

A Clinical Approach of Ayurvedic Panchakarma Therapy

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Abstract

Panchkarma therapy is one of the important branches of Ayurveda which deals with purification of the provoked Doshas (physiological or pathological) from the body. The Doshas (toxins and waste materials) should be purified from natural as well as from the nearest root of the body. Ayurveda advocates a unique approach of therapeutics by introducing the two fold therapy viz. Sanshamana (Pacification) and Sanshodhana (Purification). It is the only system of medicine in the world which proposes the need of under-taking the purification of biological system from gross channels up to the molecular levels aiming to clean the entire organism to render it suitable for self recovery and therapeutic responsiveness.

Keywords

Panchkarma, Poorvakarma, Pradhanakarma, Paschatakarma, Sansarjanakarma

Introduction

India bears a longstanding medicare system i.e. Ayurveda, with rich heritage evolved on a continuous process of experienced base scientific research. Since its origin is thousands of years ago, it has a continuous practice, research and education. Ayu the span of life is considered to be a live process between birth and death and the health means a perfect harmony between inner and outer environment with the three specific component i.e. physical, mental and spiritual well being of human body. Ayurveda propounds that the cause of all human disease are the failure of harmonies, at the level of three basic factors Kal (time), Budhi (Intellect) and the Indriya-arth (The sensory

perception of all the objects) which are popularly known as Parinam, Pragyaparadha and Asatmya indriyarth samyoga and the process of pathogenesis begins with the accumulation of morbid wastes and toxins, in the body. The purification therapy is described classically in terms of Sanshodhana by Panchakarma procedures. These five procedures (Vamana, Virechana, Vasti, Nasya and Raktamokshana)¹ have been applied in almost all diseases. It has also been claimed that this therapy affords a permanent cure.² Specially designed five procedures of internal purification of body at -(i) Gross level - G.I.T., respiratory tract etc. and (ii)

Subtle level - cell, molecules, cell membranes etc. by this procedure biological system returns to normalcy, rejuvenation of *Dhatus* (body tissues), potentiates desired pharmacokinetic effect if curative remedies administered, eliminates toxins, stagnated malas (waste materials) and metabolites from the body and facilitates the transport of ions and molecules through the cell membrane. So *Panchakarma* is a full therapeutic role as a promotive, preventive, curative and rehabilitative procedure.

Objective of Panchakarma

Panchakarma is performed with three main objectives:-

- (i) *Preventive Panchakarma* - Promoting the health of a healthy individuals
- (ii) *Curative Panchakarma* - Eradicating the disease of a diseased persons
- (iii) *Conservative Panchakarma* - Disease suppression and rehabilitation.

Maharshi Sushruta divided the *Panchakarma* procedure in three sub-categories as *Poorvakarma* (Preparatory procedures), *Pradhanakarma* (Main procedures) and *Paschatkarma* (Post therapeutic dietetic regimen)³.

A) Poorvakarma (Preparatory procedures)-The set of procedures which *Ayurveds* prescribes to facilitate the removal of toxins from the tissues is collectively

called *Poorvakarma*. *Poorva* means “before” and *karma* means “action.” These procedures help to loosen *Ama* (toxic and waste materials) and move it out of the deep structures into the G-I tract, where *Panchakarma*,s main therapies can then eliminate it. The preparatory procedures for taking the patient for *Pradhana Karma* (main purificatory processes) consist of (i) *Deepana*, (ii) *Pachana* and (iii) *Snehana*- (a) external (b) internal, (iv) *Swedana*.⁴

Purpose of Poorvakarmas:- To facilitate morbid *Doshas* to move from *Shakha* (body tissues) to *Koshtha* (G.I.T.), improve the digestion of *Ama* (*Ama-Pachana*) at gut level as well as at cellular level, duration may be 3-7 days, action to support bio-purification.⁵

B) Pradhana Karma (Main procedures):- Includes-(1) *Vamana* (Therapeutic emesis), (2) *Virechana* (Therapeutic purgation), (3) *Vasti* (Enemata)-two types (i) *Anuvasan Vasti* (Oil based enemata), (ii) *Asthapana Vasti* (Decoction based enemata), 4) *Shirovirechana* (Insufflation) and (5) *Raktamokshana* (Blood letting).⁶

C) Pashchata Karma (Post therapeutic dietetic regimen)-called as *Sansarjana Karma* which done by *Peya*, *Vilepi*, *Mansarasa* etc.⁷

Poorvakarma- Snehana Karma (Oleation therapy)

Procedure adopted to induce lubrication of internal and external body channels and tissues with *Sneha Dravyas*.

Snehana Karma is of two types-

(i) *Abhayanga* (External oleation) by massage with medicated oils and

(ii) *Snehapana* (Internal oleation) for purification or shamana.

Snehana Karma leads to- (i) Oleation (ii) Liquifaction (iii) Increased fluidity (iv) Softening of morbid doshas and tissues.⁸

Indications of *Abhyanga* (External oleation):- For proper massage of each and every part of the body seven postures (in sequence) are recommended, which are (1) Sitting (2) Lying (3) Left lateral (4) Back (5) Right lateral (6) Lying (7) Sitting, Massage / *Abhyanga* carried out in these postures yields excellent results.⁹

A) As a part of daily regime (*Dincharya*):- Application of oil over head,¹⁰ *Karna-purana* (Application of oil in ears),¹¹ *Sneha Gandusha* (Oil gargling),¹² *Pada Abhyanga* (Massage of feet by oils),¹³ *Mardana/Unmardana* (Application of oil with pressure),¹⁴ *Samvahana*(Gentle application of oil),¹⁵ *Lepa* (Application of medicated unctuous paste),¹⁶ *Udvardana*¹⁷ and *Pariseka* (Medicated oil poured all over body) as explained by Dalhana.¹⁸

B) As part of disease palliation:- *Shira Tarpana* (Oleation of head),¹⁹ *Akshi-Tarpana* (Oleation of eyes),²⁰ *Nasa-Tarpana* (Instillation of oil in nose),²¹ *Dhoomapana* (Inhalation of unctuous medicated powder fumes) in the form of *Snehika Dhoomapana*²² and *Vasti* as *Anuvasana Vasti* (Oil based therapeutic enema).

Contra-indications of *Abhyanga* (External Oleation):-

1. *Kapha dosha* dominant disorders,
2. In case of indigestion, fever and *Sama dosha* etc and
3. After *Vamana* (Emesis therapy) or *Virechana* (Purgative therapy).²³

Probable Mode of Action of External *Snehana* (Massage):-

1. Lubricates the *Srotamsi* (Microcirculatory channels),
2. Displaces exudates and thus may relieve tension and pain,
3. Softens muscles, ligaments and tendons, corrects stiffness and rigidity and induces elasticity in body and
4. Prepares smooth passage (Microchannels) for elimination of vitiated *Doshas* during *swedana* therapy.

***Poorvakarma- Swedana* (Fomentation / Sudation therapy)**

Swedana (Fomentation/Sudation therapy) relieves stiffness, heaviness and coldness of body and induces the sweating.

It is useful in treatment of *Vata* and *Kapha* dominant diseases. *Swedana* (fomentation/sudation therapy) is preceded by *Snehana* (oleation therapy). As a result the waste materials blocked in the body channels become unctuous and the channels become lubricated. Through *Swedana* these waste materials are brought into the main body channels (*Maha Kosta*), before it is expelled through the main techniques of *Panchakarma*²⁴.

Types of *Swedana* (Fomentation Therapy)²⁵

1. *Sagni Sweda* (Involves the application of fire),
2. *Niragni Sweda* (Without application of fire)

Indications of *Swedana* (fomentation therapy)

1. Hemiplegia / Paraplegia (pakshaghata),
2. Facial palsy,
3. Sciatica,
4. Stiffness of back, waist and abdomen,
5. Excessive heaviness and numbness in body,
6. Neuralgia of upper and lower extremities,
7. Constipation,
8. Earache, headache
9. Distension of abdomen
10. Cough, hiccup and coryza
11. Before *Panchakarma*.²⁶

Contraindications *Swedana* (Fomentation Therapy)

1. Obese persons/Obesity,
2. Debilitated persons,
3. Alcoholics,
4. Raktapitta (bleeding disorders),
5. Diabetes mellitus,
6. Diarrhoea,
7. Inflammation and prolapse of rectum,
8. Jaundice, Anaemia,
9. Gout,
10. Unconsciousness.
11. Pregnant women.²⁷

Signs and Symptoms of proper *Swedana* (fomentation therapy):-

(A) **Ideal Fomentation:-** 1. Subsides symptoms like cold, pain, stiffness and heaviness,
2. Duction of sweating and 3. Body musculature becomes soft²⁸

B) **Improper Fomentation:-** 1. Symptoms like cold, pain, stiffness and heaviness still persist, 2. No sweating is induced, 3.No softening of body musculature.

(C) **Over/Excessive Fomentation:-** 1. Aggravation of *Pitta Dosha*, 2. Fainting, 3.Prostrations, 4. Thirst, 5. Burning sensation all over the body and 7. Joint pains.²⁹

Management of over/excessive *Swedana* (Fomentation):-

1. Treatment of over/excessive fomentation either in external or internal form should be unctuous, sweet and cold in nature,
2. Advise the patient to sleep in air cooled room after the therapy,
3. Apply paste of *Chandana* powder over affected area or all over the body,
4. Prescribe *Pitta* alleviating medicines like *Sutashekhara Rasa*, *Pravala Pishti* or *Shankha Bhasma* etc. Light and liquid diet is advised throughout the procedure.

Probable mode of action of Swedana (Fomentation):-

1. Induces sweating and removes body toxins,
2. Induces *Srotoshudhi* (Cleanses microchannels),
3. Liquifies morbid *Doshas* and expels them out with sweat,
4. Recovers vascular insufficiency of the joints, muscles,
5. Cause relaxation of muscles and tendons and
6. Activate the local metabolic processes which inturn produce relief of pain, swelling, tenderness and stiffness etc.

Pradhana Karma (Main procedures)

(1.) Vamana Karma (Therapeutic emesis)³⁰:- *Vamana* (therapeutic emesis) is induced vomiting in which endotoxins (vitiated *Kapha* or *Pitta*) which are present

in stomach, in cells or tissues of intire body (mainely upper part) are eliminated through mouth. Here medicated drugs are given internaly in the form of powder, decoction, juice and vomiting is induced.

Patho-physiology of Vamana (Therapeutic emesis)

Vomiting occurs due to stimulation of vomiting centre present in the medulla oblongata, the multiple pathways can induce vomiting. The chemo-receptor trigger zone (CTZ) located in the brain which has direct linked to the GIT, throat and other viscera. The CTZ is also accessible to blood born drugs, mediators, hormones and toxins: because this area is not protected by blood brain barrier. Cytotoxic drugs, radiation and other GI irritant release 5-HT (5-hydroxytryptamine) which have direct stimulus to CTZ. There are two groups of emetics these are-

- 1) Which act on CTZ. Eg. Apomorphine.
- 2) Which act via reflex and CTZ. Eg. Epachac.

However mustard suspension and strong salt solution may also induce emesis by producing irritation to stomach area, smell, pain, sight, psychogenic stimulus, motion, cerebellum pressure GI irritation, chemotherapy, hyper-thermia, infections various drugs, morphine, digitalis may induce vomiting; but these all emetic process

disturb the homoeostasis whereas *Vamana Karma* maintain the homoeostasis.

Indications of *Vamana Karma* (Therapeutic emesis):- *Kasa* (Cough), *Swasha* (Asthama), *Amlapitta* (Hyperacidity), *Apasmar* (Epilepsy), *Unmada* (Insanity), *Putinasha* (Sinusitis), *Gulma* (Tumour), *Kustha* (Skin diseases), *Sleepad* (Elephantiasis), *Ajeerna* (Indigestion), *Visha* (Poisoning), *Medoroga* (Obesity) etc.^{31, 32}

Contra-Indications of *Vamana Karma* (therapeutic emesis):- Children, Old age, Pregnant lady, *Hridroga* (Heart diseases), *Urdhaga raktapitta* (Haemoptysis, Epistaxis), *Pleeha-vridhi* (Splenomegaly), *Udara roga* (Ascitis), *Timira*, *Shira shoola* (Headache) etc.³³

***Vamaka Dravya* (Drugs cause therapeutic emesis):-** *Madana-phala* (*Randia dumetorum*), *Jeemutaka* (*Luffa echinata*), *Ekshwaku* (*Legnaria vulgars*), *Dhamargava* (*Luffa agyptica*), *Krutavedhana* (*Luffa amara*), *Kutaja* (*Writia tinctoria*).

Preparation of *Vamana Aushadhi* (medicine cause therapeutic emesis):- *Madan-phala* (*Randia dumetorum*) seed powder -6 to 10 gm (*Antarnakha musthi*-feestfull of patient), *Vacha* (*Acorus calamus* powder) 3 to5 gm and *Saindhava* (rock salt) 2-3gm, make paste with honey and give to patient.

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Pharmacokinetic of *Madan-phala* as emetic:- *Madan-phala pulp* and *seed* contains large numbers of saponins. Saponins are the chemical compounds which form colloidal solution in water and after shaking precipitate cholesterol. Saponin act as detergent on mucous membrane and they produce irritation and due this irritation the reflex effect of vomiting are seen through vagus nerve. The saponins also have adrenergic effect. The saponin of *Randia dumetorum* are (a) Randic neutral saponin and (b) Randic acid saponin, which after hydrolyses convert into Oleonolse acid (saponin) which act as emetic.

Materials and Medicine for *Vamana Karma*:- Ghrita – 500 ml, *Saindhava lavana* - 100 gm, *Madana-phala pippli churna* - 10 gm, *Vacha* (*Acorus calamus*) *churna* – 10 gm, *Yastimadhu* (*Glycerhyza glabra*) *churna* - 100gm, Milk or Sugarcane juice - 1-2 litre, Luke warm water, *Vashpa Swedan Yantra*, Measuring glasses – 2 in number, Plastic glasses – 2 in number, *Vamana* chair – for sitting, Bucket – 2 in number.

***Vamana Lakshana* (Symptoms of therapeutic emesis):-**

(1.) ***Laingiki***:- a) Lightness of the body, b) *Indriya parasannata* (Cheerfullness), c) *Vegas* stops automatically, d) Lightness in chest and other regions and e) Felling happy.

(2) **Vegiki:-** a) *Pravara suddhi*- 8 vegas, b) *Madhya suddhi*- 6 vegas and c) *Avara suddhi* -4 vegas

(3) **Maniki:-** The input (*Vamanaopaga* and *vamana dravyas*) and output of the vomitus should be measured or weighed- a) *Pravara* – 2 Prastha, b) *Madhya* – 1.5 Prastha, c) *Avara* – 1 Prastha

(4) **Antiki:-** “*Pittantamistham Vamanam*” i.e. Pitta should be come out at last.³⁴

Paschat Karma (post therapeutic regimen):- After *Samyak Vamana* the patient should be advised to take complete rest i.e. physically and mentally and should not be allowed to take normal diet. Digestive power becomes very weak after *vamana karma* do the *dhumapana*, *pariharya vishaya*, *sansarjana krama*.

Vamana Vyapata (Complications of therapeutic emesis):- (Ten in number)

These are as following- 1. *Adhmana* (Gaseous distention) 2) *Srava* (Excessive salivation), 3) *Gatra-graha* (Bodyache and stiffness), 3) *Vibhramsa* (Mental confusion), 5) *Upadrava* (Other complication), 6) *Parikrtika* (Pricking pain in anal region), 7) *Hrid-graha* (Heaviness in chest region) 8) *Jeevadana*, 9) *Swasha* (Dyspnoea) and 10) *Klama* (Letharginess).

These can be divided into two categories- (i) Ayoga (ii) Atiyoga.³⁶

In *Vamana Ayoga* (Improper therapeutic emesis)- The patient may get *adhmana*, *parisrava*, *hrid-graha*, *anga-graha* and *klama* and in *Vamana Atiyoga* (Excess)- The patient may get *parikartika*, *jeevadan*, *alpa pravrutti of vegas* and *asamyak pravrutti vegas* where as in atiyoga the *vyapat* may produce due to *atipravrutti*.

Vamana Vyapata Karana (Causes of complications of therapeutic emesis):-

Improper *snehana* i.e. internal oelation as well as external application of *snehana*, improper *swedana*, selection of improper drug and dose, old less potency drug, *Krura* or *Mrudu Kostha*, *Teekshna* or *Mandagni*, strong body or weak body and predominance of *Ama*.

Peyadi Sansarjana Karma (Post therapeutic dietic regimen)³⁵

Days	Annakal a	Pravara Shuddhi	Madhyam a Shuddhi	Avara Shuddhi
Ist day	Morning	-	-	-
	Evening	Peya	Peya	Peya
IInd day	Morning	Peya	Peya	Vilepi
	Evening	Peya	Vilepi	KritakritaYush a
IIIrd day	Morning	Vilepi	Vilepi	Kritakrita Mamsarasa
	Evening	Vilepi	AkritaYush a	Normal Diet
IVth day	Morning	Vilepi	Krita Yusha	-
	Evening	Akrita Yusha	Akrita Mamsaras a	-
Vth day	Morning	Krita Yusha	Krita Mamsaras a	-
	Evening	Krita Yusha	Normal Diet	-

VI th day	Morning	Akrita Mamsar asa	-	-
	Evening	Krita Mamsar asa	-	-

Vamana Ayoga and management:- If we are administer the *vamana* drugs for the patient who is having more appetite, teekshna Agni, *mrudukostha*, *swalpa utklishta kapha*, then instead of *Vamana*, he may get *Virchana* due to *ayoga*. In above conditions the *doshas* are not evacuated properly hence patient may get *alpavega* or *avega*.

Management:- 1. *Yasthimadhu Kwatha* and *Lavana Jala* should be given according to the condition of the patient. 2. **Mechanical stimulation:** *Madanaphala* churna mixed with honey should be kept on tongue and ask the patient to do *utklesha* with his fingers. After getting few *Vegas* the patient may be kept on *pachana* drugs like *sutshekhhar*, *shankhavati*, *trikatu churna etc.*

Conclusion of Vamana therapy:- Now a days, due to life style and stress we are getting various dreadful diseases having unknown etiology. *Shodhana* therapy (detoxification) is a mandatory treatment for every one, particularly *Vamana* therapy can be admistrated in a modified way by drinking about one and half liter of lukewarm saline water (about 1% saline) as

quickly as one can until feel like vomiting it out. Because it inhibits the excess secretion of HCl (Hydrochloric acid) and brings the peristaltic movement into normalcy, thus it enhances bowel motility. It helps in cleansing the lower GI track and inhibits the excess absorption of glucose. All Vomiting (pathological) process disturb the homoeostasis where as *Vamana Karma* (therapeutical) maintain the homoeostasis. After complete of procedure *Sansarjana karma* (dietic regimen) should be follow for proper results.

(2) **Virechana Karma (Therapeutic purgation)³⁷:-** *Virechana* is a process by which *doshas* (vitiated humors) are made to pass through *adhomarga* i.e.anus. It is said to be the important therapy for evacuation of *Pitta dosha* (vitiated *Pitta* humors). By *Virechana* the *Pitta dosha* and *malas* (waste materials) are cleaned not only from the colons and rectum but also from whole body i.e. from cellular level. *Virechana* cleans the intestines properly and enhances the better circulation to the visceral organs and avoids the ischemia by reversing the pathology and restores the physiology of all the visceral organs. *Virechana* mainely purified the vitiated *doshas* situated below the diaphragm (Upper boundry of the abdomen) and above the umbellicus (ilieocaecal junction of intestine).

Important issues in Virechana Karma:- *Snehapana* and its assessment, selection of *Virechana Yoga*, assessment of *Virechana karma*, planning of *Samsarjana Krama*.

Indications of Virechana Karma:- 1. *Jvara* (Fever) 2. *Kustha* (Skin disorders), 3. *Prameha* (of UTI), 4. *Arsha* (Piles), 5. *Bhagandara* (Fistula in ano), 6. *Arbuda* (Tumour), 7. *Granthi* (Glands), 8. *Visarpa* (Erysipelas), 9. *Swasa* (Asthama), 10. *Kasa* (Cough), 11. *Kamala* (Jaundice), 12. *Apasmara* (Epilepsy), 13. *Unmada* (Insanity), 14. *Vatarakta* (gout), 15. *Udara* (ascitis), 16. *Sthanyadosha* (Vitiated breast milk), 17. *Shirashoola* (Headache), 18. *Krimikoshtha* (Worm's infection) and 19. *Aruchi* (Anorexia).³⁸

Contraindications of Virechana Karma:-

1) *Alpaagni* (Poor appetite), 2) *Langhita* (Fasting), 3) *Ajeerna* (Indigestion), 4) *Navajwara* (Acute fever), 5) *Kashta gudam* (Prolapse of rectum), 6) *Madya atiyoga* (Alcoholism), 7) *Atiruksha* (Over dehydrated), 8) *Daaruna Koshta* (Constipated), 9) *Kshata Ksheena* (Traumatically weak), 10) *Atikrusha* (Emaciated), 11) *Garbhini* (pregnant woman), 12) *Bala* (children), 13) *Vridhdha* (aged person), 14) *Durbalya* (weak), 15) *Rajayakshma* (lung T.B), 16) *Hridroga* (heart diseases), 17) *Bhaya-bheeta* (fear person), 18) *Atisara*

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(diarrhoea), *Pipasita* (thirst), (19) *Maithuna prasakta* (interest in coitus), *Adhyayana prasakta* (interest in studies) (20) *Vyayama prasakta* (interest in exercise), (21) *Chinta Prasakta* (interest in thinking).³⁹

(I) Poorvakarma of Virechana Karma (pre-operative procedure):-

Sambhara sangrah (collection of materia), *Atura pariksha* (examination of patient), *Atura siddhta* (preparation of patient), *Selection of drug and dose*, *Rukshana* with *Ahara*, *Deepana* and *Pachana* (Tab. *Amapachana vati*: 1 gram three times/day, *Panchakola Churna* 2 grams three times a day, Tab *Chitrakadi vati*: 1 gram three times/day), For 3 to 7 days or till *Nirama lakshana* and *Agnideepti* is achieved than *Abhyantara Snehapana*, (adequate internal oleation) and *swedana* (external fomentation) done.

Abhyantara Snehapana, (Adequate internal oleation):- Selection of *Sneha*, dose, duration, dose pattern need to be standardized to some extent- select preferably *Shuddha Sneha* (plain ghee or oil) or medicated *Sneha* as per the patient and disease, dose, duration, dose pattern: give 3 to 7 days in increasing dose as per *Agnibala* and *Koshtha* or till *Samyaka snigdha Lakshana* achieved. Start with test dose (*Hrasiyasi Matra*), *Vishrama Kala* (gap period)- 03 days, *Bahya snehana* and *swedana* (external oleation and

fomentation) for 30 minutes both times in these three gap days, rice and meat soup/green gram soup in moderate quantity with moderate quantity of fat, spices and salt, sour fruits like grapes, frequent drinking of arm water, no complex food is permitted.

Ensure the day of the Virechana:- Patient had proper sleep in the night, proper digestion of food taken by previous day, Proper clearance of natural urges, no *Kaphavruddhi Lakshana* developed in the patient, *Sarvanga Abhyanga* and *Svedana* at virechana day, time of administration should be after passing *Kaphakala* (about 10.00 AM).

(II) Pradhana karma of Virechana karma (main Procedures):- Administration of Virechana Yoga:- **Common Virechana drugs (purgative medicines with dose):-** *Avipattikara choorna*: 20-40g, *Bahushala guda*: 20-40g, *Trivrit lehya*: 20-40g, *Manibhadra guda*: 20-40g, *Patolamooladi kwatha*: 90-120 ml, *Eranda Sneha* preparations: 25-50ml, *Abhayadi modaka*, *Ichhabhedi rasa* etc. according to *Kostha* of the patient and disease chronicity. It may be 1) *Eranda tail* (castor oil) 30 to 50ml + 250-500 mg of *Ichhabhedi rasa* with water or 2) *Trivrut churna* (*Operculina terpathum*) *Katukarohini* (*Picrorhiza curo*) or *Swarnpatri* + 200 ml of water = 50 ml + 250-

500 mg of *Ichhabhedi rasa*. (for ladies and delicate persons give only castor oil and decoction without *Ichhabhedi Rasa*)

Observation of patient:- As soon as the drug is administered, due to bad taste in some sensitive patients they get nausea or vomiting sensation, hence these patients should be given *lavang* or *shatapushpa*. Within one or two hours, patient starts passing motions. The pulse, heart rate, blood pressure, respiration rate should be recorded during the vegas. After getting the *samyak virechana lakshanas* the patient is asked to take complete rest.

Clinical symptoms of Samyak Virechana:-
(1.) Laingiki- a) Lightness of the body. b) *Indriya prasannata* (cheerfulness), c) Alleviation of vitiated doshas. d) Passing of flatus. e) Increase of digestion, f) Feeling happy, **2.) Vegiki** - *Pravara Shuddhi* - 30 vegas, *Madhyama Shuddhi* - 20 vegas, *Avara shuddhi* - 10 vegas, **3.) Maniki** - *Pradhan* - 4 *Prastha* (216 tolas), *Madhyama* - 3 *Prastha* (162 tolas), *Avara* - 2 *Prastha* (108 tolas) and **4) Antiki** - "*Kaphantam virechanam*" in virechana, the *kapha* should be come out at last.

Samyak Virechana Lakshanas:- (i) Initial expulsion of stools followed by *Pitta* (observed as golden yellow colored viscous fluid with a characteristic bilious odor) and at last *Kapha* (mucous). (ii) Lightness of the

body, (iii) Subsiding of the *Vega* by itself without causing excessive weakness.

Pashchat karma (Post-operative procedure):- Assessment of *Virechana* (purgation), *Sansarjana Krama* (post therapeutic dietetic regimen)-After the subsiding of *Vegas* and ensuring *Jeerna Aushadha Lakshana* patient must be advised to take warm water bath in the evening and dietetic schedule should be advised as per the *Shuddhi* achieved once the patient feels hunger. After getting proper appetite, *Samsarjana Krama* should be done as per *Shuddhi*.

Samsarjana Krama (post therapeutic dietetic regimen):-(i) Rice gruel with more water- Rice gruel with less water- rice with mudga yoosha (Khichdi) - if non veg rice with meat soup is advised for 3/2/1 *annakalas* depending upon *shuddhi*. Three *annakalas* are practiced if *agnibala* is good, ii) *Peya* (thin rice gruel), *Vilepi* (thick rice gruel), *Odana* (rice) with *Mudga Yusha* (green gram soup)/*Mamsa Rasa* (meat soup) for three, two, one *Annakala* for *Pravara Madhyama* and *Avara Shuddhi* respectively.⁴⁰

Virechana Vyapat (complications of therapeutic purgation)- Ayoga (incomplete purgation)- the *Virechana* drugs administered to the patient who is having poor appetite and predominance of Greentree Group

shleshma will get--*Urdwavega, Admana, Srava, Hritgraha, Angagraha Klama* or the patient who is *Asnigdha Asweda, Ruksha shareera* receives old and *heenavirya* *virechana* drug may get *Vibhramsha Oedema, Hikka, Giddiness*, pain in calf muscles.⁴¹

(3) Vasti karma (bio-purificatory therapeutic enemata):__- *Vasti* is a therapeutic procedure designed to produce biopurification especially of *Vata Dosha (vitiated Vata humor)* through ano-rectum. **Classically it may be of two types-**(i) *Niruha Vasti or Asthapana Vasti*) i.e. predominantly decoction based enemata, (ii) *Anuvasana Vasti* i.e. predominantly oil based enemata while administration of *Vasti* (enemata) through *Vaginal / Urethral* route is referred to as *Uttara Vasti*.

(i) Niruha Vasti or Asthapana Vasti (decoction based therapeutic Enemata):- The therapeutic procedure which arrests restricts or slows down the advancing of age and aggravation of *Doshas* is termed as *Asthapana (Niruha) Vasti*. The essential procedure in *Vasti Karma* is to introduce the medicated liquid (decoction / oils / ghee) into the rectum / sigmoid colon. Certain amount of pressure is required to push the medicine to the desired side.

Indications of Niruha Vasti (Decoction based therapeutic Enemata):- As a

purificatory process before all promotive and preventive measures, such as seasonal purification and before *Rasayana* therapy and for treatment of *Vata* predominant diseases, all kinds of paralysis, degenerative diseases of C.N.S, neuromuscular and osteoarticular diseases, myopathies, diseases of the lower intestinal tract like chronic colitis, irritable bowel syndrome / chronic constipation, senile problems, residual psychoses, benign hypertrophy of prostate.⁴²

Screen of the patients eligible for Niruha Vasti⁴³:- Prepare *Vasti Dravya* (contents of *Vasti*) in required quantity according to the age group, Prakriti (constitution) and disease conditions of the individual, the medicine i.e. *Vasti Dravya* should be made slightly warm by indirect heat by putting the container in a hot water bath, a *Kalka* such as *Yavanyadi Kalka* may be added and mixed in enemata decoction.

Standard procedure of Niruha (Asthapana) Vasti⁴⁴:- *Niruha Vasti* should be performed on empty stomach between 5-7 p.m. i.e. during *Vata Kala* after subjecting the patient for gentle massage and mild sudation. For practical convenience *Vasti* can also be given in the morning hours. Then asks the patient to lie down on the *Vasti table / Droni* in the left lateral position. Apply the oil at catheter and anus and introduce the *Vasti* applicator into the

rectum gently and properly. Then squeeze the contents so as to introduce the medicine into the rectum in one slow go. During administration the patient may be advised not to sneeze, cough, laugh, yawn or shake the body. In case the patient develops an urge to maturate or defaecate then withdraw the *Vasti* applicator. After pushing the contents of *Vasti* into the rectum, slowly withdraw the *Vasti* instrument. Patient should then lie down in the supine position followed by in the right lateral position to allow the ascent of the *Vasti Dravya* towards the colon. While in the supine position, a gentle massage may be done over abdomen. Maximum period of retention of *Vasti* contents should be around one hour. If the medicine is not expelled out even after one hour, another *Vasti* can be given with *Yavakshara*, *Gomutra* (Cow's Urine) and *Amala Dravyas* i.e. sour substances. If *Vasti* contents are expelled out immediately after administration then second dose of *Vasti* may be given. Ask the patient to rest for some time and then he may take bath with Luke warm water. The patient is required to follow specific *Sansarjana Krama* after the administration of *Niruha Vasti*. *Anuvasana Vasti* (oil based enemata) can be given in the evening hours i.e. *Vatakala* of the same day, but after meals.

Quantity of Niruha Vasti (according to age):-

S.No.	Age	(Max)	Quantity of Niruha Vasti
1.	1 year	½ Prasriut	- nearly 40 ml
2.	10 year	5 Prasruit	400 ml
3.	15 year	9 Prasruit	720 ml
4.	15-70 year	12 Prasruit	960 ml (stand.quantity)
5.	Above 70 year	10 Prasruit	800 ml ⁴⁵ (Ca.Si.3 / 31- 33)

Even though the maximum quantity of *Niruha Vasti* has been stated as 1200 ml, in number of patients, doses more than 900 ml has produced practical difficulties. A dose between 500-800 ml was observed to yield good therapeutic responses. Hence for practical point of view, the dosage range should be kept between 500-800 ml.

Order of mixing of Vasti dravya (decoction based enemata materials)⁴⁶:-

The order of mixing of materials are as following. Continuous churning should be maintained at every stage of mixing:-

Honey → Rock salt (**Stage 1**)
 → Add oil (Sneha) (**Stage 2**) → Add medicated paste (Kalka) (**Stage 3**) → Add decoction (Kwatha) (**Stage 4**)

Quantity of Sneha in Niruha Vasti (decoction based enemata):-

	Healthy / Pitta persons
-	130 ml
	Vata disease
-	200 ml
	Kapha disease
-	100 ml

• Ratio of mixing --**Kalka : Sneha : Kwatha**

1 : 4 : 8

Complications of Niruha or Asthapana Vasti:-

Commonly encountered complications are:- 1.) Sensation of burning / irritation / discomfort, injury, bleeding per rectum,
 (2) General feeling of uneasiness,
 (3.) Headache, constipation/diarrhea
 (4) Abdominal pain/discomforts.

In case of complications, further administration of *Vasti* may be avoided and the condition may be treated symptomatically.⁴⁷

(II) Anuvasana Vasti (Oil based therapeutic enemata):-

Predominantly oil based enemata that can be administered in healthy and diseased individuals are called *Anuvasana Vasti*. Dose wise there are three types of *Anuvasana Vasti*:- (i) *Sneha Vasti* - 240 ml (1/4 of Niruha=3Prasrit=6Pal=24tola=240ml

approx.), (ii) *Anuvasana Vasti* - 120 ml (1/2 of *Sneha Vasti*), (iii) *Matra Vasti* - 60 ml (1/2 of *Anuvasana Vasti*). Such *Vasti* has more *Shamana* and *Brahamana* effect than actual *Sanshodhana* and hence is not counted among *Langhana* measures.⁴⁸

Indications of *Anuvasana Vasti* (oil based therapeutic enemata):- 1. Persons eligible for *Asthapana Vasti* (decoction based enemata), 2. Dryness of body, 3. Increased digestive power, 4. *Vata Dosha* dominant diseases such as-(a) Degenerative and neurological diseases (b) Debilitating disease conditions (c) BPH and Udavarta syndrome.⁴⁹

Contraindications of *Anuvasana Vasti* (oil based therapeutic enemata):- 1. Persons contraindicated for *Asthapana Vasti*, 2. Empty stomach, 3. Acute Fevers, 4. Anaemias, 5. Haemorrhoids, fistula-in-ano, fissure and rectal prolapse, 6. Hepato-splenomegaly, 7. Jaundice, 8. Diabetes mellitus, 9. Worm Infestations, 10. *Medo Roga* (obesity and lipid disorders), 11. Filariasis with chyluria.⁵⁰

Season wise time of administration of *Anuvasana Vasti* (oil based therapeutic enemata):- 1. In winter and spring season – Morning, 2. In summer and rainy season – Evening.⁵¹

Procedure of administration of *Anuvasana Vasti* (oil based therapeutic
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enemata):- The procedure of administration of *Anuvasana Vasti* is the same as that of *Niruha Vasti*. However it should be administered 15-30 minutes after having light diet, 5-10 gms of rock salt (*Saindhava Layana*) should be added to the *Sesame oil* (tila taila). Medicated oil is to be used for *Anuvasana Vasti*. Usually maximum duration of retention of *Anuvasana Vasti* is 09 hours. However if expulsion does not occur with in stipulated time, no further treatment is required. If the *Vasti* is expelled out immediately, second dose should be given. Complications of *Anuvasana Vasti* are far less than that of *Asthapana Vasti*. After administration of *Anuvasana Vasti*, light and warm diet should be given especially in evening hours. *Anuvasana Vasti* should be used alternately with *Niruha Vasti*. Neither *Niruha* nor *Anuvasana Vasti* should be given continuously without alternating with each other, in order to avoid aggravation of *Vata* and / or *Kapha dosha* respectively.

Numbers of *Anuvasana Vasti*:- Considering the chronicity and specific indication of *Vasti* therapy the physician should choose one of the following there *Vasti* schedules namely -(i) *Yoga Vasti* -8 in number, (ii) *Kala Vasti*-16 in numbers and (iii) *Karma Vasti*-30 in numbers.

Bio-clinical markers for assessment of *Vasti karma* clinical / physiological

parameters:- Feeling of well being and lightness in lower abdomen, improved functions of A.N.S., remission of symptoms, improved appetite and digestion, improved haemodynamic status, improved skin lusture and elasticity to be assessed “blindly” by before and after photographs.⁵²

Humoural paramerters:- Test the functions of Enteric Nervous System, estimation of blood level of Vit. B12 (cyanacobalamine) in blood, free radical estimation, immunoglobulin estimation, analysis of expelled material and comparison of its contents with the composition of original *Vasti Dravya*.

Difference between Enema and Vasti:- Enema- purpose- simple bowel wash, *Vasti*- its own therapeutic importance, flow, pressure, temprature, viscosity, position, time more importance given in *Vasti*. Use of enema pot can not be considered as option or improvisation for *Vasti* yantra, use of *Vasti* yantra need more skilled hands.

Routinely practiced Vasti:- *Nirooha Vasti*, *Yapana Vasti*, *Siddha Vasti*, *Sneha Vasti*, *Ardhamatrika Vasti*, *Matra Vasti*, *Brimhana Vasti*, *Samana Vasti*, *Deepana Vasti*, *Ksheera Vasti*.

(4.) Nasya Karma (Nasal Insufflation):- One of the *Panchakarmas*, *Nasya* therapy is a process where the drug (herbalized oils and liquid medicines) is administered

through the nostrils. To *Ayurveda* the nose is the gateway of the head, so systematically performed *Nasya karma* cures almost all the diseases of the head easily. Systematic administration of drugs through nose as per classical methods mentioned in ayurveda is called as *Nasya karma* (nasal insufflation). By late modern pharmacology has recognized that certain medicines can be effectively administered through nasal route and a separate section has been listed under ‘nasal administration of drugs. *Shirovirechana*, *Shirovireka*, *Murdhavirechan*, *Navan* etc. are Synonyms. For the treatment of *Urdhwajatrugat Roga* (supraclavicular region), nostrils are taken as opening of head. Drugs administered through nostrils reaches head and gets scattered all over in the head and cure the diseases of *Urdhwajatrugat*.

Nasya indications:- 1.*Urdhwajatrugata Roga* (diseases above supra-clavicular region), 2.*Unmada* (psychiatric disorders), 3.*Apasmara* (epileptic/convulsive disorders), 4.Headaches and related problems, 5.Mouth and dental problems, 6.Nasal cavity problems, throat problems, 7.Optholmic problems (eyes disorders), 8.Problems related face, 9.Neurological disorders likes- *Ardita* – facial palsy/ ischemic disorders etc.

Nasya can impart in healthy individuals:- Good sleep, good memory, good functioning

of eyes, ear and senses, sturdy and strong skull bones, delay graying of hair and fall of scalp hair, delay ageing process of head/brain.

Contraindications of Nasya:- The *Nasya* can not be given in any disease, if the season is not appropriate, *Peeta sneha, Peeta toya, Peeta madya or Patum- ikshtam, Bhuktabhakta, Shirahasnat, Snatukam, After Raktamokshan, Navapeenas, Vegart, Sutika, Shwas, Kaas, After Shodhan karam, Anuvasit etc.*

How it is done:-*Nasya* therapy begins with a relaxing foot massage. Warm medicinal herbal oils are applied to the face and neck. Specific care is given to the cheekbones, temples and nasal cavity, helping to release impurities and alleviate pressure. A deep steam inhalation is followed by a warm moist towel over the sinus areas. A few drops of medicinal *Nasya* oil are slowly dropped into each nostril. The sinus areas are massaged once more with the warm herbal oils. A brief massage of the head, ears and neck follows. This is followed by herbal gargle and mouth wash soothes and clears the throat.

A-Poorva karma (Preparatory procedure):- Selection of the patient done as following:- **Age:-** 8 yrs to 80 yrs for *shodhan Nasya, Pratimarsh-* It can be used in any age, Greentree Group

DhoomNasya-more than 18 yrs, *Kawal dharan* -not below 5 yrs. of age, **time (Seasons)-** *Pravritta, Sharad, Vasant. Doshas-* *Kaphaj- Poorvahana, Pittaj-Madhyahana, Vataj- Aprahana.*

B-Pradhana Karma (Main procedure):-

Lie down on a *Nasyapeeth* with his head bent a little backward. vessel containing the *Nasya* medicine is put into hot water so that it becomes little warm. After closing one nostril the *Nasya* medicine is put into the other nostril and vice versa. His feet, shoulders, hands and ears should be massaged well at that time. Head should be not bended too much. Patient should lie for one minute after giving *Nasya* medicine at about 100 matra. Then asked to patient to sit and expell out the kapha again and again. Then *Gandoosh* should be done with lukewarm salt water again and again. *Dhoompan and dhoom Nasya* should be given with *Ghrit bhabita Erandnal* or *Yava* and asked to expel the aggravated *Kapha*.

C- Pashchat Karma:- *Nasya yogayogya lakshanas- Samyak-* Patient should feel lightness of head. Patients have good sleep without any discomfort. **Asamyak-** *Vata Vikar, Indriya rukshata, Kandu, Angagaurava,* discharge from nose, eyes and mouth. **Atiyoga-** Heavy discharge of *Kapha* form nose, heaviness in the body, and abnormal functions of *Indriyas*.

Note:- After *Shodhan Nasya*, the *Nasya* of *Sneha* is to be given. *Paittika Vikara- Ghrita* should be used, *Vatika Vikara- Tail* should be used, *Gandoosha and Kawala, Dhoompana* should be done.

Parihar Vishaya (Post therapeutic diet and life style):- Always lukewarm water should be used for every purpose, light diet should be taken, *Rajodhoom, Shoka* etc. are contra indicated. Patient should keep in a room where no direct air should reach to him. He should be kept awaken on daytime.

Course of Nasyakarma:- According to *Charaka* -7 days *Nasya Karma* should be given. According to *Sushruta*, *Nasya* can be given upto 21 days. In *Manyastambha, Swarbheda Nasya* may be given two times a day. After given 7 days *Nasyakarma*, the *Raktamokshan* can be performed. If *Raktamokshan* is not necessary then *Rasayana- Vajikarna* or *Shamana* treatment should be given.

Some Important Nasya Kalpa:-A- Powders used for *Dhamapan Nasya* as well as for *Avapeeda Nasya-Kataphala, Trikatu Apamarg, Vidang, Shigru, Vacha, Swaskuthar ras, Pippali churna.* B- Medicated Sneha Nasya as-*Anutail, Shadbindu tail, Vacha tail, Apamarga tail, Jyotismati oil, Triphala Ghrit, Bramhi ghrit* etc. C- Swaras- *Doorva Tulsi, Apamarga, Anar, Sugarcane, Angoor,* etc.D-Dhooma- *Greentree Group*

Guggulu, Kantakari, Ajwayan, Vidang, Dhatura etc.

(5.) Raktamokshana (blood letting):- *Raktamokshan* (blood letting) is one of the best therapies mentioned in *Ayurvedic* classics for *Rakta vikaras* (blood disorders) and *Pittaja rogas*. Further, *Acharya Sushruta* stated that it is one of the important measures for treating the surgical disorders. As in *Kayachikitsa, basti* is said to be half *Chikitsa*, in the same manner *Rakata mokshana* has been considered as half *chikitsa* in *Shalya tantra*. It lets the impure blood from the body. Now a day, this treatment is widely practicing through out the Globe.

Blood letting and Dosha:- A) *Shringavacharana –Vata,* B) *Jalaukavacharana – Pitta,* C) *Alabu avacharana –Kapha* and D) *Ghatyantra - Kaphaand Vata*

This procedure can be done in two ways- 1. Blood letting with Instruments.

2. Blood letting without Instruments

I. Blood letting with Instruments:- *Siravedha* is one of the varieties of blood letting and it can be done with the help of needle and some physicians perform veinisection . But blood letting with needle is very simple and easy method and can be

done any where without any operation theatre.

Indications of Siravedhana:- 1) *Vicharchika*, 2) All other skin disorders, 3) Wounds, 4) Tumors, 5) Unhealed wounds.

Materials:- 1) Scalp vein set 18 no, 2) Kidney tray, 3) Cotton and 4) Bandage.

Poorva Karma (pre-operative procedure):- Patient should be asked to take complete rest mentally and physically. He should be asked to pass natural urges before coming to the table. The part where we are doing the Siravedhana should be cleaned with any lotion. **Pradhana Karma (Operative procedure):-** Patient should be asked to lie down on the table. Introduce the scalp vein (No.18) into the Brachial vein and allow blood slowly into the kidney tray up to 50 to 100 ml or till the blood turns from dark red to bright red and do proper bandage.

Paschat Karma (Post-operative procedure):- Patient should be asked to take complete rest for one hour, then he can be allowed to do normal work. It should be repeated 4 to 5 times at the intervals of 5 days. Sometimes it can be repeated another 4 to 5 times according to the condition of the disease.

II. Blood letting without Instruments (Leech application):-

Indications: - 1) Gulma (Tumors), 2) Arsha (Hemorrhoids), 3) Vidradhi (Abscess), 4) Vatarakta (gout), 5) Netra rogas (Eye diseases), 6) Visarpa (Erysepalas), 7) Psoriasis (Kitibha Kushtha), 8) All types of skin disorders. 9) Deep vein thrombosis.⁵³

Poorva karma (Pre-operative Procedure:-

a) Preparation of leeches: - Before application of leech it must be purified by putting in water containing *Haridra* (turmeric powder). It should be kept for 10 to 15 minutes. After vomiting the saliva and abdominal contents leeches should be transferred into fresh water for 10 to 15 min. By doing this, its appetite and blood sucking power will be increased. **b)**

Preparation of the patient:- *Snehapana*, *Abhyanga Snehana* and *Swedana* should be avoided before this therapy. If it is necessary the external application of oil and fomentation can be performed one day before to the *raktamokshan*. Before the application of leech that part should be cleaned with *Triphala quath* or hot water.⁵⁴

Pradhana karma (Operative procedure):-

After cleaning the part, patient should be asked to sit or lie down on the table comfortably. Pick up the leech with the help of cotton swab and keep on clean part (wear the rubber gloves) and cover it with

cotton. After few minutes it starts to search the suitable place and after that it starts sucking the blood. Then allow it to suck the blood for 25-30 minutes. After sucking the blood automatically it leaves that area. If it won't leave after 25-30 minutes apply turmeric powder at mouth.

***Paschata karma* (Post-operative procedure):-** It includes treatment of leech and the patient. a) **Treatment of Leech:-** Leecha should be kept in a vessel, then put turmeric powder on mouth of the leech. It vomits total blood instantly whatever it has consumed from the patient. Then transfer the leech into fresh water container and see that the leech is moving freely in water or not, when it is moving freely it has vomited the blood completely. Then the leech should be kept in a separate container.⁵⁵

b) Treatment of the patient'- As soon as the leech is removed from the body, clean the area with cotton. It won't clot easily because of hirudin. Apply turmeric powder and do proper bandage. The patient should be asked to take complete rest for 1 to 2 hours.

Conclusion:- At last it can be concluded that *Panchakarma* therapy is the boon of *Ayurveda* for the chronic incurable diseases as disclosed by the western medicine. It is the safe and cost-effective procedure of *Ayurveda*. It not only increases the life of patient (curative purpose) but also can be used as rejuvenative (prevention of premature aging), as well as for increasing the lustre and tone of the skin (preventive and cosmetic purpose).

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