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A conceptual study on imperative herbs from classical texts of Ayurveda used in Panchakarma

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Abstract

As per the *Ayurvedic* classics almost all the diseases have their origin from 'āma' which is produced due to the malfunctioning of *agni*. To re-word the term 'āma' (toxins), *Ayurveda* uses the word *Tridosha* (Bio-humors). – They are *Vata*, *Pitta* and *Kapha*. These *Tridoshas* are key factors to maintain health. Same in turn when go abnormal or vitiated, they cause the disease. Alone use of "*Samshamana Chikitsa*" i.e. Medicines only cannot remove toxins from the body and moreover sometimes they don't reach the site of the disease and also there is a chance of recurrence. In such conditions, "*Samshodhana Chikitsa*" i.e. *Panchakarma* proves very favourable line of treatment because - It confiscates all Toxins and free radicals from the body without taxing the body and thus helps in curing the root cause of the disease preventing the recurrence of the disease ^[1]. *Panchakarma* treatment requires some specific herbs of specific properties which will be discussed in this article. Classical texts of *Ayurveda* provide a wide range of herbs used for accessory processes i.e. *Poorvakarma* as well as various *Panchakarma* processes such as *Vamana*, *Virechana* etc. All these herbs from various references of classical texts have been mentioned and discussed in the present article.

Keywords: Anuvasana Basti, Herbs, Nasya, Panchakarma, Vamana, Virechana, Niruha Basti

Introduction

Panchakarma is a specialty of *Ayurveda* which presents a unique approach with specially designed five procedures of internal purification of the body through the nearest possible route. Such purification of the body allows the biological system to return to homeostasis and also to rejuvenate rapidly. It also facilitates the desired pharmacokinetic effect of medicines administered thereafter. *Panchakarma* acts as a promotive, preventive, curative & rehabilitative procedure. *Panchakarma* not only eliminates disease-causing toxins but also revitalizes the tissues. Hence it is also known as rejuvenation therapy.

In today's world, every single day, more and more people are falling prey to the adverse effects of anxiety, stress, pollution, unhealthy lifestyle which is leading to diseases like indigestion, insomnia, various allergies, heart diseases, obesity, diabetes, chronic fatigue, osteoporosis & even cancer etc. The main cause of these diseases are deeply seated toxins in the body. *Panchakarma* helps in eliminating these toxins from the body, allowing permanent healing of the tissues, digestion, and mental functions. *Ayurveda* advises to undergo *Panchakarma therapy* during seasonal changes to purify the body, improve the digestion and also to improve metabolism.

If the *Doshas* (bio-humors) are vitiated in excess, they give rise to various endotoxins, which accumulate in the minute channels of the body which cannot be treated with pacification and hence, they need to be removed out from the body. In such cases the bio-purificatory therapy is indicated which is done by five procedures of *Panchakarma* therapy namely:

1. Vamana- Herb induced emesis
2. Virechana- Herb induced purgation
3. Anuvasan Basti- Medicated enema with oil
4. Niruha Basti- Medicated enema with decoction (cleansing enema)
5. Nasya- Medicated errhine/nasal medication

Acharya Dalhana says that, Panchakarma is done in three steps ^[2]:

1. Poorva karma – Preliminary or Preparatory procedures-*Pachana* (digestive therapy), *Snehana* (oleation), *Swedana* (sudation).
2. Pradhana Karma- Main panchakarma procedures like *Vamana*, *Virechana*, *Basti*, *Nasya*, *Raktamokshana* (blood-letting)
3. Pashchata karma- Post panchakarma procedures- *Samsarjana krama* (diet regimen), *Shamanaprayoga* (oral medication), *Rasayana* (rejuvenation) therapy.

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Depending upon the type of *Karma*/ therapy to be performed different kinds of herbs are used according to their properties. Also depending upon the strength of the disease & patient, climate, place, digestive capacity etc. factors, these drugs or herbs may vary.

Various herbs advised for different procedures are as follows:

Pachana-The process which digests ama (undigested food or toxins). So *Pachana* drugs digest ama due to their *Amla* (sour), *Lavana* (salty), *Katu* (pungent) *Rasa* (taste) properties. E.g. *Jeeraka* (*Cuminum cyminum*), *Dhanyak* (*Coriandrum sativum*), *Nimbuk* (*Citrus acida*), *Rasona* (*Allium sativum*) etc. [3].

Along with *Pachana* drugs sometimes, *Deepana* drugs are also given which enhance the digestion due to *Ushna* (hot), *Tikshna* (sharp), *Laghu* (light), *Sukshma* (minute), *Katu Rasa* (pungent taste). E.g. *Pippali* (*Piper longum*), *Maricha* (*Piper nigrum*), *Adraka* (*Zingiber officinale*), *Hingu* (*Ferula asafoetida*) etc. [4].

These drugs are given in the beginning before *Panchakarma* procedures so that they can improve the digestion and digested the undigested food, so that *Snehana* given after this can be absorbed & digested easily without any obstruction in the stomach or GIT.

Snehana- The process which produces unctuousness, liquefaction/ dissolution of *Doshas*, softness, and moistness in the body [5]. In this process, *Sneha* or oily substance usually medicated ghee is given internally as well as applied externally in the form of medicated oil massage. This is done to soften and dissolve the toxins so that the deeply seated toxins can flow towards the GIT.

Properties of Snehana herbs: *Snigdha* (unctuous), *Guru* (heavy), *Sheeta* (cold), *Mridu* (soft), *Drava* (liquid), *Picchila* (slimy), *Sara* (tendency to flow), *Manda* (sluggish), *Sukshma* (minute/subtle) [6].

Snehana Dravya or herbs are of 2 types due to origin:

1. **Plant origin:** The oil extracted from the seeds of certain plants like *Tila* (*Sesamum indicum*), *Bilwa* (*Aegle marmelos*), *Moolaka* (*Raphanus sativa*), *Atasi* (*Prunus persica*), *Abhya* (*Terminalia chebula*), *Eranda* (*Ricinus communis*), *Sarshapa* (*Brassica campestris*), *Karanja* (*Pongamia pinnata*), *Shigru* (*Moringa oleifera*) etc.

2. **Animal origin:** Curd, milk, ghee, meat, muscle fat & bone marrow obtained from fish, animals & birds [7].

Snehopagaherbs: Drugs which enhance the action of *Sneha* when administered with *Sneha*. Like *Mridvika* (*Vitis vinifera*), *Madhuka* (*Glycyrrhiza glabra*), *Madhuparni* (*Tinospora cordifolia* wild), *Jeevaka* (*Microstyli wallichi*), *Shalaparni* (*Desmodium gangeticum*) etc. [8].

Swedana- The process which induces sweat, reduces stiffness, heaviness and cold sensation in the body.⁹In this process, steam is given to the body after the oil massage so that the toxins liquefy and flow towards the GIT so that they can be removed out from the nearest possible route.

Properties of swedana herbs: *Ushna* (hot), *Tikshna* (sharp), *Sara* (fluidity), *Snigdha* (unctuous), *Ruksha* (dry or rough), *Sukshma* (minute), *Drava* (liquid), *Sthira* (stable), *Guru* (heavy) [10].

Swedana dravya or herbs according to types of Swedana:

Pindasweda (Pottali/ bolus sweda)- *Tila* (*Sesamum indicum*), *Ghee-cow's*, *Oil-tila* or *castor*, *dry dung* of animals, *Mamsa* (meat), *Nimbuk* (*Citrus acida*), *Egg-hen's*, *Sand*, *Cereals* like *wheat*, *barley* etc. or *Pulses* like *horse gram*, *black gram*, *leaves of plants* mentioned below etc [11].

Nadi & Drava sweda (Steam & liquid pouring)- *Decoction* of *leaves of Varuna* (*Crateva religiosa*), *Guduchi* (*Tinospora cordifolia*), *Shigru* (*Moringa oleifera*), *Vasa* (*Adhatoda vasica*), *Tulsi* (*Ocimum sanctum*), etc. [12].

Upnaha sweda (Poultice)- *Godhuma* (wheat husk powder), *Lavana* (salt), *Medicted oil*, *Chincha* (*Tamarindus indica*)¹³ *Kakoli* (*Roscoea procerca*), *Yashtimadhu* (*Glycyrrhiza glabra*), *Draksha* (*Vitis vinifera*), *Nirgundi* (*Vitex negundo*), *Kuchla* (*Strychnos nuxvomica*), *Ela* (*Elettaria cardamomum*), *Kushtha* (*Saussurea lappa*), *Guggul* (*Resin of Commiphora mukul*), *Haridra* (*Curcuma longa*), *Dhatuara* (*Dhatuara metel*), *Gokshura* (*Tribulus terrestris*), *Shatavari* (*Asparagus racemosus*) etc. [14].

Swedopaga herbs: Drugs which enhance the action of *Swedana*. *Shobhanjana* (*Moringa oleifera*), *Eranda* (*Ricinus communis*), *Arka* (*Calotropis gigantea*), *Punarnava* (*Boerhavia diffusa*), *Masha* (*Phaseolus mungo*), *Badara* (*Zizyphus jujuba*) etc. [15].

Vamana: In this procedure, excess and vitiated *Doshas* are removed from the upper part of the body by vomiting [16]. The drugs are administered through the mouth. It is normally the first purification therapy. It is mainly done to eradicate the vitiated *Kapha dosha* [17].

Properties of Vamaka herbs: These herbs are *Ushna* (hot), *Tikshna* (sharp), *Sukshma* (subtle/minute), *Vyavayi* (quickly spreads throughout body), *Vikasi* (breaks the bonds between various tissues & loosens them) & *Urdhvabhaghara prabhav* (tendency to go upwards). Due to their potency, they quickly get absorbed sublingually & travel to heart without being digested and reach all the micro channels of the body. There they separate the aggravated doshas or toxins stick to the tissues and bring them to the stomach from where they are expelled out through vomiting [18].

Vamaka herbs: *Madanphala* (*Randia dumetorum*), *Jeemutaka* (*Luffa echinata*), *Ikshavaku* (*Lagenaria vulgaris*), *Dhamargava* (*Luffa cylindrica*), *Vatsak/Kutaj* (*Holarrhena antidysentrica*), *Kritavedhana* (*Luffa acutangula*) [19]. Though *Acharya Charaka* has specially mentioned these 6 herbs for *Vamana karma* but he has mentioned 355 *Vamana yoga/formulations* of these 6 drugs which can be prepared and used according to the disease and palatability of the patient [20]. *Vacha* (*Acorus calamus*), *Lavana* (salt), *Ela* (*Elettaria cardamom*), *Sarshapa* (*Brassica compestris*) etc. [21].

Vamanopag herbs: These drugs support the process of vomiting [22]. *Honey*, *Madhuka* (*Glycyrrhiza glabra*), *Kovidara* (*Bauhinia pupura*), *Neepa* (*Anthocephalus cadamba*), *Vidula* (*Salix caprea*) etc [23]. *Milk-cow's* and *sugarcane juice* are also used to support vomiting.

The best & safest combination for effective emesis is: *Madanphala* powder-4parts + *Vacha* powder-2parts + *Saindhava lavana*- 1part+Honey

Virechana: In this process, excess & vitiated *Doshas* are removed from the lower part of the body by purgation [24]. The drugs are administered through the mouth. It is the second purification therapy. The aim of this therapy is to stimulate the vitiated *Doshas* from stomach, small intestine, liver & gall bladder and bring them to large intestine for their eventual expulsion from the body through the rectum. It is mainly done to eradicate the vitiated *Pitta dosha* [25].

Properties of Virechaka herbs: These herbs are *Ushna* (hot), *Tikshna* (sharp), *Sukshma* (subtle/minute), *Vyavayi* (quickly spreads throughout body), *Vikasi* (breaks the bonds between various tissues & loosens them) & *Adhobhaghara prabhav* (tendency to go downwards) [26].

Virechaka herbs: *Trivrit* /*Nishoth*/ *Krishna Nishoth* (*Operculina turpethum*), *Shyama*/ *Shweta Nishoth*/ *Murva* (*Marsdenia tenacissima*), *Aragvadh*/ *Amaltas* (*Cassia fistula*), *Tilvaka*/ *Lodhra* (*Symplocos racemose*), *Sehund*/ *Snuhi* (*Euphorbia neriifolia*), *Saptala* (*Euphorbia pilosa*), *Shankhini* (*Euphorbia dracunculoides*), *Danti* (*Baliospermum montanum*), *Dravanti*/*Jaipala*/*Dantibeeja* (seeds of *Croton tiglium*)²⁷. Though *Acharya Charaka* has specially mentioned these 9 herbs for Virechana karma but he has mentioned 245 *Virechana yoga*/formulations of these 9 drugs which can be prepared and used according to the disease and palatability of the patient [28]. *Swarnaksheeri* (*Argemone Mexicana*), *Eranda* (*Ricinus communis*), *Chitrak* (*Plumbago zeylanica*), *Kampilaka* (*Mallotus philippensis*) etc. [29].

Virechanopag herbs: These drugs support the process of purgation. *Draksha* (*Vitis vinifera*), *Kashmari* (*Gmelina arborea*), *Haritaki*/*Abhya* (*Terminalia chebula*), *Amalaki* (*Emblica officinalis*), *Bibhitaka* (*Terminalia belerica*) etc. [30]. Based on intensity *Virechana dravya* can be of three types:

1. **Mridu/Mild purgatives:** e.g. *Draksha* (*Vitis vinifera*), milk, warm water, *Eranda taila* (*Castor oil*)
2. **Madhyama/Moderate purgatives:** e.g. *Trivrit* (*Operculina turpethum*), *Kutki* (*Picrorhiza kurroa*), *Amaltasa* (*Cassia fistula*)
3. **Tikshna/Strong/Drastic purgatives:** e.g. *Snuhi ksheera* (Milk of *Euphorbia neriifolia*), Roots of *Hemakshiri* (*Dregea volubilis*), *Danti* fruit (*Croton tiglium*) etc.³¹

Commonly used Virechaka yoga/ formulations are: *Ichhabhedhi rasa*, *Abhyadi modak*, *Trivrit lehya*, *Aragvadh lehya*, *Gandharva hastyadi taila*, *Eranda taila*, *Avipattikar churna*, *Tripphla churna* etc.

Basti: In this process, medicine is administered through the rectum, acts upon the whole body and every system, draws out impurities from head to toe by its potency, and along with it comes out through rectum only [32]. It acts on various disorders based on the selection of drug according to the disease. It is mainly done to eradicate the vitiated *Vata Dosha* [33] which is the predominant *Dosha* and hence its treatment therapy *Basti* is considered the predominant therapy. Also, it can treat morbid *Pitta* & *Kapha* by using drugs opposite to their properties. This is so because *Basti* unlike *Vamana* & *Virechana* is not just purification process but its multi-functional like tonification, strengthening, rejuvenation, aphrodisiac action, improving intellect, curative action, sustaining age & health etc. Innumerable *Bastis* can be

formulated using various drugs in different proportions for various diseases and for different patients. *Acharya Charaka* has mentioned 216 types of different *Basti* formulations according to the condition of the patient and disease. The properties of these drugs depend upon the choice of the drug according to the disease or *Dosha* involved. Some of the drugs used in *Basti* therapy are mentioned below.

It is mainly of two types based on the drugs used

1. **Anuvasan:** In this case *Basti* is given by medicated oil or ghee.
2. **Niruha/Aasthapana:** In this case *Basti* is given by medicine predominantly containing *Kwatha* or decoction of prescribed herbs according to the disease. The composition of *Niruha Basti* in sequence are honey, rock salt, medicated oil or ghee, paste of herbs and large quantity of medicated decoction.³⁴ In the last, sometimes *Prakshepa* or additional drugs are added to make it mild or strong.

1. Herbs for anuvasana basti

Anuvasanopaga herbs: These drugs support the action of *Anuvasana Basti*. *Rasna* (*Pluchea lanceolata*), *Surdaru* (*Cedrus deodara*), *Punarnava* (*Boerhavia diffusa*), *Shvadanshtra* (*Tribulus terrestris*), *Agnimantha* (*Premna mucronate*), *Shyonaka* (*Oroxylum indicum*) etc.³⁵

Commonly used oils for Anuvasana basti: *Bala oil*, *Mahanarayan oil*, *Sahacharadi oil*, *Ksheerabala oil*, *Dhanwantram oil*, *Saindhavadi oil* *Dashmoola oil* etc.

Commonly used ghee/ghrita for Anuvasana basti: *Panchtiktaka ghrita*, *Guggul tiktaka ghrita*, *Phala ghrita*, *Mahatiktaka ghrita* etc.

Prakshepa dravyas for anuvasana: *Saindhava* (Rock salt) & *Shatahva* (*Anethum sowa*) may be added to the oil of *Anuvasana* because they facilitate its proper & better return [36].

2. Herbs for Niruha/Aasthapana Basti

Aasthanopaga herbs: These drugs support the action of *Niruha Basti*. *Bilwa* (*Aegle marmelos*), *Vatsakphala* (Fruit of *Holarrhena antidysentrica*), *Shatpushpa/Shatahwa* (*Anethum sowa*), *Pippali* (*Piper longum*), *Madhuka* (*Glycirriza gabra*), *Trivrit* (*Operculina turpethum*), *Sarshapa* (*Brassica campestris*) etc. [37].

Common herbs used for Aasthapana/Niruha basti

Decoctions: *Bala* (*Sida cordifolia*), *Guduchi* (*Tinospora cordifolia*), *Triphala*-Fruits of 3 plants- *Haritaki* (*Terminalia chebula*), *Bibhitaka* (*Terminalia belerica*), *Amalaki* (*Emblica officinalis*), *Dashmoola*-Roots of 10 different plants- *Bilwa* (*Aegle marmelos*), *Agnimantha* (*Premna mucronate*), *Shyonaka* (*Oroxylum indicum*), *Patla* (*Stereospermum suaveolens*), *Kashmari* (*Gmelina arborea*), *Brihati* (*Solanum indicum*), *Shalaparni* (*Desmodium gangeticum*), *Kantakari* (*Solanum xanthocarpum*), *Prishnaparni* (*Urarua picta*), *Gokshura/Shwadanshtra* (*Tribulus terrestris*), *Rasna* (*Pluchea lanceolata*) etc. [38].

Paste: *Yavani* (*Trachyspermum ammi*), *Madanphala* (*Randia dumetorum*), *Musta* (*Cyperus rotundus*), *Shatahva* (*Anethum sowa*), *Kushtha* (*Saussurea lappa*), *Vacha* (*Acorus calamus*) etc. [39].

Prakshepa: Cow's milk, cow's urine, Mamsa rasa (decoction of goat's meat), Kanji (Liquid made by fermentation of rice) etc are added according to *Dosha* ^[40].

Some other drugs used in Niruha Basti depending upon the disease or Dosha to be treated: *Amlika/Imli* (Tamarandus indica), Jaggery (Unrefined sugar made from sugarcane juice-Saccharum officinarum), *Patola* (Trichosanthes dioica), *Nimba* (Azadirachta indica), *Bhunimba* (Andrographis paniculate), *Mamsa rasa* (decoction of goat's meat), *Usheera* (Veteveria zizanioides), *Amaltasa* (Cassia fistula), *Manjishtha* (Rubia cordifolia), *Eranda* (Ricinus communis), *Rasanjana* (Extract obtained by processing decoction of roots of Berberis aristata with goat's milk), *Kshara* (Alkalies e.g. *Sajji kshara*-ash obtained by burning Salsola stocksii-it is a crude form of sodium carbonate, or *Yava kshara*-alkali made by burning whole plant of Hordeum vulgare or barley), *Mocharasa* (Gum exudate of Salmalia malbarica), *Vidanga* (Embelia ribes), different types of Salts etc.

Nasya / Shirovirechana: In this process, medicines are administered through the nose, by their potency they get absorbed in the head and from there it brings all toxins out through the nose. It does elimination of morbid *Doshas* from parts above the clavicle bone. Nose is not only limited to respiration and smell but it is also considered a pathway of drug administration and is indirectly connected to brain centres in the head ^[41]. The properties of these drugs depend upon the choice of drug according to the disease or *Dosha* involved.

Herbs used for Nasya: *Apamarga* (Achyranthes aspera), *Piplai* (Piper longum), *Vidanga* (Embelia ribes), *Ajaji* (Cuminum cyminum), *Tumburu* (Zanthoxylum alatum), *Sursa* (Ocimum sanctum), *Shweta/ Aprajita* (Clitoria ternatea), *Shirisha* (Albizia lebeck), *Lahsun* (Allium sativum), *Saindhav lavana* (Rock salt) etc. ^[42]. *Shunti* (dried ginger powder), *Darvi* (Berberis aristata), *Sarjarasa* (Resin of Vateria indica), *Brihati* seeds (Solanum indicum), *Rasanjana* (Extract obtained by processing decoction of roots of Berberis aristata with goat's milk), *Heeng* (Resin of Ferula assafoetida) etc. ^[43]. Various forms of herbs are used for different types of *Nasya* like:

- Oils processed with above drugs are used for *Navana nasya*,
- Fresh juicy extract is used for *Avpida nasya*,
- Dry powder is used for *Dhmapana nasya*,
- Fumes released after burning these drugs is used for *Dhooma nasya*

Shirovirechanopag herbs: These drugs support the action of *Nasya/ Shirovirechana*. *Jyotishmati* (Celastrus paniculata), *Kshavaka* (Centipada minima), *Maricha* (Piper nigrum), *Sarshapa* (Brassica campestris), *Mahashweta/ Shweta Shirisha* (Albizia procera) etc. ^[44].

Raktamoshan: In this process vitiated from selected areas of the body (veins) is expelled out by a specific method. Blood is vitiated by vitiated *Pitta*. It is usually done by instruments and not by herbs. E.g. a sharp blade, needle and syringe, Medicinal/Non-toxic Leeches, Mud pot, Shringa (Cow's horn) or Alabu (Pitcher gourd). Nowadays instead of Shringa or Alabu, glass cup is used.

Conclusion: Various herbs and other drugs like minerals, animal products etc. are mentioned in Ayurveda to conduct *Panchakarma* procedures. Plants and animals both can be the source of the drugs. Different parts of plants are used according to the presence of active principle e.g. roots or seeds or resins or leaves or fruits or flowers etc. Plants are used in different ways by making different formulations from them like powder or decoction or paste or oil or ghee etc. Appropriate herbs when used in *Panchakarma* in the proper and prescribed way in calculated amounts can normalize the *Dosha* balance and promote health. A thorough knowledge of the herbs to be used in *Panchakarma* including their properties and availability is must for an *Ayurvedic* practitioner who wants practice authentic *Panchakarma*.

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