammu, J&K, India

Email: drguru984@gmail.com

ABSTRACT

Vati or Gutika is a term used to indicate tablets or pills in the Ayurvedic system of medicine. The intake of Ayurvedic medicines is often unpleasant due to their bitter and astringent taste. Vati or Gutika is the palatable form of Ayurvedic medicines, which are pleasing for the taste buds thus allowing the patients, especially children, to consume them without having to bear the unpleasant taste. Vati or Gutika an Upakalpana of Kalka Kalpana (formulations in which drugs are in paste form) & comprise more than one drug from plant, animal or mineral origin. This form of medication is widely accepted in present clinical practice because of its accuracy in dosage, longer shelf life & palatability. Langali Gutika is one formulation mentioned in classics which is widely used in present day clinical practice. First reference of this yoga (formulation) is from Bhavprakash of Bhavmishra, Vataraktadhikar. This paper is an attempt to make a review on the formulation “Langali Gutika” from various literatures of Ayurveda.

Keywords: Langali Gutika, Vati, Vata, Rakta, Vatarakta

INTRODUCTION

Medicine is one among the four Padas of Chikitsa Chatushpada. The consideration of the drugs during the line of treatment for particular ailment has great importance.

W. H. O defines drug as “a substance or product that is used or intended to be used to modify or explore physiological system or pathological status for the benefit of the recipient”. Ayurveda was the first to give an elaborate description of various therapeutic measures not merely of radical removal of the causative factors but also at the restoration of Doshik equilibrium.

According to Ayurveda, drug or diet article that reverses or break the Samprapti is ideal. It is often the total effect of all the ingredients in the formula rather than the action of individual drugs that plays a vital role in therapeutics. Drug combinations are envisaged to serve synergistic
action, combined action, toxicity neutralising action and specific action.

Taking this fact into consideration, *Ayurvedic* physicians have formulated single as well as compound drugs for the cure and prevention of various ailments. Many systemic and local therapeutic applications have been mentioned in *Ayurvedic* texts. *Langali Gutika* is one of those formulations which are described here in detail.

**REVIEW OF LITERATURE**

Classical reference of this formulation is from *Bhav Prakash (Laghutrayee)*\(^2\)

*Bha.prk of bhv.mis. vataraktadhikar* (29/83-86)

The ingredients of *Langali Gutika* are as follows:-

1. **Langali kandha**
2. **Amrita**
3. **Triphala**
4. **Loha bhasam**
5. **Trikatu**
6. **Guggulu**
7. **Draksha**

*Langali Kanda* and *Amrta* both equal in quantity are mixed with *Triphala, Loharaja* and *Trikatu* all equal quantity, *Guggulu, Amrtavalli* and *Draksha* are macerated in the juice of *Matuluna* or decoction of *Triphala* and made into pills of 500 mg each: this is consumed along with honey, cures cracks of the foot, fracture of knee and many other diseases of *Vata* and *Rakta* said to be incurable and also the severe form of *VataRakta*.

**Method of Preparation of Langali Gutika:**

**Step 1- Langali Shodhana**- Langali is dipped in Gomutra for more than one day to purify it for medicinal purpose. Then it is taken out from gomutra and washed with clean water.

**Step 2-Guggulu Shodhana**- Guggulu is purified by dissolving in *Triphala Kashaya* and boiling it for few minutes. Then it is filtered through a cloth and dried in Sunlight.

**Step 3- Langali** is grinded into powdered form in mixer. All other drugs that is *Trikatu*, *Triphala*, *Guggulu*, *Guduchi*, *Loha Bhasma*, *Draksha* are also grinded in powder form. All these powder form drugs are mixed in equal quantity. These are given the shape of Tablets.

**Table 1: LIST OF THE INGREDIENTS OF LANGALI GUTIKA**

<table>
<thead>
<tr>
<th>S.No</th>
<th>INGREDIENTs</th>
<th>BOTANICAL NAME</th>
<th>FAMILY</th>
<th>GANA</th>
<th>PARTS USED</th>
<th>CLASSICAL NAMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Langali</td>
<td>Gloriosa superna Linn</td>
<td>Liliaceae</td>
<td>Upvisha</td>
<td>Tuber</td>
<td>Agnishikha, Garbhanut, Agnimukhi, Hiranyapushpi, Kanakapushpi, Halini, Vabnivakra</td>
</tr>
<tr>
<td>2</td>
<td>Amalaki</td>
<td>Embellica officinalis</td>
<td>Euphorbiaceae</td>
<td>Vayasthapana, Virechanopaga (Ch.) Triphala, Parushakadi (Su.)</td>
<td>Fruit</td>
<td>Amalaki, Vayasya, Dhatriphala, Amritaphala, Amalaka, Tishyaphala.</td>
</tr>
<tr>
<td>3</td>
<td>Bibhitaki</td>
<td>Terminalia bellirica</td>
<td>Combretaceae</td>
<td>Jwarahara, Virechanopaga (Ch.)</td>
<td>Fruit, Seed</td>
<td>Bibhitaka, Aksha, Karshaphala, Kalidruma, Bhutavasa, Kliyugalaya.</td>
</tr>
<tr>
<td>Item</td>
<td>Medicinal Plant</td>
<td>Scientific Name</td>
<td>Part Used</td>
<td>Common Names</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>----------------</td>
<td>-----------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Haritaki</td>
<td>Terminalia chebula</td>
<td>Bark</td>
<td>Jwarahara, Prajasthapana, Kusthagha, Kasagha, Arshogha (Ch.), Triphala, Parushakadi (Su.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fruit</td>
<td>Haritaki, Abhaya, Pathya, Kayastha, Putana, Haimavati, Avyatha, Chetaki,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Guduchi</td>
<td>Tinospora cordifolia</td>
<td>Root, Stem, Leaf</td>
<td>Guduchi, Amrita, Amritavallai, Vatasaadani, Tantrika, Kundalini, Dhira</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Shunthi</td>
<td>Zingiber officinaceae</td>
<td>Stem, Leaf</td>
<td>Shunthi, Nagar, Mahashaddha, Vishvabhesha Shringabera, Katubhadra, Ardrika, Ardraka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Pippali</td>
<td>Piper longum</td>
<td>Fruit</td>
<td>Pippali, Magadhi, Krishna, Kana, Chapala, Ushana, Shaundi, Vaidehi, Tikshna tandula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Maricha</td>
<td>Piper nigrum</td>
<td>Fruit</td>
<td>Maricha, Vellaja, Krishna, Dharmapattana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Guggulu</td>
<td>Commiphora mukul Engl.</td>
<td>Gum resin</td>
<td>Guggulu, Devadhoopa, Kaushika, Kalamiryas, Ulukhala, Palankasha, Pura, Mahishaksha, Jatayu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Draksha</td>
<td>Vitis vinifera</td>
<td>Ripe fruit, Leaf</td>
<td>Draksha, Mridwika, Gostami, Charuphala, Kapisha</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Lauha Bhasma** is procured directly from the market and is prepared by a GMP certified standard pharmaceutical house. It is prepared according to the references mentioned in *Rasa Trangani* and it has been seen that it suits all the parameters of *Bhasma Pariksha Preparations of test drugs* –

Scraps of wrought iron and old rusted iron collected from local market, taken as raw materials of *Lauha* and made into course powder by hammering. These are then subjected to *Shodhana* according to traditional *Ayurvedic* procedure. For this purpose it is heated to red hot and quenched in sesame oil, butter milk, cow’s urine, sour gruel, decoction of *Kulattha* seeds, and decoction of *Triphala*, seven times in each media, total 42 times.

The purified materials are subjected to *Marana* according to traditional procedure. For this purpose one part of these materials are mixed with $1/12^{th}$ part of cinnabar (*Hingula*) and is levigated by *Kumari Swarasa* (*aleo gel*) for 6 hrs. Pellets are prepared from this levigated doughy mass and taken into earthen crucibles faced together, and the junction is sealed by mud smeared clothes. This apparatus, called as *Sarava Samputam* was subjected for heating in electric muffle furnace. Heating of materials confined to this apparatus is called *Putapaka* in the parlance of *Ayurveda*. Burning is approximately continued for 3 hrs, when cooled apparatus is taken out and opened to get the incinerated iron powder. These procedures are repeated for 7 times and finally the *Lauha Bhasma* is collected in glass container.

**Table 2: PROPERTIES OF LANGALI GUTIKA INGREDIENTS**

<table>
<thead>
<tr>
<th>S.NO</th>
<th>INGREDIENTS</th>
<th>RASA</th>
<th>GUNA</th>
<th>VIRYA</th>
<th>VIPAKA</th>
<th>DOSHA KARMATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Langali</td>
<td>Katu,tikta</td>
<td>Laghu,tikshna</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphavata shamaka</td>
</tr>
<tr>
<td>2</td>
<td>Amlaki</td>
<td>Madhur Amla Katu Tikta kashaya</td>
<td>Guru Ruksha Sheeta</td>
<td>Sheeta</td>
<td>madhur</td>
<td>Tridoshahar</td>
</tr>
<tr>
<td>3</td>
<td>Bibhitaki</td>
<td>kashaya</td>
<td>Laghu Ruksha</td>
<td>Ushna</td>
<td>madhur</td>
<td>Tridoshahar</td>
</tr>
<tr>
<td>4</td>
<td>Haritaki</td>
<td>Madhur Amla Katu Tikta kashaya</td>
<td>Laghu Ruksha</td>
<td>Ushna</td>
<td>madhur</td>
<td>Tridoshahar</td>
</tr>
<tr>
<td>5</td>
<td>Guduchi</td>
<td>Tikta kashaya</td>
<td>Guru Snigdha</td>
<td>Ushna</td>
<td>madhur</td>
<td>Tridosha shamak</td>
</tr>
<tr>
<td>6</td>
<td>Shunthi</td>
<td>Katu</td>
<td>Laghu Snigdha</td>
<td>Ushna</td>
<td>madhur</td>
<td>Vatakapha Shamak</td>
</tr>
</tbody>
</table>
DESCRIPTION OF ACTION OF EACH DRUGS: -

LANGALI

**Rogagnata:** Shotha, Varna, Gandamala, Charmaroga, Unmantha, Arsha, Kustha.

**Karma:** Raktotkleshaka, Kshobhaka, Krimighna, Garbhapatana, Deepana, Rechaka, vamak.

**Chemical Constituents:** Cornigerina, 3-demethyl-N-formyl-N-decetylcolchicine, colchicines, colchicamide.

**Pharmacological and clinical study of Langali:** Spasmolytic, CNS depressant, antibiotic, oxytocin, uterine stimulant, nematicidal.

**Actions and Uses:**

- In large doses it is highly poisonous and may cause vomiting, purging, gastralgia and burning sensation.

AMALAKI

**Rogaghanata:** Paittikavikara, Daha, Pattikashirahshoola, Mootravarodha, Netraroga, Khalitiya, Palitya, Rasayana, Mootrala, Kushtaghna.

**Karma:** Rasayana, Raktastambhaka, Dhaprapashama

**Chemical Constituents:** Vitamin C, Gallic acid, Cellulose, Caphosphorous, Iron, Nicotinic acid, Ellegic acid, Proteins, Fat.

**Pharmacological and clinical study of the Amalaki:**

- Vitamin C – 600 mg/100 gm (Vitamin C) content up to 720 mg / 200 g of fresh Pulp and 921 mg/100 cc of fresh juice has been recorded
- Amla fruit is probably the richest known natural source of Vitamin C.
- It possesses an antioxidant property and has proved to be an immunomodulatory drug (Chem. and the Env.).
- It has strong antiulcer property (In.J.Phy.Pha.1998)

Spasmolytic, mild CNS depressant, hypolipidemic, antiatherosclerotic, antimutagenic, antimicrobial, antioxidant, immunomodulatory, antifungal, Antitumour, hypoglycaemic, anti-inflammatory, antibacterial, antiulcer, adrenergic potentiating, HIV-1 reverse transcriptase inhibitory action.

**BIBHITAKI**

**Action:** Raktastambhaka, Shothahara, Vedanasthapana, Vranaropana.

**Chemical Constituents:** Tannin (21.4 %), Galic acid, Egalic acid, Chebulagic acid, Manitol, Glucose, Galactose.

**Pharmacological and clinical study of the Bibhitaka:-**
Purgative, blood pressure depressant, antifungal, antihistaminic, activity against viral hepatitis and vitiligo, antisthmatic broncho-dilatory, antispasmodic antibacterial, CNS stimulant, antistress and endurance promoting activity.

**HARITAKI**

**Action:** Raktastambhaka, Shothahara, Shonitaspathana, Vedanasthapana, Vranaropana.

**Chemical Constituents:** Chebulagic acid, Chebulinic acid, Tannin, Corilagin, Amino acids.

**Pharmacological and clinical study of Hari-
taki:**
Antimicrobial, Antifungal, Antibacterial, Antistress, Antispasmodic, Hypotensive, indurance promoting activity, Anti hepatitis B virus activity, hypolipidaemic, inhibitory activity, against HIV-1 protease, antihelmintic, purgative.

**GUDUCHI**

**Action:** Kushta, Vatarakta, Trishna, Daha, Chardi, Aruchi, Shoola, Amalapitta.

**Chemical Constituents:** Tinosporine, Tinosporon, Tinosporic acid, Tinosporol, Palmarin, Columbin.

**Pharmacological and clinical study of Guduchi:**
Hypoglycaemic, Antihyperglycaemic, CNS Depressant, Antibacterial, Antimicrobial, Antipyretic, Ant diabetic, Antioxidant.

**SHUNTHI**

**Action:** Shothahara, Amapachana, Shoolaprashamana.

**Chemical Constituents:** Calcium (20%), Phosphorus (60%), Iron (2.6 mg), Carbohydrate, Protein, Starch, Zingiberaceae (35.6%), Zingiberol, aromatic oil, Gingerol, Shogaol, zingerone.

**Pharmacological and clinical study of Shun-
thi:**
Shunthi having antibacterial activity + grade (+
= mild active ), as per “On the antibacterial ac-
tivity of some Ayurvedic drugs” (Jour.Res.Ind.Med. 9:2, 1974 )
Antiinflammatory, hypolipidaemic, antiemetic, antiulcer, antiplatelet, antipyretic, cardiovascu-
lar, antioxidant, antibacterial, antifungal, car-
bonyl reductase activity, cholagogic, antirhino-
viral, inotropic, inhibition of prostaglandin re-
lease.

**PIPPALI**

**Chemical Constituents:** Aromatic oil, Piperine, Piplartine, Sesamin, Piplasterol, Piparin.

**Pharmacological and clinical study of pippali :-**
It is antibacterial, anti-inflammatory, insecticidal, antimalarial, CNS stimulant, antitubercular, antihelmintic, hypoglycaemia, antispasmodic, cough suppressor, anti-giardial, immunostimulatory, hepatoprotective, analeptic, antinarcotic, antiulcerogenic.

**MARICHA**

**Action:** Deepana, Pachana, Krimighna

**Chemical Constituents:** Piperine (5 - 10 %), Piperedin (5 %), Pipreltine, Chavicine, Aromatic
oil, Protein, Carbohydrate, Calcium, Phosphorus, Iron, Vit. A

**Pharmacological and clinical study of Maricha:-**
It is antioxidant, anticonvulsant, sedative, analgesic, insecticidal, pesticidal, CNS depressant, muscle relaxant, antipyretic, anti-inflammatory, antifungal, hepatoprotective, antimicrobial, antiulcer, antibacterial, lipolytic, cyclo oxygenase inhibitory activity.

**LAUHA BHASMA**
*Karma:* Kaphapittashamaka, Balya, Varnya, Medhya, Vrishiya.
*Rogaghanata:* Pandu, Krimi, Shwasa, Kasa, Twakaroga, Kamala, Hridaroga, Kshaya, Chardi.

_Lauha Bhasma_ is the most commonly used preparations of incinerated iron.
It is indicated in anaemia, oedema etc and are also used as immunomodulators (Rasayana). All iron preparations are probably equally toxic per unit mass of soluble iron. They produce mild gastrointestinal disturbances characterised by colic pain, nausea, vomiting, diarrhoea, and gastric distress.

**GUGGULU**
*Rogaghanata:* Amavata, Sandhivata, Gandamala, Charmoraga, Arsha, Krimi, Vrana, Gridhrasi
*Karma:* Shothahara, Vedanasthapana, Vrashodhana, Vibandha, Hridroga, Prameha, Medoraga, Kushta.

**Properties and Uses:-**
- According to _Charaka_ in the disease of stomach.
- _Sushruta_ has indicated its use in _Urustambha, Shotha, Karna durgandha_, etc.
- _Vagbhata_ mentioned in _Shvasa roga_.
- _Chakradatta_ refers its use in _Gridhrasi, Kroshtukshirsha, Vidradhi_ etc.
- _Guggulu_ is an olea-resin obtain from the plant _Commiphora mukul_ and is very much used in Indian system of medicine as astringent, antiseptic, expectorant, aphrodisiac, demulcent, carminative, antispasmodic and used in rheumatism. The drug is described as _hridya, medoghna and mehaghna, ashmaghna_.
- It also reduces the level of cholesterol and obesity. Oleo-resin gum of _C.mukul_ has been proved to be a potent hypocholesterolemic, hypo-lipidaemic, antiatherosclerotic agent both in clinical as well as in experimental studies.
- The steroidal fraction had a significant effect on the primary as well as the secondary inflammation induced by Freud's adjuvant, the activity being less than that of hydrocortisone acetate in primary inflammation but it is more effective than hydrocortisone in reducing the severity of secondary lesions (Arora et al, 1971, 1972). Further study showed that the steroidal component of fraction A had a pronounced antiarthritic effect and is superior to phenyl-butazone and comparable to hydrocortisone (Sharma and Jain, 1978).
- The oleo-resin fraction possessed significant anti-arhritic and anti-inflammatory activities. Only the acidic fraction showed significant activity while the monacid and solid fraction were inactive (Santha Kumari et.al, 1964). Chemistry :-
- From the gum-resin, sesamin, cholesterol, few other steroids, essential oil containing steroidal ketones, alcohols and aliphatic triols (mostly as esters of ferulic acid) were reported. The structure elucidation of steroidal constituents viz, Z-guggulsterone, E-guggulsterone, three new sterols guggul-
sterols-I,-II and III have been established along with partial synthesis of guggulsterol II from diosgenin. In addition, diterpenoid constituents cembrene-A and Mukulol, some fatty tetrals-octadecan-1,2,3,4-tetrals, eicosan-1, 2,3,4,-tetrol and non-adecan-1,2,3,4,-tetrol were reported (CRU,P).

➢ Two new sterols viz, guggulsterols-IV & V have been reported for the first time Known compounds isolated were guggul-sterols-I,-II &III and guggulsterones-Z and E. (CSMDRIA, M). A diterpene alcohol, gug- gulsterone, guggulsterol-I-II & III were iso- lated from the gum-resin (CRU, D).

**DRAKSHA**

**Doshaghnata:** Vatapittashama, Rogaghnata: Mastishadaurbalya, Bhrama, Madatya, , Chhardt, Grahmi, Gulma, Udavarta, Kamala, Pandu.

**Karma:** Medhya, Saumanasyajanana, Snehana, Anulomana, Hridya, Moutrala, Vrishya, Garbhashthapana ,Jwaragdna.

**Chemical Constituents:** Palmitic, stearic, oleic, linoleic, and linolenic acids; isochlorogenic acid, isomer of quercitrin, isomer of rutin, caffeic and caffeyltartaric acids.

**Pharmacological and clinical study of Drak- sha:-**

Antifungal, angiotensin-converting enzyme ac- tivity, tumour inhibitory, antiulcer, hepatopro- tective, antioxidant, wound healing, ant- tumutagenic, antihepetic, cardioprotective, breast cancer suppressor, antibacterial.

**DISCUSSION**

The action of Rasa, Guna, Virya etc. get neutral- ized among themselves. Therefore, stronger component neutralizes the action of weaker component. Hence, action of particular drug compound is the action 'as a whole and slow in nature'.

Langali Gutika contains mainly Tikta, Madhura, Kashya Rasa, Laghu, Snighda, Tikshan Guna, both Katu and Madhura Vipaka and also Ushna Virya. It cures cracks of the foot, fracture of knee and many other diseases of Vata and Rakta said to be incurable and also the severe form of VataRakta.

It has anti-inflammatory, analgesic and anti rheumatic properties. It is used in auto -immune disorders especially Gouty Arthritis.

**ACTION ON SAMPRAPTI GHATAKA:**

**Dosha:**

➢ Tikta, Madhura, katu and Kashaya Rasas contain mainly Laghu, Snigdha Gunas.(Ch. Su. 26).

➢ Snigdha Guna inhibits the Ruksha Guna of Vatadosha and Pittadosha.

➢ Laghu guna and Madhura, Kashaya Rasas normalise the Pitta and Rakta.

➢ Katu Guna removes the obstruction and di- late the passage and allay Kapha. In this way they help in Sroto-Shodhana.

Thus in this way the compound drug acts on Dosha and disintegrates Dosha Samprapti.

**Dushya:**

**Madhura Rasa & Madhura Vipaka:** Nour- ishour of Rakta Dhatu.

**Tikta Rasa:** Anti-inflammatory, anti-toxic.

**Katu Rasa:** Removes the toxic elements from the Tissues.

**Srotas:**

Katu Rasa and Laghu, Tiksha Guna remove the obstruction and dilate the passage and allay Kapha. In this way they help in Sroto Shodhana. Madhura Rasa and Sheeta Vir ya aggravates the vitiated Vata & rakta. In this way, Srotas Sanga
is removed and this acts on symptoms of Vata Rakta.

CONCLUSION

- **Langali Gutika** is mainly used in diseases of Vata, Rakta and severe form of Vatarakta.
- It is used in auto-immune disorders especially Gouty Arthritis.
- Due to its anti-inflammatory, analgesic and anti-rheumatic properties, it is widely used in various joint disorders like Sandhi Shool, Sandhi Shoth, Sandhi Graha etc.
- Classical reference of this formulation is from *Bhav Prakash (Laghutrayee)*
- The main Rogadhikar of Langali Gutika is Vatarakta.
- It can be used in various ailments of Vata and Rakta with proper Anupanas.

REFERENCES


Source of Support: Nil
Conflict Of Interest: None Declared