

A CONCEPTUAL ANALYSIS ON THE PREPARATION AND ADMINISTRATION OF NIRUHA BASTI

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Abstract

Basti chikitsa (medicated enema treatment) is considered to be the prime treatment modality among the Panchakarma (five-fold purificatory therapies) in Ayurveda. It is also considered as Ardhachikitsa (half of entire treatments). Niruhabasti (Medicated decoction enema) is one of the types of Bastikarma. In samhitas (Classical texts) there are different opinion about the method of preparation and administration. The present article is an attempt to analyse the principle behind, preparation and administration of Niruhabasti (Medicated decoction enema).

Key words: Niruha Basti; Madhyahna; Saindava; Makshika.

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INTRODUCTION

Basti (medicated enema) is one of the main Panchakarma procedures. 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 therapies having wide range of therapeutic action. Niruha Basti is one which eradicates dosha (Humors) from the body, increases strength of the body and has Acintya shakti (unpredictable effects).^[1] There is no other treatment capable of bringing pleasure to the body parts than application of basti. To win over the increased vata in various diseases, there is nothing else than the Basti karma. Amongst all the treatments of vata, it is the half treatment.^[2]

There are two preliminary steps in doing a niruha Basti. First is the preparation of Basti material and second is the administration. About the preparation there are various opinions about the order of mixing of basti dravya and the mixing pattern and the time of administration of Niruha Basti. The effect of Basti is not restricted to ano-rectal region locally as in conventional enema. The basti is supposed to exert a systemic action. The ingredients of Basti dravya reaches upto small intestine. They are absorbed through gut wall distributed in the body and thus exert a systemic effect. Best and Taylor who state "Materials introduced by enema, may in some instances pass through the valve into the ileum. Such incompetence may permit the enema fluid to reach the duodenum. He further adds "The possibility of material from even lower bowel reaching the mouth is strongly suggested by the fact that lycopodium spores, introduced into colon by enema, have been recovered some hours later from washings of the stomach, alimentary canal movements.

There are similar enemas explained like that of basti, where contents are different. Quantity of Niruha basti depends upon the condition of the diseases. About the time of administration, some explains Madhyahnekinjitaavritte.

According to some acharyas time of administration is Madhyahna and According to Acharya Caraka, Niruhavasti should be administered after the previous meal gets digested and after the elimination of natural urges. So there are various opinions about timing. Position i.e. left lateral position also plays a major role because as the grahani (duodenum) and guda (rectum) are situated on the left side of the body and due to this Basti dravya may reach up to the grahani.

There are some important materials which used in this procedure i.e. honey, salt, fatty material, paste of herbs, decoction of herbs. Order of mixing and the equipments used to prepare basti are mentioned and there are different opinions.

BASTI KALPANA

Materials used in basti

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).

Makshika (Honey)

Honey is sweet and astringent in taste, chedana (scraping) and ruksha (dryness) in guna (quality) and ushna in veerya (potency).

The most important properties of honey in the context of Basti karma are the yogavahitva (Catalyst in action) and sukshma marga anusaaritva (Potency to penetrate into the minute capillaries of the body). (Table 1)

Saindava lavana (Rock Salt)

Saindava is salty and sweet in nature, laghu and moderately hot, it is margavisodana (Clears the channels). (Table 2)

Sneha

Snigdha guna produces unctuousness in body which in turn helps for easy eliminations of dosha and mala. The medicine administered to the seat of vata should contain some sneha dravya in it. The sneha lubricate the colon, softens the mala and helps to eliminate it without strain. Among the 4 sneha dravya, taila (sesame oil) and ghrita (cow's ghee) are widely used for Basti karma.^[9]

Kalka

Kalka is the main drug, which gives potency to the whole combination. Kalka helps to disintegrate the malas (waste) by increasing the osmotic permeability of the solution. Kalka is prepared by grinding prescribed drugs. Satahva is the commonly used drug.^[10]

Kwatha

Kwatha helps in maintaining the volume of the fluid, helps in spreading and cleansing. Besides that, the herbs added are Vatahara in nature which provides anulomana (downward action) and nirharana (disintegrates) of doshas.^[11]

Avapa

Avapa (the powders of certain herbs) are added in asthapana and anuvasana if the disease is chronic and obstinate. Powders of devadaru (*Cedrus deodara*), satahva (*Anethum graveolens*), ela (*Elettaria cardomomum*), honey, jaggery, sugar, salt etc are added in general.^[12] (Table 3)

Sneha (oil), guda (jaggery), mamsa rasa (meat soup), amla (Sour material), mootra (Urine), madhu (Honey), saindava (Salt) and madanaphala (*Randia dumetorum*) these items even if unmentioned, should be included as a

prakshepa dravyas (adjuvant materials) in the formulation of niruha.^[14]

Order of mixing

Niruha Basti is a uniform mixture of Makshika, Lavana, Sneha, Kalka and Kwatha. The ingredients of basti dravya are to be mixed in specific order to obtain the perfect mixture. Order of mixing of Basti dravya, According to Susruta samhita,^[15] Vangasena samhita,^[16] Cakradatta,^[17] Saindava should be added first. According to opinion of Acharya kashyapa,^[18] Acharya vagbata,^[19] Acharya Caraka,^[20] makshika is poured first because it is a mangalakaari dravya (auspicious drug). Makshika is first of all poured for auspiciousness.

Dwadasa prasruta vasti is mentioned by Caraka, Susruta, Kashyapa, Cakradatta, Sarangadara, Vangasena. But Vagbhata mentions about 9 Prasruta (measurement). (Table 4)

METHOD OF PREPARATION

According to Acharya Kashyapa,^[35] Acharya Vagbatta,^[36] Acharya Caraka,^[37] makshika is poured first because it is a mangalakaari dravya. Lavana disintegrates by its teekshna (penetrating), pichilata (sliminess) and kashayatwa (astringent) of makshika and thus a compound is formed. That is why after honey saindava lavana is added then taila poured, which brings uniformity and kalka gets mixed quickly and the kashaya brings samsarjana (homogeneity). In some vasti, taila, kalka and kashaya mixed together is mixed with mootra (urine), which brings patutha (increases quality) and increases the veerya (Potency). In this way properly mixed Basti eradicates the vitiated pitta, vata and kapha from srotas (channels).

Table 1: Properties of Makshika

Rasapanchaka	Vagbatta ^[3]	Caraka ^[4]	Susruta ^[5]
Rasa (Taste)	Kashaya (Astringent), Madhura (Sweet)	Kashaya (Astringent), madhura (sweet)	Madhura (Sweet), kashaya (Astringent) anurasa
Guna (Properties)	Ruksha (Dryness)	Guru (Heavy), ruksha (Dryness)	Ruksha (Dryness)
Veerya (Potency)		Seeta (cold)	Seeta (cold)
Karma (Action)	Cakshushya (Good for eyes), cedana (scrapping), sandana (binding)	Sandana, cedana	Lekhana (scrapping), sandana, sukshmaarga anusaari (travels through the minute channels), yogavahi (catalyst agent)

Table 2: Properties of Saindava lavana

Rasapanchakas	Vagbatta ^[6]	Caraka ^[7]	Susruta ^[8]
Rasa	Irshat swadu (Slight sweet)	-	Swadu (Sweet)
Guna	Laghu (lightness), teekshana (penetrating), sukshma (minuteness)	Snigdha (sliminess), teekshna (penetrating)	Laghu (light)
Veerya	Kinjitusna (slight hot)	Anushna (Not very much hot)	Seeta (cold)
Karma	Vishyandana (liquefaction), vatagna (decreases vata)	Deepana (promote agni)	Margavisodana (clears the channel)

Table 3: Difference between Avapa and Prakshepa

Avapa	Prakshepa
It is the liquid medium	Both this is the synonym of kalka dravya ^[13] There are two types sadrava and adrava

Table 4: Concept of dvadasaprasruta vasti

Ingredients	Vagbata ^[21]	Caraka ^[22]	Susruta ^[23]	Kashyapa ^[24]	Cakra Datta ^[25]	Vangasena ^[26] & Bhavaprakasha ^[27]	Sharangadara ^[28]
Makshika	144g	192g	192g	192g	192g	192g	192g
Lavana	6g	12g	12g	6g	12g	12g	12g
Sneha	144g	288g	192g	192g	192g	288g	288g
Kalka	96g	96g	144g	96g	96g	96g	96g
Kwatha	480g	480g	384g	384g	480g	384g	384g
Avapa		192g	192g	192g (MR); 48g (M)	192g	192g	

MR – Mamsa rasa (Meat juice); M – Mutra (Cow's urine)

Vipareetamadkara (Churning in opposite direction) doesn't mix the ingredients in a proper way. Improperly churned, thus, in adequately mixed basti dravya doesn't fulfill its purpose that is why the sequential method of preparation of niruhavasti is described.

While mixing the basti dravyas, Acharya Caraka,^[38] Vagbata^[39] explains churned with the help of churner (khajenamathita). While Acharya Susruta^[40] explains it should be mixed in a vessel with hand (paatre talenamathneeyaat) and once kashaya is added it should be mixed with the time of

administration, Ashtanga Hridaya,^[41] Cakradatta^[42] explains Madhyahnekinjitaavritte (Commencement of afternoon). It is the first phase of madhyahna (afternoon). It is actually pitta kala. During this time appetite usually starts but not present in excess. Doshas are not in the state of utklishta (aggravation). Moreover in the early part of madhyahna the utklishtadosha is less. Kledasoshana (dryness to body fluids) takes place when sun is powerful. According to Acharya Susruta,^[43] Sarangdhara,^[44] bhavaprakasha,^[45] time of administration is Madhyahna. According to Acharya Caraka,^[46] Niruhavasti should be administered after the previous meal gets digested and after the elimination of natural urges.

Time of administration

Niruhavasti should not be given to one having taken food as it carries down the undigested food, induces chardi (Vomiting) and aggravates doshas.^{[47][48]}

Method of administration

After snehana (Oleation) and swedana (Sudation), patient is advised to relieve himself from natural urges and then Basti is administered. Patient should lie on his left side extending his left leg and folding the right knee, then the physician should take the bastiputaka (enema bag) by left hand pressing with the right one. The lubricated nozzle should be introduced into the lubricated anus and the bastiputaka should be pressed without moving the hand so that the content is let out into the guda marga. It should be pressed neither too fast nor too slow and without too great or too little force, towards the vertebral column keeping some residue in the bastiputaka (enema bag), as it contains air. The total time prescribed to insert the drug completely is 30 matra (matra is a time which taken for opening and closing of eyelids). After the drug is completely injected, the person has to lie on his back and wait for a

period of 100 Matra, then the drug enters the body with its full potency.^[49]

Importance in the position of basti

Basti should be administered to the patient lying on left lateral side as the grahani and guda are situated on the left side of the body.^[50] Here commentator cakrapani has clarified that, in this position Basti dravya reaches up to the grahani.

Characteristics of a well prepared basti dravya

A well prepared basti dravya should not run quickly out of the hand nor it sticks or remains steady on the hand. It should be uniform mixture without separation of its contents.^[51]

Other two methods in practice

Basti administration by enema apparatus is the most common method practiced currently all over India due to its simplicity in administration and is with very less complications. Enema apparatus contains enema can and rubber catheter. Here the lukewarm basti dravya is filled into the enema can and then connected to the catheter through the connecting pipe. Air is removed completely. Oil is applied to the tip of catheter and then inserted after applying oil to the anus.^[52]

Basti administration by drip method

A special douche set with a controller knob should be used for drip method. For the drip method after filling with required quantity of basti dravya the douche set should be hanged at a higher level and then the controller knob is adjusted accordingly, so that the fluid enter with sufficient pressure. To avoid any sedimentation and blockage, basti drug should be stirred frequently.^[53] There are few difference between modern type enema and naturopathic enema.^[54] (Table 5)

DISCUSSION

There are different opinion about the preparation and administration of Niruha basti. (Table 6) Order of mixing of basti dravyas is differs from each acharyaas, some says, Saindava should be added first and some other opines that, Makshika is poured first because it is a mangalakaari dravya.

Acharya Kashyapa mentions about the relevance of mixing the dravyas in order i.e. Makshika is first of all poured for auspiciousness. Lavana disintegrates by its teekshna (penetrating), pichilata (sliminess) and kashayatwa (astringent) of makshika and thus a compound is formed, that is why after honey, saindava lavana is poured, then taila is poured, which brings uniformity and then kalka is mixed and kashaya brings samsarjana (homogeneity). In this taila, kalka (paste) and kashaya (decoction) mixed together, should pour mootra (urine) which brings patutha-gunavridhhi (increases its quality) and increases its veerya (potency). Thus properly mixed Basti eradicates pitta, vata and kapha (three humors) from srotas (channels). Vipareetamadkara (churning in both directions) does not get mixed in proper way. Improperly churned, thus, in adequately mixed basti dravya does not fulfil its purpose, that is why the sequential method of preparation of niruhavasti is described. Moreover, niruha basti is a uniform mixture of makshika (honey), lavana (salt), kalka (paste), sneha (oil), kwatha (decoction). The different dravyas which are used to make basti have different properties; some may be water soluble and some may be fat soluble and so may be absorbed accordingly. Cakradatta says 100 grams of kalka for niruha, few other authors also say the same. But in our practice we are not using 100 grams of kalka in our practice because it will make the solution highly viscous and can produce dehydration. Lekhana basti and kshara basti can be given after a light meal. In our practice we give 1½ to 2 hours gap between food and kshara.

About the mixing process of the basti dravyas some explains churned with the help of churner (khajenamathita). While some others explains that it should be mixed in a vessel with hand (paatretalenamathneeya) and once kashaya is added it should be mixed with a churner.

A research which held at Jamnagar by Yashwant Juneja, research on standardization of Basti concluded, Basti prepared by Khalwa was stable due to proper trituration and addition. Basti prepared by house hold blender (Churner) method was never been stable even for some seconds. In this method, Basti mixed properly in less time but still it has given a stable colloid nature. Even if all the ingredients is added collectively (not following the classical way of sequential mixing) does not affect the end product. But after the preparation there were lot of bubbles on the surface which may increase Vata in Basti and also contain some oil particles on the surface, but this doesn't produce any complications or reduced efficacy.^[55]

Another research was by Dr. Manohar S Gundeti on the topic of Basti revealed that the equipment and method of administration. The study is two apparently healthy male adult individuals (A and B) who had matra basti on previous day and with prior sneha-sveda in the morning were administered niruha basti comprising of Makshika (honey) 150 ml, Saindava (rock salt) 15g, tilataila 150 ml, kalka (paste of fresh herbs) 30 g, added to Eradamula kwatha (decoction of castor roots in water) to make total 960 ml with classical method and with conventional enema can method respectively, after taking written informed consent. Barium sulphate B.P. (Microbar HD) 25g were added in both the niruha basti dravya after its preparation.

Table 5: Difference between enemas (Modern), Basti, Enema (Naturopathy)

Enema (Modern) ^[53]	Basti ^[53]	Enema (Naturopathy) ^[54]
Mechanical bowel cleanser prior to abdominal surgery	The emulsion nature of the solution has got a cleansing, healing effect. It has got multi-dimensional therapeutic effect.	A warm water enema helps to clean the rectum of accumulated faecal matter. This is not only the safest system for cleaning the bowels, but also improves the peristaltic movement of the bowels and thereby relieves constipation.
The aqueous or oily solutions or suspensions are introduced into the rectum for clearing or for therapeutic purpose	Medicated decoction along with paste of drugs, honey, salt, oil or oil enema.	In naturopathic Enema, lukewarm water is injected into the rectum for cleaning the bowels

Table 6: Matra (dose in grams) of dravyas according to dosha

Dravya	CK ^[29]			BP ^[30]			CS ^[31]			SS ^[32]			VS ^[33]			SS ^[34]		
	V	P	K	V	P	K	V	P	K	V	P	K	V	P	K	V	P	K
Makshika	144	192	288	192	192	288				192	192	288	144	192	288			
Sneha	288	192	144	288	144	192	288	192	144	288	144	192	288	192	144	288	192	144
Kalka	96	96	96										96	96	96			
Kwatha	480	480	480										480	480	480			
Avapa	144	192	144															

CK – Cakradatta; BP – Bhava prakasha; CS – Caraka samhita; SS – Sarangdhara samhita; VS – Vangasena samhita; SS – Susruta Samhita; V – Vata; P – Pitta; K – Kapha

In Subject A, the vaidya administered basti with uniform pressure and gradual squeezing of the bastiputaka. In the subject B the enema can was kept hanging on a stand four feet above the bed. Basti administration was done on the x-ray table and radiographs were taken immediately after the administration. Observations about basti administration time in the subject A was about 60s where stipulated amount of bastidravya entered in the colon homogenously with uniform positive pressure. The radiograph of subject A shows complete filling of sigmoid colon and further propelling of the bastidravya through colon towards illeocaecal junction where it has almost filled the ascending colon. In subject B it took about 10 min for administration of bastidravya with interruption. The radiograph of subject B shows added filling of sigmoid colon, propelling the basti dravya through colon, reaching the illeocaecal junction but the amount of bastidravya is less at that point in comparison to Subject A.^[56]

Action of Basti depends upon the ingredients of Basti dravya and it reaching up to small intestine. They are absorbed through gut wall distributed in the body and thus exert a systematic effect. Best and Taylor who state “Materials introduced by enema, may in some instances pass through the valve into the ileum. Such incompetence may permit the enema fluid to reach the duodenum. He further adds “The possibility of material from even lower bowel reaching the mouth is strongly suggested by the fact that lycopodium spores, introduced into colon by enema, have been recovered some hours later from washings of the stomach, alimentary canal movements.^[57] Honey contains sucrose and lot of enzymes. Saindava contains sodium chloride and other ions which help in generating the action potential. Honey has got ambiphilic action. Salt helps in electrolyte exchange. The emulsion nature of the solution has got a cleansing, healing effect. The kalka which has got irritant properties along with other ingredients may induce colonic distention. This distention stimulates pressure stimulates pressure which produces evacuatory reflex.

There may be a chance of release of catecholamines also. The active principles of Basti drugs may also be absorbed because they are mainly water soluble. It may be considered that Niruha Basti is hyperosmotic which facilitates absorption of morbid factors into the solution.^[58]

About the time of administration of Niruha basti is also varies between Acharyas. i.e. Niruha Basti should administer at Madhyahna (Afternoon in the context Susruta samhita etc. According to Vagbatta etc explains Madyahnekinjitaavritte (first phase of madhyahna). It is actually pitta kala. During this time appetite usually starts but not present in excess. Doshas are not in the state of utklishta. Moreover in the early part of madhyahna the utklishta dosha is less. Kledasoshana takes place when sun is powerful. According to Acharya Caraka, Niruhavasti should administer after the previous meal gets digested and has a concentrated mind. It should be given on an auspicious day in the sukla paksha.

Usually Niruha basti is given in the first phase of Madhyahna (Afternoon). Madhyahna is from 10 am to 2 pm. Practically, Niruha Basti is given between 10 am to 11 am. It is actually pitta kala. During this time appetite usually starts but not present in excess. Doshas are not in the state of utklishta. According to Susruta it can be given in any part of Madhyahna. Moreover in the early part of madhyahna the utklishta dosha is less. Kledashoshana takes place when sun is powerful. Breakfast is usually avoided but for Vaitarana basti and Kshara basti, breakfast can be given. These procedures increase kapha and help in compensation.

Importance of left lateral position is also plays a major role i.e., as the grahani and guda are situated on the left side of the body. So due to this Basti dravya reach up to the grahani.

CONCLUSION

Basti (medicated enema) is a very important therapeutic measure in the management of disease. The effect of basti is not restricted to ano-rectal region locally as in conventional enema. There are different opinions in method of preparation and administration of niruha basti (medicated decoction enema). Also there are variations in the dosage among various texts and authors. One should be very careful about dosage, because for example, adding excess of salt causes burning and diarrhoea. Quantity depending upon the condition, so there are different opinion about the timing of administration of Niruha Basti, some says Niruha basti should administered at early morning, while some other says at first phase of afternoon. Reason of giving Niruha basti (medicated decoction enema) in empty stomach, because vata is more predominant and niruha basti can tackle vata very well and eliminate the malas (wastes) properly. The importance of administering Basti in left lateral position is the grahani (duodenum) and guda (rectum) are situated on the left side of the body. Due to this Basti dravya may reach upto the grahani.

So, it could be seen that there was a process of evolution in Basti kalpana since the period of Caraka to that of Vagbata. Even though it is interesting to compare the opinions of various Acharyas from an academic standpoint, the ultimate aim is to practise and to produce successful results.

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