



## A CONCEPTUAL ANALYSIS AND PRACTICAL APPROACH ON THE PREPARATION OF NIRUHA BASTI (BASTI SAMMILANA VIDHI).

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**ABSTRACT** Basti (Medicated enema) is one of the five therapeutic procedures in *Panchakarma*, is frequently used in the management of different *Vatavyadhi* (neurological disorders). It is a herbo - mineral preparation prepared by systematic step wise procedure described in *Ayurvedic* classics. The most important materials used in the preparation of *Basti* are *Makshika* (Honey), *Saindava* (Rock salt), *Sneha* (Fatty material), *Kalka* (Paste of herbs), *Kwatha* (Decoction of herbs). It is a unique preparation as well as widely practiced all over among the treatment modalities of *panchakarma*. Therefore, here is an attempt is made to understand the rationality and importance behind the specific order of mixing of *Basti* ingredients during the process of mixing of it and also identifying the practical difficulties faced during the mixing of *Basti dravya's* in the order mentioned and solutions for them on the modal *Erandamooladi Niruha Basti*.

**KEYWORDS :** Basti, practical difficulties, Mixing, Erandamooladi Niruha basti.

### INTRODUCTION

Basti (medicated enema) is one of the main Panchakarma procedure and is compared with conventional enema due to its similarity in procedure of administration. But in effect, enema is simple evacuation technique, whereas *Basti* (Medicated enema) is a therapeutic measure considered as *Ardhachikitsa* (half treatment). *Basti* is of two types, *Niruhabasti* (Medicated decoction enema) and *Anuvasana basti* (Oil enema). *Niruha Basti* is one of the most important and commonly used basti having wide range of therapeutic action. *Niruha Basti* is one which eradicates *dosha* from the body, increases strength of the body and has *Acintya shakti* (unpredictable effects). To tackle the increased vata in various diseases, there is nothing is best than the *Basti* karma.

There are two steps in the procedure of *Niruha Basti*. First is the preparation of *Basti* material and second is the administration of it. In our classics we get various opinions about the order of mixing of *Basti dravya* and the mixing pattern of *Basti*. There are some important materials which are used in this procedure i.e *Madhu*, *Saindhava*, *Sneha*, *Kalka* and *Kwatha*. Order of mixing, different equipments and different methods of mixing are used to prepare *Basti dravya* and are mentioned in the classics having different opinions.

'*Erandamooladi Niruha Basti*' a type of *Niruha Basti* (decoction enema) also named as *Asthapana Basti*, is a mixture of *Makshika* (honey) and *Taila* (oil) along with other ingredients like *Saindhava lavana* (rock salt), *Kalka* (Fine paste obtaining after wet grinding of plant material), *Kwatha*(decoction). As these ingredients are immiscible with each other, classically, a systematic step wise procedure is explaining for the preparation of *Niruha Basti*. By this serial mixing homogeneity is sustained for a reasonable period<sup>3,4</sup>.

### AIMS AND OBJECTIVES

- To prepare *Erandamooladi Niruha Basti* in accordance with the prescribed (Khalwa and Hastatala) classical method.
- To assess the role of serial order of mixing basti dravya with reference to *Bhavana Samskara*.

### MATERIALS & METHODS:

**Table no: 1 Showing ingredients of Erandamooladi Niruha Basti.**

INGREDIENTS	QTY IN PRASRTA	QTY IN PALA	QTY
MAKSHIKA	2	3	200 ml
SAINDHAVA	1/8	¼	15 gm
SAHACHARADI TAILA	3	6	300 ml
KALKA	1	2	100 gm
SHATAPUSHPA			
E.M.KASHAYA	5	10	400 ml

AVAPA	1.5	3	200ml
Total (approx.)	12	24	1200ml

### EQUIPMENTS:

- Heating source
- Mortar and pestle
- Filter
- Stainless steel vessels
- Measuring cylinder

### METHOD:

- To understand the rationality and importance behind the specific order of mixing of *Basti* ingredients, on the modal *Erandamooladi Niruha Basti*.
- Practical difficulties faced during the mixing of *Basti dravya's* in the order mentioned and solutions for them on the model *Erandamooladi Niruha Basti*.

### METHOD 1

*Basti* was prepared by step wise serial order of mixing the ingredients prescribed by Charaka, Sharangadhara as indicated below.

Step1 - *Makshika* (Honey) and *Lavana* (rock salt) are mixed together in the beginning.

Step 2 - Followed by addition of *moorchita tila taila*. This mixture is then meticulously mixed.

Step 3 - The finely wet grinded paste of *shatapushpa kalka* is then mixed in it. The mixture is then again mixed thoroughly.

Step 4 - The prescribed liquid, *eranada moola kwatha* is added to it and subjected to thorough churning to produce a homogenous mixture.

- पूर्व हि दध्यान्मधु सैन्धवं तु स्नेहं विनिर्मथ्य तत अनुकल्कम्॥२३॥  
विमथ्य संयोज्य पुनर्द्वैस्तं बस्तौ निदध्यान्मथितं खजेन।  
चरक.सि.३।२३

- It is important to know the rationality behind the mixing of *Basti ingredients* before administration of *Basti* to the patients. We get the reference of *Niruha Basti* is a uniform mixture of *Makshika*, *Lavana*, *Sneha*, *Kalka* and *Kwatha*. According to *Susruta*, *Vangasena*, *Cakradatta*, *Saindava* should be added first. According to opinion of *kashyapa*, *vagbhata*, *Caraka*, *makshika* is poured first because it is a *mangalakaari dravya* (auspicious drug), followed by *saindhava*, *sneha*, *kalka*, *kwatha* and *avapa*.

- स्याच्चेद्विद्वक्षा द्रव्याणां प्रक्षेपं प्रति कस्यचित्॥३९॥

तत्र वाच्यमिदं व्यस्तक्रम संयोगकारणम्।

Disciples asked the question to Kashyapa that ,what is the reason behind mixing of Dravyas in the preparation of Basti Dravya. Answer given by the Acharya Kashyapa is as follows.

- मंगल्यं मंगलार्थय मधु पुर्व निषिच्यते ॥४०॥  
पैच्छिल्यं बहुलत्वं च कषायत्वं च माक्षिके।
- भिनत्ति लवणं तैक्षण्यात् संघातं च नियच्छति ॥४१॥  
मधुनो अनन्तरं तस्मात् लवणांशो निषिच्यते।
- ततस्तैलं विनिक्षिप्त एकभावाय कल्पते ॥४२॥  
कल्कः संसृज्यते च आशु क्वाथश्च समतां व्रजते।  
स्नेहकल्ककषायानामेवं संसृज्यते ॥४३॥

काश्यप,संहिता,खिलस्थान ८/३६-३८

Step 1 - *Makshika* (Honey) and *Lavana* (rock salt) are mixed together in the beginning.

#### • The contents of Honey are:

Sugars like fructose, glucose, sucrose, maltose, lactose and other disaccharides and tri -saccharides. Proteins, fats, vitamins, minerals, enzymes and amino acids, Volatile aromatic substances. Ashes and water etc.

- As it contains sugars which are quickly absorbed by our digestive system and converted into energy, this can be used as instant energizer. It is hygroscopic it speeds up healing, growth of healing tissue and dries it up and Honey is a very good antioxidant.

#### • Saindhava:

Saindhava contains 21 essential and 30 accessory minerals. 98 % sodium chloride only and traces of potassium is also seen. It is useful in regulating acid, alkaline balance, maintaining osmosis, activation of ATP phase an generates hydro-electric energies in the cells for nerve cells communication.

#### • MAKSHIKA + SAINDHAVA

Honey contains glucose and an enzyme added by honeybees called glucose oxidase. Honey itself does not have the right condition to activate and breakdown of glucose into hydrogen peroxide. This conversion happens in the conditions like, pH of 5.5 to 8.0 and in the presence of certain amount of sodium.

Step 2 - Followed by addition of *moorchita tila taila*. This mixture is then meticulously mixed.

#### • MAKSHIKA + SAINDHAVA + SNEHA

Helps in the formation of emulsion. Emulsion is a substance consisting of one liquid dispersed throughout another liquid (paint like). It helps to emulsify two immiscible liquids (water and oil). SCFA are produced due to breakdown of this sneha and these Short chain fatty acids are absorbed from rectum and small intestine more in the presence of Na, K, here comes the role of saindhava lavana. Unionized and lipid soluble substances are readily absorbed.

Step 3 - The finely wet grinded paste of *shatapushpa kalka* is then mixed in it. The mixture is then again mixed thoroughly.

#### • MAKSHIKA + SAINDHAVA + SNEHA + KALKA

Wet drug without adding water and dry one with little quantity of water.

Sharangadhara while explaining the action of each ingredient of Basti he explains, Kalka will ease the basti pratyagamana ( proper and complete evacuation ).

“कल्कः संसृज्यते च आशु”

After adding the kalka to the Basti it forms a colloidal solution, it increases the surface area and accelerates the absorption of basti.

Step 4 - The prescribed liquid, *Eranadamooladi kwatha* is added to it and subjected to thorough churning to produce a homogenous mixture.

#### • MAKSHIKA+SAINDHAVA+SNEHA+KALKA+KWATHA

“क्वाथश्च समतां व्रजते”

Kwatha increases the Basti Volume and it imparts the cleaning quality in to it. As Basti volume increases ability to spread in the colon increases and accelerates the absorption of basti dravya by increasing the surface area of it.

Kwatha used in basti are different having special therapeutic effects are added to the Basti Dravya.

- दत्त्वा आदौ सैन्धवस्याक्षं मधुनः प्रसृतवदयम्।  
पात्रे तलेन मन्थीयात्तद्वत् स्नेहं शनैः शनैः ॥ ३३ ॥  
सम्यक् सुमथिते दध्ययात् फलकल्कमतः परम् ॥  
ततो यथोचितान् कल्कान् भागैः स्वैः श्लक्ष्णपेषितान् ॥३४ ॥

सुश्रुत.चि.३८/३३-३४

Sushruta has nicely explained the method of Basti sammilana vidhi by the palm in a wide mouthed vessel<sup>10</sup>. Basti sammilana from this method will increase the surface area and aids the formation of more collisions. Particle size and surface area of drug are inversely related to each other. Smaller the drug particle greater the surface area, this increased surface area exposes the drug particles more to the drug media which enhances the rate of reaction. Large surface area exposed to the atmosphere helps in oxidation of the active constituent of the drug by the atmospheric oxygen.

#### METHOD 2

*Eranadamooladi Niruha Basti* is taken as a model Basti to identify and solve the practical problems faced during the preparation of Basti Dravya.

एरण्डमूल त्रिफलाबलारसनापुनर्नवाः । .....।

एरण्ड बस्तिः शमयेन्मारुतं च कफावृत्तम्। का.खि.८/९७-१०३

#### • Criteria's to be observed during the mixing of Basti Dravya :

*Basti* is homogenous emulsion mixture of Honey, *Saindhava*, *Sneha Dravya*, *Kalka*, *Kwatha* and *Avapa Dravya*.

( आर्दता ) Wetting.

( कर्दमाभ ) Mire like consistency.

( संप्लावन ) Immersion.

( एकीभूत ) Becoming homogeneous mixture.

#### • Till what time the mixing should be done :

According to *theory of collision*, Reactions can only occur only when reacting particles collide with each other. Decreasing the size of particles increases the surface area. If there is a larger surface available for particles to collide then will be more collisions. Therefore the rate of reaction is increased. In a chemical reaction, bonds are broken and new bonds are formed. By the formation of such new bonds, property of the material will be changed.

Reduction in the size of particles was found in the sample as the duration of *Bhavana* increases. Uniformity in distribution of particle as well as particle size was observed by 30 min of the *Bhavana*<sup>7</sup>. This imparts homogeneity of *basti dravyas* for a reasonable period. Thus, *Bhavana* is an important and mandatory process during *basti* preparation, affecting the physicochemical and biological properties of a dosage form<sup>7</sup>.

#### DISCUSSION

*Basti* is always useful in diseases caused by *vata*, *pitta*, *kapha*, *rakta* and in mixed *doshic* conditions too<sup>8</sup>. *Basti Karma* is time tested and well established, but exact pharmaco-dynamics by which it acts is still unknown. *Niruha Basti* is a uniform mixture of *Makshika*, *Lavana*, *Sneha*, *Kalka* and *Kwatha*<sup>2</sup>. Rationality behind mixing is clear classically, as explained by Acharya Kshyapa . *Makshika* is added initially as it is believed that it is auspicious. *Saindhava* is being added next to the madhu, *saindhava* by the virtue of its tikshna guna, it breaks down the picchilya and bahula guna of madhu. *Sneha* and *Kalka* are added and mixed till the mixture becomes homogeneous, finally *Kashaya* is added to it and mixed well.

#### • Characteristics of a well prepared Basti Dravya

#### • Physical tests :

न धावति औषधं पाणिं न तिष्ठति अवलिप्य च करोति सीमन्तं स  
निरुहः सुयेजितः। चक्रदत्त  
समरसतां

A properly prepared Basti Dravya will not easily flow off and stick to the palm, it will not form different layers of ingredients added to it and finally it will form a uniform homogeneous mixture

• **Biological (retrospective):**

सम्यगेवं विमुदितः स्रोतोभ्यः कफमारुतौ ॥४४॥

विष्यन्दयति पित्तं च क्षिप्रं चैव हरत्यति।

अतो अन्यथा मृध्यमानो न श्लेष्माधिगच्छति ॥४५॥

काश्यप.खिल.८/४४-४५

Classically prepared *Basti* will clear the *strotas* and eliminate the vitiated *tridoshas* from the body.

• **CONCLUSION**

Order of mixing of Basti dravya is explained to form homogeneous emulsion. Time required to mix Basti dravya can be fixed for 10 - 15min in each step and complete mixing for 30 -45 min. Basti sammilana by hastatala is stands best method because the homogeneous basti dravya is formed and retention time is more compared to the conventional method.

प्रमाणं च प्रकृष्टस्य प्रसुतेर् उदाहृतम्। .....

गुणतस्तु उभयत्वेन द्रुष्टा व्याधिबलाबलम् ॥४८॥

काश्यप,खिल८/४७-४८

Quantity of Basti Dravya explained are only the examples, Vaidya has to fix the dosage of Basti Dravya after the complete evaluation of Vaya, Bala and Vyadhibalabala<sup>3</sup>.

**REFERENCES**

1. Charaka Samhita, Siddisthana1, 5th ed. Varanasi: Chaukhamba Sanskrita Sansthan; Chakrapani; 2001.
2. Vagbhata. Astanga samgraha. Srikanthamurthi KR, editor. Varanasi: Chaukhamba orientalia; 2008. Sutra sthana, 28/5. p.378
3. Vrudha Jivaka. Kasyapa Samhita (Vidyotini commentary). 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2008. Khilasthana, 8/3-5. p.277.
4. Vrudha Jivaka. Kasyapa Samhita (Vidyotini commentary). 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2008. Khilasthana, 8/36-39.
5. Susruta Samhita, Chikitsa sthana 38 5th ed. Varanasi: Chaukhamba Sanskrita Sansthan; Chakrapani; 2001
6. Charaka Samhita, Siddisthana3/23, 5th ed. Varanasi: Chaukhamba Sanskrita Sansthan; Chakrapani; 2001.
7. Vrudha Jivaka. Kasyapa Samhita (Vidyotini commentary). 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2008. Khilasthana, 8/97-103.
8. Effect of Bhavana samskara on particle size distribution in various stages of preparation of Niruha Basti w.s.r to madhutailika basti. KLE Ayurveda mahavidhyalaya Belagavi.
9. Susruta Samhita, Chikitsa sthana 35/6. 5th ed. Varanasi: Chaukhamba Sanskrita Sansthan; Chakrapani; 2001
10. Susruta Samhita, Chikitsa sthana 37/33-34. 5th ed. Varanasi: Chaukhamba Sanskrita Sansthan; Chakrapani; 2001