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 āgni. 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 “Samshodhana 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. 

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. Poorvakaarma 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 revitalize 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 decoction
4. Niruha Basti-Medicated enema with oil
5. Nasya- Medicated errhine/nasal medication

Acharya Dalhana says that, Panchakarma is done in three steps:

1. Poorva karma – Preliminary or Preparatory procedures-Pancha (digestive therapy), Snehana (oleation), Svedana (sudation).
2. Pradhanaka Karma- Main panchakarma procedures likeVamana, Virechana, Basti, Nasya, Raktamokshana (blood-letting)
3. Pashchhata karma- Post panchakarma procedures- Samsarjana krama (diet regimen), Shamanaprayoga (oral medication), Rasayana (rejuvenation) therapy.
Depending upon the type of Karmal 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 (Cumimum cuminum), Dhanyak (Coriandrum sativum), Nimbu (Citrus acida), Rasona (Allium sativum) etc. [3].

Along with Pachana drugs sometimes, Deepana drugs are also given which enhance the digestion due to Usna (hot), Tikshna (sharp), Laghu (light), Sukshma (minute) properties. E.g. Pippali (Piper longum), Maricha (Piper nigrum), Adraka (Zingiber officinale), Hingula (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, Snehna or oily substance usually medicated ghee is given internally as well as applied externally in the form of medicated oil massage. This is to soften and dissolve the toxins so that the deeply seated drugs are administered through the mouth. It is normally the first purification therapy. It is mainly done to eradicate the vitiated Kapha dosha [6].

**Properties of Snehana drugs**: 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 Snehana when administered with Snehana. Like Mridvika (Vitis vinifera), Madhuka (Glycyrrhiza glabra), Madhusaparni (Tinospora cordifolia wild), Jeevaka (Microstyi wallichii), Shalaparni (Desmodium gangeticum) etc. [8].

**Swedana**- The process which induces sweat, reduces stiffness, heaviness and cold sensation in the body. In 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**: Usna (hot), Tikshna (sharp), Sara (fluidity), Snigdha (unctuous), Ruksha (dry or rough), Sukshma (minute), Drava (liquid), Shhira (stable), Guru (heavy) [10].

**Swedana dravya or herbs according to types of Swedana**: Pindasweda (Potatal/ bolus sweda)- Tila (Sesamum indicum), Ghee-cow’, Oill-tila or castor, dry dung of animals, Mansa (meat), Nimbu (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 (Crataeva religiosa), Guduchi (Tinospora cordifolia), Shigru (Moringa oleifera), Vasa (Adhatoda vasica), Tulsi (Ocimum sanctum), etc. [12].

**Upnaha sweda (Poulntice)**- Godhuma (wheat husk powder), Lavana (salt), Medicated oil, Chinch (Tamarindus indica), Kakoli (Roscoea procrea),Yashthinadhu (Glycyrrhiza glabra), Draksha (Vitis vinifera), Nirgundi (Vitex negundo), Kuchla (Strychnos nuxvomica), Ela (Elettaria cardamomum), Kushta (Saussurea lappa), Guggul (Resin of Commiphora mukul), Haridra (Curcuma longa), Dhatura (Datura metel), Gokshura (Trubulus terrestris), Shatatvari (Asparagus racemosus) etc. [14].

**Swedopada herbs**: Drugs which enhance the action of Swedana. Shobhanjana (Moringa oleifera), Eranda (Ricinus communis), Arka (Calotropis gigantica), Panarnava (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 Usna (hot), Tikshna (sharp), Sukshma (subtle/minute), Vyavayi (quickly spreads throughout body), Vikasi (breaks the bonds between various tissues & loosens them) & Urdhvaabaghara 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 aggravatated 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 dumentorum), 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 Vamaka karma but he has mentioned 355 Vamana yogas/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 campestris) etc. [21].

**Vamnapag herbs**: These drugs support the process of vomiting [22]. Honey, Madhuka (Glycyrrhiza glabra), Kovidara (Bauhinia purpurea), Neepu (Anchocephalus 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

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Virechana: In this process, excess & vitiated Doshas are removed from the lower part of the body by purgation [34]. 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 [29].

Properties of Virechaka herbs: These herbs are Ushna (hot), Tikshna (sharp), Sukshma (subtle/minute), Vyavayai (quickly spreads throughout body), Vikasi (breaks the bonds between various tissues & loosens them) & Athabhaghara prabhav (tendency to go downwards) [30].

Virechaka herbs: Trivrit /Nishoth/ Krishna Nishoth (Operculina turpethum), Shyamal/ Shweta Nishoth/ Marva (Marsdenia tenacissima), Aragvadha/ Amaltas (Cassia fistula), Tilvaka/ Lodhra (Symlocos racemose), Sehund/ Snushi (Euphorbia neriifolia), Saptala (Euphoria pilosa), Shankhini (Euphoria dracunculoides), Danti (Baliaspermum 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].

Virechana therapies: These drugs support the process of purgation. Draksha (Vitis vinifera), Kashmari (Gmelina arborea), Haritaki/Abhya (Terminalia chebula), Amalaki (Embilica 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. Madhya/Moderate purgatives: e.g. Trivrit (Operculina turpethum), Kutki (Picrorhiza kurroa), Amalata (Cassia fistula)
3. Tikshna/Strong/Drastic purgatives: e.g. Snushi ksheera (Milk of Euphorbia neriifolia), Roots of Hemakshiri (Dregea volubilis), Danti fruit (Croton tiglium) etc.

Commonly used Virechaka yoga formulations are: Iechabbedi rasa, Abhyadi modak, Trivrit lehya, Aragwadha lehya, Gandharva hastyadi taila, Eranda taila, Avipattikar churna, Triphla 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 multifunctional 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. In the last, sometimes Prakshepa or additional drugs are added to make it mild or strong.

1. Herbs for anuvasa basti
Anuvasanopaga herbs: These drugs support the action of Anuvasa Basti. Rasna (Pluchea lanceolata), Surdaru (Cedrus deodara), Punarnava (Boerhavia diffusa), Shwadanshtra (Tribulus terrestris), Agnimanthra (Premna mucronate), Shyonaka (Oroxylum indicum) etc.

Commonly used oils for Anuvasa basti: Bala oil, Mahanarayan oil, Sahasaradi oil, Ksheerabala oil, Dhanwantram oil, Saindhavadi oil, Dashmoolo oil etc.

Commonly used ghee/ghrita for Anuvasa basti: Panchtikta ghrta, Guggul tikta ghrta, Phala ghrta, Mahatikta ghrta etc.

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

2. Herbs for Niruha/Aasthapana Basti
Aasthapanopaga herbs: These drugs support the action of Niruha Basti. Bilwa (Aegle marmelos), Vatsakphala (Fruit of Holarrhena antidysenterica), Shatuptshpa/Shatavaha (Anethum sowa), Pippali (Piper longum), Madhuka (Glycerrhiza gabra), Trivrit (Operculina terpethum), Sarshapa (Brassica campestris) etc.

Common herbs used for Aasthapana/Niruha basti
Decoctions: Bala (Sida cordifolia), Gaduchi (Tinospora cordifolia), Triphala-Fruits of 3 plants- Haritaki (Terminalia chebula), Bibhitaka (Terminalia belerica), Amalaki (Embilica officinalis), Dashmoola-Roots of 10 different plants- Bilwa (Aegle marmelos), Agnimanthra (Premna mucronate), Shyonaka (Oroxylum indicum), Patla (Sterospermum suaveolens), Kashmari (Gmelina arborea), Brihat (Solanicum indicum), Shalaparni (Desmodium gangeticum), Kantakari (Solanicum xanthocarpum), Prishnaparni (Uraria picta), Gokshura/Shwadanshtra (Tribulus terrestris) , Rasna (Pluchea lanceolata) etc.

Paste: Yavani (Trachyspermum ammi), Madanphala (Randia dumetorum), Musta (Cyperus rotandus), Shatavaha (Anethum sowa), Kushta (Sassureau lappa), Vacha (Acorus calamus) etc. [39]
Praṣkhepa: 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 Doṣha [40].

Some other drugs used in Niraṇa Basti depending upon the disease or Doṣha to be treated: Antikārṇiṇī (Tamarandus indica), Jaggery (Unrefined sugar made from sugarcane juice-Saccharum officinarum), Patolā (Trichosanthes dioica), Nimba (Azadirachta indica), Bhunimba (Andrographis paniculate), Mamsa rasa (decoction of goat’s meat), Usheera (Vetiveria zizanoides), Amaltasā (Cassia fistula), Manjishthā (Rubia cordifolia), Eranda (Ricinus communis), Rasanjana (Extract obtained by processing decoction of roots of Berberis aristata with goat’s milk), Kshara (Alkalies e.g. Saffi kshara-ash obtained by burning Salsola stockii-it is a crude form of sodium carbonate, or Yava kshara-alkali made by burning whole plant of Hordeum vulgare or barley), Mocharasā (Gum exudate of Salmalia malabarica), 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 their it brings all toxins out through the nose. It does elimination of morbid Doṣha 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 Doṣha involved.

Herbs used for Nasya: Apamarga (Achyranthes aspera), Pipplai (Piper longum), Vidanga (Embelia ribes), Ajājī (Cuminum cyminum), Tumburu (Zanthoxylum alatum), Sursa (Ocimum sanctum), Shwetā Aprajīta (Clitoria ternatea), Shirīsha (Albizzia lebeck), Lahsun (Allium sativum), Saindhav lavana (Rock salt) etc. [42], Shuntī (dried ginger powder), Darvi (Berberis aristate), Sarjarasa (Resin of Vateria indica), Brīhati seeds (Solanum indicum), Rasanjana (Extract obtained by processing decoction of roots of Berberis aristata with goat’s milk), Heeng (Resin of Ferula asafoetida) 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

Shirovirechanapag herbs: These drugs support the action of Nasya/ Shirovirechana. Jyotishmati (Celastrus paniculatus), Kshavaka (Centipada minima), Maricha (Piper nigrum), Sarshapa (Brassica campestris), Mahashweta/ Shweta Shirīsha (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 (Pitcheer 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 Doṣha 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.

References
5. Charaka Samhita by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi, Pub-Chaukambha Sanskrit Pratishthan, Delhi - (Ch.Su.22/10), 2006; 1:309.
12. Charaka Samhita - - by Acharya Vidyadhar Shukla & Prof. Ravi Dutt Tripathi, Pub-Chaukambha Sanskrit Pratishthan, Delhi - (Ch.Su.14/30-33), 2006; 1:221.