STANDARDIZATION OF PEDIATRIC PANCHAKARMA PROTOCOLS



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Abhyanga (Oil Massage)

1. Therapy/Procedure Name: Abhyanga (oil massage)

2. Age Group:

Newborn – (Pre term Baby and Term)

Neonate

Infant (up to 1year)

Toddlers (1-3 years)

Pre-schoolers (3-5 years)

School-age (6-12 years)

Adolescents (12-18 years)

3. Indications and Contraindications:

A. Indications

• For maintenance of health/ prevention of disease:

Abhyanga as a daily routine i	It has been included in the <i>Dinacharya</i> (daily routines) by our Acharyas to improve the health in diseased and healthy individuals. Regular practice of <i>Abhyanga</i> is mainly advocated for the purpose to maintain the physical fitness on daily basis.	
Abhyanga in natural urges ⁱⁱ	Natural urges need to be voided as and when they manifest, otherwise they causes imbalance of <i>Dosha</i> and produce certain symptoms. Among these in some of the symptoms <i>Abhyanga</i> has been advised as the treatment like in suppressing the urges of <i>Mutra</i> (urine), <i>Shakrit</i> (stool), <i>Shukra</i> (Semen), <i>Adhovata</i> (flatus), <i>Vamathu</i> (vomiting), <i>Kshut</i> (hunger), <i>Nidra</i> (sleep), <i>Shramaswasa</i> (urge to Breathing Heavily on exertion)etc.	
Seasons wise Abhyanga ⁱⁱⁱ	Abhyanga is advised to protect the body from the extreme cold of Hemant Ritu, similarly extreme cold as well as dry weather of Shishira Ritu. Abhyanga is beneficial in these seasons to counteract the detrimental effect of the cold weather.	

- **As a** *Purvakarma:* As a pre-operative procedure for *Shodhana* Therapy *i.e.* Vamana, Virechana etc^{iv}.
- Disease specific:
 - 1. Neuromuscular Disorder
 - 2. Musculo-skeletal
 - 3. Skin disorder
 - 4. Other systemic disorder if required

B. Contraindications

1. Classical reference^v, vi: (A.H.Su.2/9, Su.Chi.24/35-37)

- *Kaphagrastha* (suffering from *Kaphaja* disorders)
- *Krita Samshodhana* (for who underwent *Shodhana*(internal purification))
- *Ajeerna* (suffering from indigestion)
- *Aama* (suffering from Aama condition)
- Saamadosha (having vitiated Dosha in Aama state)
- *Navajwara* (newly manifested fever)
- Santarpana Samuttha Roga (diseases caused by over nourishment).
- Agnima and ya (suffering from impaired digestive activity)

2. Other contraindications

1. For newborn

- a. Congenital heart diseases like cyanotic heart diseases.
- b. Vitally unstable.
- c. Dull/ lethargic, refusal to feed and signs of sepsis.
- d. Respiratory distress required oxygen.
- e. Hypoglycemia.
- f. Exaggerated neonatal jaundice. (if baby is unable/incapable to feed).
- 2. **Skin Conditions** Broken skin, Skin infections like Cellulitis, Impetigo, Scabies, Chicken pox, Measles.
- 3. **Musculoskeletal conditions** in acute conditions (in some type of fracture/dislocation local application i.e. *Parishek*, *Pichu* methods of *Snehana*(oleation) may be allowed: should be decided by the attending physician)
- 4. **Head injuries-** Subdural haematoma
- 5. Acute Fever / infection
- 6. Presence of any acute local inflammation

4. Pre-Procedure Preparation:

- > Information sharing and sensitization
- > Informed consent from parents/ attendant and assent from child
- > Sensitivity test Patch test can be done 15 mins prior to the main procedure, if no adverse reaction is noticed then the main procedure can be carried out (on the first day of first sitting)

- > Guidelines for pre-procedure fasting
 - Neonates and infants- should be breast fed and burped well before 30-40 minutes
 - Older children- should be fed 40mins to 1 hour before the procedure or light snack can be given 30 mins before the procedure
 - For children above the age of 10 years, abhyanga in empty stomach is preferable
- ➤ Environmental control Room temperature (25 32° C)
- Bowel preparation
 - Advisable to carry out the procedure after the evacuation of bowel.
- Oil application
 - Apply only pre warmed oil as part of the main procedure. Temperature of the oil or other drugs used in the procedure minimum 37.7 degree celcius (100 degree F), maximum 40.5 degree celcius (105 degree F)
- Medicines/Oil
 - Selection of oil is disease specific.
- > Any other specific information

5. Procedure Details:

- > Step-by-step procedure guidelines specific to paediatric patients
 - Make the patient to lie down in supine position with minimum clothes.
 - Pour the pre warmed oil (100-105° F) over the bregma and start the abhyanga procedure by massaging over the head in circular motion, followed by ears and soles.
 - Gently apply the pre warmed oil all over the body.
 - After the initial application, start massaging with required pressure.
 - The massage should be carried out in a sequential order of face, neck, shoulder, upper limbs, chest, abdomen, lower limbs.
 - Massage should be done in circular motion over all the joints and in linear motion over rest of the body parts.
 - The direction should be along the roots of the hair (from upward to downward)
 - The same steps should be repeated in the prone position.

> Modifications required compared to adults

- All the 7 positions as explained in the adults cannot be carried out in children.
- Instead, only 2 positions (supine and prone) are applicable in both diseased and healthy children.
- In some conditions, if children are not co-operative then abhyanga can be done in sitting position.
- For children below the age of 5 years, one masseur may be sufficient.
- For children above the age of 5 years, 2 masseurs are required.
- If 2 masseurs are carrying out the procedure then both of them should do the procedure in a well-co-ordinated manner.

- Navajata Abhyanga can be carried out in 2 ways-
 - one by making the baby to lie down on the masseur/mother's legs.
 - Another by making the baby to lie on a soft cushioned bed.
- For Snehana and the other Bahya procedure the minimum and maximum pressure applied-
 - Minimum pressure : 10mmHg, maximum pressure : 30mmHg
 - Maintainance of equal pressure : by training
- **Comfort level-** use soothing music or rhymes to calm the child, use of hangings from the ceiling, cartoon wall paintings to attract the child, masseur can sing a lullaby and engage the child

Specific conditions

- > For Neonates, Abhyanga can be performed immediately after birth once the baby gets vitally stable.
- > In cases of hypotonicity or hypertonicity, the limbs have to be placed in anatomical position and later start the procedure.
- When Sarvanga Abhyanga is contraindicated than Sthanika Abhyanga can be done.
 Eg: if a cerebral palsy child is having running nose and cold, then instead of Sarvanga Abhyanga, Sthanika Abhyanga(to limbs) can be done followed by Upanaha(applying medicinal mixtures on the disease-affected body part).
- > In the initial days, if the child is aggressive and non-co-operative (ADHD, Autism) then gentle oil application can be done without any pressure.

> Equipment size/specifications

- Abhayanga Table length modification is required for newborn to toddler.
- Disposable paper sheet may be used for the procedure.

> Medicines and dosages

Respiratory conditions	Taila	Reference
Dushta pratishyaya (DNS, Polyp, Hypertrophid nasal turbinates)	Asana bilwadi taila	Sahasrayoga, taila-yog prakarana
Tundikeri (Adenoids, Tonsillitis)	Yashtimadhu taila	Bhaishjya ratnavali, kshudra roga adhikara
Kaphaja kasa (bronchitis)	Murchita taila+ lavana	Charaka chikitsa Hikka Shwas Chikitsa Adhyaya
Vataja kasa(Allergic bronchitis)	Karpooradi taila	Sahasrayoga, taila yog prakarana
Tamaka swasa(Bronchial asthma)	Brihat saindhavadi taila	Bhaishjya ratnavali, Aamvata chikitsa prakarana

Skin Conditions	Taila	Reference
Swithra	1.Marichadi taila 2.Somaraji taila	1.Yogratnakara Vatarakta adhikara 2.Bhaishjyaratnavali Nadivrana rogadhikara
Eka kushta, Kitiba	Paranthyadi taila	Sahasrayoga, taila yog prakarana
Charmadala	1.Nalpamaradi taila, 2. Jeevanthyadi yamaka, 3.Yashtimadhu taila	1. Sahasrayoga, taila yog prakarana 2.Bhaishjyaratnavali Jwaradhikara 3.Bhaishjyaratnavali Kshudrarogadikara
Vipadika	Jeevanthyadi yamaka, Yashtimadhu taila	1.Bhaishjyaratnavali Jwaradhikara 2.Bhaishjyaratnavali Kshudrarogadikara
Sheetha pitta	Nalpamaradi taila	Sahasrayoga taila yog prakarana
Dadru	1.Chakramarda taila 2.Eladi taila	2. Sahasrayoga taila yog prakarana
Darunaka	1.Durdura patradi taila 2.Triphaladi taila	1.Sahasrayog taila yog prakarana / Arogyarakshakalpadrum 2. Sahasrayoga taila yog prakarana
CNS Conditions	Taila	Reference
Arditha ()	Karpasasthyadi taila	Sahasrayoga taila yog prakarana
Pakshagata()	1.Ksheerabala taila, 2.Mahanarayana taila, 3.Dhanvantaram taila	1.A.H. Vatshonita chikitsa 2.Bhaishjya ratnavali Vatavyadhi
Pangu, Khanga	Sahacharadi taila	A.H.Chi. 29/66-68

Erb's palsy	Bala ashwagandha lakshadi taila	Sahasrayoga taila yog prakarana
Cerebral palsy	1.Prasarini taila, 2.Mahamasha taila	1. Sahasrayoga taila yog prakarana 2.Bhaishjya ratavali Vatavyadhi prakarana
Mamsagata vata	Mahamasha taila	Bhaishjya ratavali Vatavyadhi prakarana
Down's syndrome	Brahmi taila	Ayurveda sara samgraha Taila prakarana
ADHD, Autism	Brahmi taila	Ayurveda sara samgraha Taila prakarana

6. Duration and Frequency:

• Recommended duration for the procedure

Newborn/Preterm Abhyanga
 Neonate Abhyanga
 Infants Abhyanga
 Abhyanga of older children (1-16 year)
 Newborn/Preterm Abhyanga
 10 -15 minutes
 20 minutes
 30 - 40 minutes

• Frequency/repetitions based on age

- > Preferably morning hours (after 8am)
- For pre procedure for *Vamana* or *Virechana* early morning hours
- ➤ Navajata Abhyanga after 10am
- Nishi Abhyanga between 7pm to 8pm

7. Post-Procedure Guidelines:

- > Diet and activity guidelines
- > Diet: Initially after abhyanga, a liquid diet is preferable (to maintain the hydration status)
- ➤ Normal meals (light, easy to digest) can be taken after 20-30 minutes of the procedure.
- > Junk food/ Processed food should be restricted
- > Proper rest
- > **Avoid:** Vigorous play, exposure to cold and breeze
- > Allowed: Swedana (chosen by the attending physician)
- > Follow-up and monitoring
 - Depending upon the diseased condition

- > Adverse effects and management
 - Adverse effects- rashes, allergic reactions, burn
 - Symptomatic treatment
- > Any other specific information

8. Contraindications for Medications:

- List medications contraindicated for use in each age group- non processed oils (crude coconut oil, olive oil etc), mixture of 2-3 oils
- > Any other specific information

9. Precautions and Safety Guidelines:

- > Special precautions and safety measures to be followed
- The child's general condition should be favourable.
- The oil used should not be too cold or too hot.
- The temperature of the oil should be maintained throughout the procedure
- Oil should not be heated on direct heat source (should be indirectly heated like put in warm water bowel).
- After Sarvanga Abhyanga, the excess oil from the head should be wiped off.
- The oil from the soles also has to cleaned well to prevent fall.
- The child should be assisted to climb up and down the *Abhyanga* table.
- The child should not be left unnoticed on the *Abhyanga* table.
- The child should not be exposed for very long time (it leads to cold stress).
- Room warmers can be used to maintain the temperature of the room.
- Hygiene should be maintained.
- Soiled lenins should be cleaned and changed after each patient.
- Massuer's general health condition should be good.
- Massuer should be groomed well by trimming the nails, avoid fancy accessories, use of perfumes.
- Massuer should strictly avoid using electronic gadgets during the procedure.

• Knowledge of a child's medication use:

For interactions between medications and Abhyanga, classes of medications like antiinflammatory and analgesics, muscle relaxants, clot management, antidepressants, anxiolytics, and diabetes management should be kept in mind.

- In most of the cases, unconventional massage techniques may be responsible for adverse outcomes.
- > Any other specific information

10. Documentation Protocols:

- Parameters to be documented for the procedure
- Follow-up notes
- Any other specific information

*JUSTIFICATION FOR AGE CONSIDERATION

Justifications for considering separate age groups when standardizing paediatric Panchakarma therapies:

Infants (0-1 year)

- Immature digestion, absorption and elimination systems
- Developing immunity and higher risk of adverse reactions
- Require lower dosage of medications
- Gentle therapies indicated in first year of life

Toddlers (1-3 years)

- Transitioning digestion, still sensitive
- Limited communication skills to express issues
- Procedure cooperation and positioning challenges
- Mild-moderate therapies based on dosha imbalances

Preschoolers (3-5 years)

- Improvement in digestive capacity
- Better compliance with procedure instructions
- Can communicate discomfort during therapy
- Age appropriate medicated oils and decoctions

School-age (6-12 years)

- Closer to adult-level digestion and elimination
- Cooperative and can follow preparatory instructions
- Withstand procedures of longer duration

Adolescents (12-18 years)

- Resemble adults in terms of physiology
- Higher communication, cooperation during procedures
- Require therapies catered to hormonal changes

The different developmental stages, communication ability, physiological maturity and medication tolerance based on age justifies separate guidelines customized for each paediatric age group during Panchakarma.

Points to be focused while preparing the SOP for different Panchakarma procedures in pediatric practice - *Snehana* and other *Bahya* Procedure

- 1. If powder is used for *Udvartan* before *Snehana* Powder size or sieve size required and ground material required
 - *Udwartana* powder used in SDMCAH, Hassan (all particals through sieve number 10 and 30% passes through 44) so it comes under the category of course powder.

(For coarse powders, all the particals should pass through sieve number 10 and not more than 40% should pass through number 44 sieves)

• Coarse powder: 10/44

• Moderately coarse powder: 22/60

• Fine powder: 85

• Very fine powder: 120

- 2. Alterations in the procedure as per *Parkriti* of the child, Individual constitution of the child
- 3. Common drugs Yoga's are used as per some of the common pediatrics disorders in which Bahya procedures are indicated.
- 4. Shelf life of the *Yogas* to be used
 - Oil- 3 years (drug and cosmetic act)^{vii}, 16 months^{viii} (Sharangadhara)
- 5. Probable mode of action of each procedure
- Sneho Anilam Hanti^{ix}
- Vata Shamaka properties of Sneha
- Sneha have opposite Gunas of Vata
- Vatanulomana is first, Samyak Snigdha Lakshana
- Helps in proper *Gati* of *Vata*
- Bahya Snehana
- Drugs undergo Pachana by Brajaka Pitta
- Virya of drugs are absorbed through Romakupa
- Circulates all over the body
- Nourishment of *Dhatus*
- Dosha Shamana

References:

ⁱ Caraka Samhitā - 'Āyurveda Dipikā' Commentary of Cakrapānidatta, edited by Vaidya Jadavaji Trikamji, Chaukhambha Surbharti Prakashan, Varanasi, Edition reprint, 2011; Charaka sutra chpter 5 verse no. 81-89

ⁱⁱ Vagbhata. Ashtangahridayam, Sutrasthana, with commentaries sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri. Varanasi: Chaukhamba Surbharti Prakashan; Sutra sthana, Chapter 4

iii Caraka Samhitā - 'Āyurveda Dipikā' Commentary of Cakrapānidatta, edited by Vaidya Jadavaji Trikamji, Chaukhambha Surbharti Prakashan, Varanasi, Edition reprint, 2011; Charaka sutra chapter 6 verse no. 14 and 20

^{iv} Vagbhata. Ashtangahridayam, Sutrasthana, with commentaries sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri. Varanasi: Chaukhamba Surbharti Prakashan; Sutra sthan Chapter 18, verse 59; 2017

^v Vagbhata. Ashtangahridayam, Sutrasthana, with commentaries sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri. Varanasi: Chaukhamba Surbharti Prakashan; Sutra sthana, Chapter 2, verse 19; 2017

Acharya Sushruta, Sushruta Samhita, Chikitsa sthana, chapter 13, verse 8, Hindi translated by Shri. Ambika Dutta Shastri. Varanasi: Chaukhambha Sanskrit Sansthan; Reprint, 2014; 80 Chikitsa sthan chapter no. 24 verse no. 35-37^{vi}

vii The Drugs and Cosmetics' Act, 1940, Professional book publisher, Delhi, 2020, Drugs and Cosmetics Rules 1945, R-161B, pg. no. 210, 211.

^{viii} Sharandhara Samhit, Dr. Bramhananda Tripathi, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2016, Purva Khanda 1/5

^{ix} Caraka Samhitā - 'Āyurveda Dipikā' Commentary of Cakrapānidatta, edited by Vaidya Jadavaji Trikamji, Chaukhambha Surbharti Prakashan, Varanasi, Edition reprint, 2011; Siddhi sthana chapter 1 verse no.7

Swedana

- 1. Therapy/Procedure Name: Nadi Swedan
- 2. Age Group:-1-18 years

3. Indications and Contraindications:

Indications: Pratishyay, Shwas, Kaas, Hikka, Angamard, Vishwachi, Khalli, PrushthakatigatVaat, Sthir-KathinKushtha, Rajayakshma,Vatvyadhi, Ekangvaat, Arthritis, Bursitis, Frozen Shoulder, Back Pain, Obesity, Neck Pain, Sprain, Amdosh, Vatkantak, Contractures.

Contraindications :- Raktapitta, Atisaar, Madhumehi, Pitta prakruti, Vidagdh, Andkoshvriddhi, poisoning, fatigue, unconscious, hungry, fatty, thirsty, anger ,anxiety, Anaemia, jaundice, Ascitis, Indigestion, Obese, Vatrakta (gout), Visarp, Kushtha, After intake of milk/curd/sneh, After Virechan procedure, Rectal prolapse, During Menses.

4. Pre-Procedure Preparation:-

- a) Patient should evacuate bowel and bladder before procedure.
- b) Consent/ Assent and Counselling of parents/children.
- c) **Ideal room condition-** *Nivata Sthana* (The patient (or person) should be made to rest in place devoid of breeze, facing east or north.), Suitable sitting arrangements as per the affected part. Comfortable room temperature at 27-28⁰ C
- d) **Well calibrated instrument**for monitoring steam pressure, water level and Temperature.
- e) Abhyanga-Advised as per condition
- f) Avarana- The afflicted part of the body subjected to Abhyanga should be wrapped with thin, clean cloth so that the part is not directly exposed to the steam. (Ka. Su. 23/38)
- g) Medicines usedkwath: Erand, Giloy, Shigru, Ashmantak, Shobhanjan, Vasa, vanshpatra, Karanj Patra, Ashmantakpatra, Surasa, Dashmool, Laghu / Brihat Panchamool, Gomutra, Kanji, Dadhi, Mansaras. (Ch. Su. 14/29)
- *h)* **Preparation of pottali:**it is advise to use the medicines in the form of bolus / pottali to avoide blockage in Naadiswedan yantra.
- *i)* **Monitoring Vitals:**Check Temperature, Pulse, RR and BP before and after procedure.

5. Procedure Details:

- a) Allow the initial water droplets to separate from the steam to prevent burns.
- b) Next, gently guide the steam nozzle towards the specific area of the body prepared for the sudation therapy and administer the steam.
- c) Ensure that the steam tube is not stationary but is moved systematically across the intended treatment area to evenly apply the sweating therapy (steaming).

6. Duration and Frequency:

- a) 5-15 minutes/ until proper sweating occurs/ as needed.
- b) It involves 7- 14 sitting according to age, severity of disease, prakrati of child and weather conditions.

7. Post-Procedure Guidelines:

- a) Cleaning of sweat with dry sterile linen.
- b) Patient is allowed to take wait/ rest for few minutes in therapy room and then he may be allowed to take bath with Luke-warm water after at least 1 hr.
- c) For cleaning the oil instead of the toilet soap, Bengal gram flour should be used.

8. Contraindications for Medications:

Use Atiushna- tikhna medicines cautiously like Arka and dhattur.

- 9. Precautions and Safety Guidelines:
- a) **Assess individual constitution** (Prakriti) and disease condition to decide intensity of steam.
- b) **Timing and Frequency:** In the morning or early evening, and the frequency should be determined as per the disease condition.
- c) **Hydration:** Make sure to stay well-hydrated before, during, and after Nadi Sweda. The steam can cause sweating, and proper hydration is essential to prevent dehydration.
- d) **Temperature Regulation:** Ensure that the steam's temperature is comfortable and not too hot to avoid scalding or burns.
 - i. Ensure that the steam tube is not stationary but is moved systematically across the intended treatment area to avoid burns.
- e) Duration: The duration of Nadi Sweda should be limited to the recommended time. Prolonged exposure to steam can lead to excessive sweating, potential discomfort, burns.
- f) **Avoid Food:** Do not undergo Nadi Sweda immediately after a heavy meal. It is best to wait at least 1-2 hours after eating before the treatment.
- g) **Rest Afterward:** After the treatment, take some time to rest and relax. Avoid strenuous physical activity, cold exposure immediately following Nadi Sweda.
- h) **Individual Sensitivity:**In case the patient is sensitive to heat and steam and experiences discomfort or dizziness during the treatment. Monitor vitals. The consultant can then make necessary adjustments or halt the treatment if needed.
- i) Allergies and Sensitivities: Collect informationabout any allergies or sensitivities to herbs or other substances used for swedana.
- j) **Diet:** Avoid Curd, Ice cream, cold drinks, junk food and processed food.
- k) **Rescue medicines:**Keep medicines ready for treatment of scald burns and other complications.

Common Complications and their management:

- **Pitta prakop/ Daah:** ShatdhautGhrita, Chandanadilep, Aloe-vera, Sutshekharras.
- Murchha: Drakshapanak, Praval and Mukta pishti.
- **Fatique/ Trushna:** Drakshapanak.Khanda sharkar with Milk, maintain hydration,, Shital Manth, Shrutshitjal, Shadangpaniy
- Scald/ Burn: ShatdhutGhrita, Jatyadi Taila, Padmakadi Taila,
- **Grishma rituparicharya:** Madhur- shit-drava-snigdhaannapan, Shital Manth, Shrutshitjal, Lavan-Amla-Katu-Ushna varjya, sleeping in moon light, Chandanadilep, etc.

10. Documentation Protocols:-

Demographic data

Date	Time and duration	Medicine for swedana	Vitals(Temp, Pusle, RR BP) Before and after	Remarks

11. References:

- 1. Ch.Su.14/43)
- 2. Panchakarma illustrated, by Dr.Shrinivasa Acharya, chaukhambha publishing house, reprint 2009.

- 1. Therapy/Procedure Name: -Shashtika Shali Pinda Sweda
- 2. Age Group:-1-18 yeras
- 3. Indications and Contraindications:

Indications:-

- *Prakriti* Suitable for <u>vata</u>, <u>vata-pitta</u> and <u>tridosha</u>constitutions,
- Dosha Alleviates Vata Dosha as well as Vata-Pitta
 Disease -
 - 1. Used for all types of 'vata' diseases, in general.
 - 2. stiffness of joints and muscles.

Diseases/specific indications

- a) Paralysis (Pakshaghata) or Paresis, e.g., Post Polio Paralysis.
- b) Monoplegia (*Ekangavata*) and Hemiplegia.
- c) Brachial plexus injuries, e.g., Erb's palsy.
- d) Facial palsy, Cerebral palsy, Peripheral neuritis.
- e) Contractures (sankocha) or reduced range of movement at joint.
- f) Muscular Atrophy (*Mamsashosha*), DMD and other degenerative muscle disorders or Myopathies, down syndrome.
- g) Emaciation (*shosha*), Tendinitis, Osteoarthritis, Juvenile Rheumatoid Arthritis, Multiple sclerosis,

Contraindications:-

- a) Kapha constitution persons
- b) Isolated kapha and ama associated conditions
- c) Suffering from obesity, diabetes, severely emaciated, low weight, fever, URI, Diarrhea, acute inflammatory condition with pain sensation.

4. Pre-Procedure Preparation:

- a. Consent/ Assent and Counselling of parents/children.
- **b.** MonitoringVitals:Check Temperature, Pulse, RR and BP before and after procedure.
- c. Proper examination of patient and disease (Dashvidha and Asthavidhapariksha)
- d. First 3 days Deepana Pachana Vatanulomana (malshodhana)
 - i. Drakshsava / Arvindasava / Anulomak drugs after meals
 - ii. Erand sneha at bed time (Dose ½ to 2 tsf as per age and body weight)

- iii. Udvartana / udgharshana kolakulathadichurna for 10 mins in pratiloma krama
- e. Before taking breakfast Draksha 5 to 10pc as per age can be consumed (Ka.Su.23/12)
- f. Preparation of *Talam*: Mix 20-25 gm *Amalakichurna* in 50-70 ml *Takra* or water. Cook it on fire till thick and thereafter remove it from fire. Grind it to a smooth consistency and leave it overnight to cool by itself.
- g. Preparation of SSP

Ingredients

S.No	Material	Children
1.	Rice	100 gm
2.	Balamool/ Dashmool	125 gm
3.	Water	2000 ml
4.	Kwath	500 ml
5.	Milk	500 ml
6.	No. of Pottali	2
7	No. of therapist	2
8	Earthen pot, wide mouthed vessels, cotton cloth for pottli, twine, coconut leaves or cotton cloth	

- h. Preparation of Bala kwatha (Decoction)- Take 125 gm of Bala root, crush it and boil it with 16 times water (4 Liters), until one fourth (1L) remains. Filter it for further use.
- i. Preparation of Pottalis (boluses)- The prepared rice pudding is parted into two equal portions & each is kept in centre of the cloth pieces. Tie each one firmly in their respective cloth pieces (e.g. with a one meter rope), so as to formpottalis.
- j. Ask the patient to sit on table and shiro abhyanga followed by whole body with separate and suitable medicated oils for duration of about 15-20 min.

k. Thereafter, apply a rounded mass of 'Amalakikalka' paste (talam) sufficient enough to cover the anterior fontanelle region (Brahmarandhra) of the head of patient. Whole of this application should now be fixed in place with the help of a cloth/ bandage, tied in swastikabandhana Fashion (Cross shape bandage). ensuring that its knot comes in the temple region of patient.

5. Procedure Details:

- a) Ask/restrain the patient in lying down position on his back, on Abhyanga table.
- b) Place the two*pindas*' in the vessel containing *svedana* liquid (Milk + Kwath) and then keep it on stove.
- c) Each therapists must stand by each side of patients.
- d) Take out the pottali dipped in hot decoction & grasp it at the base of its stalk (near its knot) between the base of thumb & index finger of right hand; the rest of the fingers of therapist must be free to hold the belly of the rounded pinda, sqeezing it as & when needed during the procedure. Wipe off any dribbling liquid from the pinda.
- e) The therapist should check the pinda's temperature by touching it with the back of their hand to prevent burns.
- f) Both therapists should work in a coordinated way to ensure that the continuity of process does not break.
- g) To ensure a complete coverage of whole body, it should be performed in following seven postures of abhyanga, for about 3-5 minutes per posture.
 - 1. Sitting with leg extended
 - 2. Supine position
 - 3. Left lateral position
 - 4. Prone position
 - 5. Right lateral position
 - 6. Supine position
 - 7. Sitting with lower legs extended
- h) Move to the body, massaging each body part systematically, including the neck, shoulders, arms, chest, abdomen, back, and legs. Use long, sweeping strokes on the limbs and circular motions on the joints.
- i) Three basic maneuvers are done with pottali- touch, rubbing with pressure & squeeze.
- j) To maintain the temperature of the pottalies during the procedure frequently deep the pattalies into the prepared svedana liquid (Milk + Kwath)

- k) Now open the pinda bags and take out the remaining pudding and apply it on the body (anna lepa). Rub the remaining shali-shasti paste over the body with hands for five minutes.
- The paste of rice over the body can be easily wiped out with a cotton cloth or sponge

6. Duration and Frequency:

• Time duration per day -30 to 40 mins

Treatment Duration7- 14 sitting according to age, severity of disease, prakrati of child and weather conditions.

- During this period swedana may be carried out regularly or on alternative day depending upon the requirement
- Interval between 2 sitting 2 months

• As per prakriti—-

Pittaja – 7 or 8 sitting

Vatika - 14 days

Weather –

In summer -7-8 days

In winter days - 10 - 14 sittings

As per age —

- 1 3 years 7 8 days
- 3-5 years 10 days
- 6-18 years 14 day

7. Post-Procedure Guidelines:

- a) Now wipe off the above lepa from patient's body with the help of margins of a coconut leaf /eranda (castor) leaf/ a sterile towel. Also remove the Talam.
- b) Thereafter, sponge the patient's body with a sterile towel dipped in warm water so as the remove the oil.
- c) Finally, the patient is asked to take a luke warm water bath after 1-2 hours.

8. Contraindications for Medications:

9. Precautions and Safety Guidelines:

- a) **Assess individual constitution** (Prakriti) and disease condition to decide intensity of steam.
- b) **Timing and Frequency:**Typically in the morning and the frequency should be determined as per the disease condition.

- c) **Hydration:** Make sure to stay well-hydrated before, during, and after procedure. The steam can cause sweating, and proper hydration is essential to prevent dehydration.
- d) **Temperature Regulation:** Ensure that the pottali temperature is comfortable and not too hot to avoid scalding or burns.
- e) **Duration:** The duration of SSPS should be limited to the recommended time. Prolonged exposure to steam can lead to excessive sweating, potential discomfort, burns.
- f) **Avoid Food:** Do not undergo SSPS immediately after a heavy meal. It is best to wait at least 2-3 hours after eating before the treatment.
- g) **Rest Afterward:** After the treatment, take some time to rest and relax. Avoid strenuous physical activity, cold exposure immediately followinSwedaha.
- h) **Individual Sensitivity:** In case the patient is sensitive to heat and experiences discomfort or dizziness during the treatment. Monitor vitals. The consultant can then make necessary adjustments or halt the treatment if needed.
- i) Allergies and Sensitivities: Collect information about any allergies or sensitivities to herbs or other substances used for swedana.
- j) **Rescue medicines:** Keep medicines ready for treatment of scald burns and other complications.
- k) Therapist should be very cautious during the procedure as this procedure may cause severe injury or burns.
- 1) **Diet:** Avoid Curd, Ice cream, cold drinks, junk food and processed food.

m) Common Complications and their management:

- i. Shivering: VatnashakUshna Taila abhyanga and Guru Pravarn.
- ii. Pitta prakop/Daah: ShatdhautGhrita, Chandanadilep, Aloe-vera, Sutshekharras.
- iii. Murchha: Drakshapanak, Praval and Mukta pishti.
- iv. Fatique/ Trushna: Drakshapanak.Khanda sharkar with Milk, maintain hydration,, Shital Manth, Shrutshitjal, Shadangpaniy
- v. Scald/ Burn: ShatdhutGhrita, Jatyadi Taila,Padmakadi Taila, Grishma rituparicharya: Madhur- shit-drava-snigdhaannapan, Shital Manth, Shrutshitjal, Lavan-Amla-Katu-Ushna varjya, sleeping in moon light, Chandanadilep, etc.

10. Documentation Protocols: -

Date	Time and duration	Medicine for swedana	Vitals(Temp, Pusle, RR BP) Before and after	Remarks

11. **References:**-Panchakarma illustrated, by Dr.Shrinivasa Acharya , chaukhambha publishing house, reprint 2009.

- 1. Therapy/Procedure Name: -Patra Pinda Sweda
- 2. Age Group: -6-18 years/ as per condition
- 3. Indications and Contraindications:

Indications: -

- Dosha
 - o more significant effect in kaphaj and vatakaphaj
- Prakriti
 - Suitable to *yata*, *kapha*, *yata-kapha* and *tridosha* constitutions

Diseases

- a) Patient experiencing muscle and joint pain, stiffness, or inflammation.
- b) Degenerative and autoimmune disease like Rheumatoid Arthritis (Amavata)
- c) Neurological disorders like paralysis, hemiplegia, facial paralysis and peripheral neuritis to improve nerve function and muscle strength.
- d) Musculo-skeletal pain like Knee injury (Anterior cruciate ligament injury, Torn meniscus etc), sprain,

Contra-indications of Patra Pinda Sweda -

- a) Fractures
- b) Fever
- c) Severe inflammation
- d) Other common contraindications of swedana.

j) Pre-Procedure Preparation:-

- Consent/ Assent and Counselling of parents/children.
- MonitoringVitals:Check Temperature, Pulse, RR and BP before and after procedure.

1. Preparation of the patra-pinda

Ingredients:

S.No.	Material	Child
1	Leaves of Eranda (Ricinus communis), Nirgundi (Vitex negundo), Krushna Nirgundi, amleeka (tamarindus indicus), shigru (Moringa olifera), karanja (Pongamia glabra), etc –	150-250g
2	Powders of Shatahva and Methika	20g each

3	Saindhava (rock salt), Haridra, rasona	5-10g each
4	Lemon sliced	1-2
5	Dashmooltaila, Eranda taila, other vataghnataila	As required

- a) The herbal leaves are cut into small pieces and then is taken in a vessel of round bottom. About 30-50 ml of oil is added to this. With continuous stirring the leaves are then fried to make it plaint. This fried leaves is used for the preparation of packs.
- b) The cotton cloth is spread on the working table. About 150-250 grams of fried leave are placed on the cloth. The free corners of the cloth are approximated to cover the leaves.
- c) The free ends of the cloths are folded in its middle. And then is tied with a cotton thread to make a rounded pack with handle. In this way two packs are prepared.
- **d) Heating the packs:** In a vessel 100 ml of oil is taken and is heated. The pottalies are placed dipped in the oil. The packs should be continuously moved stirring the oil. If the herbal pack is not moved, there is every possibility that the portion of the herbal pack in touch with the heated vessel gets burnt. When the pack is properly heated it is taken out for sudation procedure.

4. Procedure Details:-

- a) Ask/restrain the patient in lying down position on Abhyanga table, on his back.
- b) Place the two*pindas* in the vessel containing and then keep it on stove.
- c) Each therapists must stand by each side of patients.
- d) The poultices are heated in medicated oil until they become comfortably warm but not scalding hot.
- e) Take out the pottali& grasp it at the base of its stalk (near its knot) between the base of thumb & index finger of right hand; the rest of the fingers of therapist must be free to hold the belly of the rounded pinda during the procedure. Wipe off any dribbling liquid from the pinda.
- f) To start the procedure, the therapist should first verify the temperature of the pottaliby gently touching it against the back of their hand. It should not be directly placed or moved over the patient's body to avoid the risk of burns. Afterward, the pottali with the appropriate temperature is used for

- Swedana.Both therapists should work in a coordinated way to ensure that the continuity of process does not break in all 7 positions of Abhyanga.
- g) Use long, sweeping strokes on the limbs and employ circular motions on the joints based on the specific area being treated.
- h) To maintain the temperature of the Patra-pindapottaliduring the procedure frequently warm the Patra-pinda into the medicated oil.
- i) When Patra-pindalooses its temperature completely or the temperature in the pack equalizes with that of the body temperature. Therapist should place the Patra-pinda on above and beneath the body part to be treated. The Sudation is then continued by taking another pack of herbal leaves which is kept in the vessel for heating in the similar manner. In this way sudation is continued for about an 3-5 min in each position.
- j) The prepared Patra-pinda and oil may be used for 2-3 sessions.

5. Duration and Frequency:-

- a) A single session should last from 25-35 min or until sweating is observed in the patient.
- b) The procedure should be done for 7-14 days or as per the disease condition

7. Post-Procedure Guidelines:-

Patient is asked to take rest for 10-15 minutes, and the part treated with Patrapindasveda maybe cleaned with sterile towel soaked in warm water. For removing the oil, one can use the Bengal gram flour instead of toilet soap.

8. Contraindications for Medications:-

Atiushan and tiksnamecienes like Ark, Dhattura are advised to be avoided.

9. Precautions and Safety Guidelines:

- a) There is risk of causing burns during the procedure, therefore every care should be taken to prevent over heating.
- b) The therapist should confirm the temperature in the sand pack by touching the same to his body at every step.
- c) Diet: Avoid Curd, Ice cream, cold drinks, junk food and processed food.
- d) **Rescue medicines:** Keep medicines ready for treatment of scald burns and other complications.

Common Complications and their management:

- Pitta prakop/ Daah: ShatdhautGhrita, Chandanadilep, Aloe-vera, Sutshekharras.
- Murchha: Drakshapanak, Praval and Mukta pishti.

- Fatique/ Trushna: Drakshapanak.Khanda sharkar with Milk, maintain hydration,, Shital Manth, Shrutshitjal, Shadangpaniy
- Scald/ Burn: ShatdhutGhrita, Jatyadi Taila, Padmakadi Taila,
- **Grishma rituparicharya:** Madhur- shit-drava-snigdhaannapan, Shital Manth, Shrutshitjal, Lavan-Amla-Katu-Ushna varjya, sleeping in moon light, Chandanadilep, etc.

10. Documentation Protocols:

Date	Time and duration	Medicine for swedana	Vitals(Temp, Pusle, RR BP) Before and after	Remarks

11. Complications and their mangement:

12. References:-

- 1. https://www.easyayurveda.com/2016/01/29/patra-pinda-sweda-ela-kizhi/
- **2.** Panchakarma illustrated, by Dr.Shrinivasa Acharya , chaukhambha publishing house, reprint 2009.

Vamana Karma

1. Therapy/Procedure Name: VAMANA

Vamana is a process in which vitiated *Dosha* are expelled through the upper route i.e. mouth. It is meant to eliminate the vitiated *Dosha* especially *KaphaDosha* accumulated in *Amashaya* and *Urdhva Shareera*.

2. Age Group: *

- Infants (0-1 year): In infants Vamana karma is used as a Paricharya for Navajatato cleanse Ulva(swallowed amniotic fluid). Sadyo-Vamanacan be Performed in Atyayika or KaphajaStanya Dusti JanyaRoga.
- **Toddlers (1-3 years):** Fit for *Sadyo-Vamana* mostly in *Kapha, Kapha-Pittaja* and *Ajeerna*.

Note: In this categories *Vaman* is done with single purpose like to cleanse *Ulva* or *Stanya Dushti Janya Vikara* as an immediate remedy to relive the condition. So the actual *Shodhan* effect is less in this age group.

- **Pre-schoolers** (3-5 years): Fit for *Sadyo-Vamana* especially in *PranavahaSrotoVikara*, and *Ajeerna*.
- School-age (6-12 years): Fit for both Sadyo-Vamana and classical Vamana
- Adolescents (12-18 years): Classical Vamana.

3. Indications and Contraindications:

Mentioned in Ka. Si. 7/3 and 8, A.h. su. 18/1-6, Ch.si. 2/8-10, Su.chi. 33/14,15,18

कफज्वरारुचिमुखवैरस्यकफप्रसेककफहद्रोगविसूचिकाकासश्वासगलग्रहगलशुण्डिकागलगण्डमालारोहिणिका-विदारिकाधोरक्तपित्तहल्लासप्रमेहहली (मक) स्कन्दग्रहस्कन्दापस्मारस्कन्दपितनैगमेषक्षीर-

गौरवक्षीरवृद्धिक्षीरघनत्वाजीर्णपरिकतिकाहल्लासशूलाटोपातिविरिच्यमानगरितविषपीताद्या वमनसाध्या इति ।। ३।। (Ka.Si. 7/3)

Indications

Infants: Kapha Dushita Stanya

In general:

- ➤ Respiratory disorders: Pinasa (chronic rhinitis), Kasa (cough), Shvasa (asthma), allergic conditions, chronic/recurrent upper & lower respiratory tract infections.
- ➤ GIT disorders: *Mandagni*(impared*appetite*), *Amlapitta*(acid peptic disorder), *Ajeerna*(indigestion), *Hrillasa*(nausea), *Aruchi*(tastelessness).
- > Skin diseases: Sitapitta, Udarda, Kotha(allergic skin conditions, urticaria etc), Kithiba (lichen), Sidhma(psoriasis), Charmadala (eczema), etc
- Endocrinal diseases: Galaganda (thyroid gland disorders), Prameha, inborn error of metabolism etc.

Psychological disorders: *Unmada* and *Apasmara*

Contraindications(Ka. Si 7/p.249)

......गैन्नोऽतिबालोऽतिवृद्धो गुल्मप्लीहोर्ध्वरक्तलोमव्यापत्कर्णरोगशिरः कम्पार्दितार्थावभेदकसूर्यावर्तरेवतीपौण्डरीकशकुनीपूतनामुखमण्डिकार्ताश्च न वाम्याः, अगर्भा गर्भकामा विवर्णक्षीरा स्रवत्क्षीरावैसर्पशोणिताशविषमाग्निकुष्ठश्चयथुश्चित्रोर्ध्वरक्तप्लीहगुल्ममधुमेहहलीमककामलापाण्डुरोगहृद्रोगकृमिकोष्ठापस्मारोप स्तम्भोदावर्तकफोन्मादविद्रधिश्कीपदयोनि (ka.si.7/8)

➤ Child with GIT bleeding, gastric/duodenal ulcers, poorly nourished child, dehydrated child, child with systemic infections and child with congenital heart diseases.

4. Pre-Procedure Preparation:

Guidelines for pre-procedure *Langhana/ Rukshana*: not required but *Mridu Langhana/ Rukshana* may be advised in *Kleda Pradhana* conditions.

- **Infants and toddlers:** Children in *Ksheerada* and *KsheeraannadaAvastha* are to be given full stomach breast milk and then *Vamana* is induced
- Children: Children in *Annada Avastha* should be given *Tanu Peya* (Liquid portion of gruel) with ghee for full stomach and then *Vamana* to be induced. Children are considered as oleated as their diet is predominant of milk and Ghee. Thus, *Snehapana* is not recommended

Pre-operative procedure can categorised as-

- A. Sambhar Sangraha (Material required)
- B. AturaPariksha (Examination of Child)
- C. AturaSiddhata (Preparation of the Child) Atur Siddhata can be categorised as for classical VamanaKarma for Sadyovamana. In Sadyovaman there is no need of Snehana orSwedana asPoorvakarma. We can use following steps for classicalVaman, it includes
 - i. *ManasaUpachara*(Counselling)
 - ii. Pachana, Deepan, Snehana and Swedana
 - iii. VamanaPurva BhojanaVyavastha
- D. Matra Nirdharana (Dose fixation)

A. Sambhar Sangraha (Material required)

- ✓ Large basin and medium size vessel
- ✓ Stalk of Erand (*Ricinus communis*) or *kamala nala*, rubber catheter, pair of gloves
- ✓ Measuring flasks and glass and Table spoon, weighing machine for measuring accurate drug
- ✓ Khalwa-Yantra
- ✓ Chair with arm rest, Cotton cloth or towel

- ✓ Luke warm water for cleansing purpose, ORS
- ✓ Glass test tubes, test tube stand, sulphur powder, sphygmomanometer, strips of pH paper, Stethoscope and thermometer, suction machine and nasogastric tube
- ✓ Drugs used for *VamanaKarma* and medicine for the management of complication

Selection of drug

- Drug classified as *Vamanopaga* and *Vamaka*
- ► Vamanopaga- Madhu, Madhuka, Kovidara, Karbudara, Nipa, Vidula, Bimbi, Shanpushpi, Sadapushpi, Pratekyapushpi. Madhu andSaindhava should be included in every Vamaka Yoga.
- According to *Dosha*
 - ➤ Kapha dominance MadanphalaKsheer-santanika, Pippaliwith luke warm water
 - ➤ Pitta Prakopa Patol, Vasa, and Nimba with cold water
 - ➤ Vatanubandha Madanphala with milk
- ► Vamaka Yogas we can use Vamaka drugs as per disease conditions suitable for Vamana as mentioned in classics. In Charak Samhita there is 355 Vamaka Yogas and 6 Vamaka Dravyas- (Ch. Kalpa 1)
 - ➤ Madanphala in all Roga
 - ➤ Jeemutaka –Jwara and Shvasa
 - ➤ Ikshvaku Kasa, Visha, Jwara
 - ➤ Dhamargava Kapha, AmashaygataVata
 - Kutaja Sukumar, Hridroga, Visarpa
 - ➤ Krutvedhana Kushtha, Pandu, Pleeha

Some GhreyaYogas are also mentioned in the classics

B. Atura Pariksha (Examination of Child)

- ✓ Child should be examined completely (Systemic examination)
- ✓ Check fitness for *Snehana*, *Swedana* and *Vamana*. Fitness of child based upon *Dushya*, *Desha*, *Bala*, *Kala*, *Vaya*, *Satva*, *Satmya*etc. of the child

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दूष्यं देशं बलं कालमनलं प्रकृतिं वयः|
सत्त्वं सात्म्यं तथाऽऽहारमवस्थाश्च पृथग्विधाः||६७||
सूक्ष्मसूक्ष्माः समीक्ष्यैषां दोषौषधनिरूपणे|
यो वर्तते चिकित्सायां न स स्खलति जातुचितु||६८||(A.H.Su. 12/67-68)
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✓ Vitals data – Blood Pressure, Pulse Rate, Temperature, Respiratory Rate etc. should be monitored before, during, and after procedure.

- ✓ Child should be checked for mental status and should be counselled for all procedures.
- ✓ It is essential to make sure that the child has cleared bowels early in the morning for classical *Vamana*
- ✓ Investigation Blood sugar, Lipid profile, CT, BT, Hb, Urine and stool examination, ECG, X-Ray chest can be done as per requirement for disease and Child.

Vamana Kala

- In SadharanaKala, preferably Vasant Ritu or during the Vyadhi Avastha
- In other seasons with artificially altering the atmosphere, if necessary
- In an auspicious day facing *Poorva*(East) or *Uttar*(North)*Disha*(Direction)
- In the morning, after proper digestion of previous day's food. Suitable time for children is 7.00 am to 9.00 am for *Vamana*.

C. AturaSiddhata (Preparation of the Child)

- i. Manasa Upachara (Counselling)
- ii. Pachana, Deepan, Snehana and Swedana
- iii. VamanaPurva BhojanaVyavastha (Diet)

i. ManasaUpachara (Counselling)

- ❖ *Vamana* is the process, which mainly depends upon the mental strength of the Child. So the main objective of *Manasopacara* is to keep the Child happy, stable, & calm.
- ❖ In the present day practice, there is erroneous belief about the process of *Vamana*. Child already has lot of wrong information received from other people. So counselling for child as well as for parents is required.
- ❖ So it is important to convince the Child about the details of *Vamana* and things to be followed. During *Vamana* process, Child is advised to concentrate on *Vamana* process, by keeping away the factors such as *Kama*, *Krodha*, *Lobha*, *Irshya*etc.
- ❖ Acharya Charaka also advocated to create, an atmosphere *by Svasthivachana, Bali, Homa, Mangala, Prayashchita*etc. before *Vamana* for well-being of Child and keeping him in good mental health throughout the procedure (Ca.Su. 15, Ka.1/14).

ii. Pachana, Deepan, SnehanaandSwedana

- Prior toSnehapana,Pachanaand Deepan-Karmashould be carried out with medicines like AjamodadiChurna, TrikatuChurna, Vidangaristha, Shankha Vati, ChitrakadiVati, and Panchakola Churna etc. according to condition of the Child.
- ❖ During Pachana and DeepanaChild is advised to take Laghu Ahar like Ragi, Rice Dosa, Krushara, Mudga Yusha, Suji Upma, Rice-Bhaat, Rasam-riceetc.
- ❖ The specific Sneha selected as per the condition (like VidaryadiGhrita, PatoladiGhrita, Indukanta Ghrita, DadimadiGhrita, ShatpalaGhrita, MoorchitaGhritawith Musta and Ajamoda etc.)should be given at the morning time (Shodhana Sneha Kala) for a period of 3 to 7 days or till appearance of SamyakaSnigdha Lakshanaaccessed through validated Samyak Snigdha Lakshanatools

Note: In gradings of SamyakaSnigdha LaskshanaAvara and Madhyama Snigdha Lakshanaare desirable for children. We can use Vicharana preparations for children like,Sneha with Manda, Snehawith milk, Tila-guda-milk shake etc. also we can add Saindhava, Madhuand GhritainGhritapreparation for quick absorption.

- ❖ *Snehapana* should be given in increasing dose pattern as per protocol.
- ❖ During*SnehapanaSnehacharya* should be followed.
- ❖ After AbhyantarSnehana we go for BahyaSnehana and Swedanafor this wecan use Taila mixed with Lavana followed by Nadi-Sweda, Sankara-Sweda, Vaspa-Sweda, Hasta-Sweda, Tapa-Swedato enhance liquification and mobilization of Kapha.
- ❖ After completion of *Snehapana*, and *Sarvanga Abhyanga*, *Swedana* one day rest should be given to child.

iii. VamanaPurva BhojanaVyavastha(Diet)

- ❖ **Diet during the days of** *Snehapana*: During *Snehapana*, Child is advised to take diet having *Drava*, *Ushna*, *Anabhishyandi* properties like *Daliya*, *Krushara*, *MudgaYusha* etc. The food must not have too unctuous material mixed in it. Also, it should not contain the articles having the property to provoke any other *Dosha(A.H.Su.16/24)*. Child should be advised to drink lukewarm water whenever needed.
- ❖ Diet for previous day of Vamana: The individual should be instructed to take food which aggravate Kapha Dosha such as milk, Krisara(Khichdi) made up of rice, Masha Payasa, meat soups of domestic animals, milk, curds, black gram, gingly, puddings and leafy vegetable rich liquid diet, sweets material like Shrikhanda, Jalebi etc. or Guda &KsheeraSevana does Kapha Utklesha. We can go for full day diet advice as in breakfast Child should take Idali with sugar, in lunch curd rice, at evening TilaLaddu and at night Masha Payasa or milk and rice with sugar.
- ❖ Diet just preceding to *Vamana* Karma: Just before starting *Vamana*, *Yavagu*Mixed with *Ghrita* can be given. However excess quantity of *Ghrita* should not be given. *Yusha+Sneha*also can be given.

D. Matra Nirdharana(Dose fixation)

While describing the process of *Vamana*, *AcharyaCharaka* told the dose of *MadanaphalaPippali*powder as the quantity of powder kept inside the fist of Child's own hand i.e. *AntarnakhaMushti Pramana* (Ca.Ka1/14). That can be standardised as 13-18 g approximately as adult dose but instead of this standardised dose we can use based on body surface area parameter and 1 % of total body surface area is the palm area and from this we can calculate the customised dose for each Child.

We can use following approximate dose of various Dravyasin Vamaka Yoga

Madanphala	Yashti	Vacha	Saindhava	Madhu
2-6 g	2-4 g	Upto 1 g	Upto 1 g	q.s.
		Note: not more than 1 g because it may cause complication		

5. Procedure Details:

5.1 Step by step procedure guidelines -

- 1) Position of Child
- 2) Akanthapana
- 3) Administration of Vamana-Yoga
- 4) Observation of the Child
- 5) Paricharak-Vruti
- 6) Assessment of Vega

1) Position of Child

- In the treatment room the client is asked to sit on a soft cushioned knee-high chair with arm rest and back support, facing east or north.
- Body is draped up to the neck with a clean cloth. This prevents the soiling of the client's cloth by the vomitus. Besides him, a towel is placed on a stool within his reach. Also, a mug withLuke warm water is placed in this stool that may be required for the client to clean his mouth and face during the *Vamana* procedure.
- In front of the Child *Vamana* table with properly adjusted height should be kept to collect the vomitus. This is the ideal position of the client for carrying out the *Vamana* procedure.

2) Akanthapana

To minimize the complication and enhance the *Vegas Akanthapana*need to be administered. Dravya Like *Ksheera, Ikshu-Rasa, Mudga Yusha, Dadhi*, etc can be used for this purpose. Quantity can be determined based on maximum satisfaction level of the Child

3) Administration of Vamana yoga

Vaamaka yoga can be administered after chanting the mantra

- ► VamanaMantra- (Ch.kalp. 1/14)
- ॐ ब्रह्मदक्षाश्विरुद्रेन्द्रभूचन्द्रार्कानिलानलाः|ऋषयः सौषधिग्रामा भूतसङ्घाश्च पान्तु ते| रसायनमिवर्षीणां देवानाममृतं यथा|सुधेवोत्तमनागानां भैषज्यमिदमस्तु ते'|
- All the *Dravya* administered for the purpose of *Vamana* should be lukewarm
- After administering *VamanaYoga*, we will observe the child watchfully for 1 *Muhurta* (48 minutes)
- If the *Vega* gets initiated with in this period, we should continue the *Vamana* by administering *Vamanopaga*liquids during the process.
- If *Vamana* yoga does not initiate spontaneously with in this period, we should initiate by doing *Talu Peedana* (tickling the palate with *Eranda nala* etc)

- Once initiated, continue the process by administering *Vamanopaga* liquid in between the *Vega*. For this one can use *Yashti Phanta*initially and *Lavanodaka* towards the end
- Long gap/ pause should be avoided in between *Vega*
- Total amount of liquid given to the client should be measured and is needed later on for the assessment of amount of vomiting.
- Child should be advised to swallow the *Vamana* yoga at a time without delay otherwise he gets nausea or vomiting

4) Observation of the child-

During Vamana process following observations should be made

Symptoms	Inference
 Lalata Sweda (Appearance of sweating on forehead) 	Doshas are liquefied
 Romaharsha (horripilation) Adhmana (fullness of abdomen) Praseka and Hrullasa (nausea and salivation) 	 Doshas moving towards <i>Amashaya</i> Enters the <i>Amashaya</i> <i>Doshas</i> moving towards mouth

5) Paricharak Vritti (role of attendant)

During the entire *Vaman* process *Paricharaka* should stand beside the child and supporting him throughout the procedure. When patient vomits *Paricharaka* should hold the forehead and with another hand rub over the back in upward direction. If *Vegas* are not coming properly as per advice of *Vaidya*, *Paricharak* should exert gently pressure over the below the umbilicus to enhance the *Vegas*.

Observe the *Vega* for the projectile nature of *Vega, Kapha Chheda*, instances of blood stain, presence of *Pitta, Yavagu, Aushadhi*etc

6) Assessment for Samyak Shuddhi-

Check for Kapha Chheda, Pittanta, Pitta Darshana, AushadhaNirgamana

Observe for Laingiki, Manikiand Vaigiki Shuddhi Lakshana

Finally ascertain the Shuddhi Prakaraas Pravara, Madhyama and Avara

VaigikiCriteria-

- ► *Vega* Projectile in nature
- *Upvega* can be considered when less projectile vomiting in clusters with less quantity being expelled in each bout or mere retching

*Maniki*Criteria –

■ Maniki Shudhhi index (M.S.I.): volume inside volume input 100

So more M.S.I. will be regarded as the *Avara Shuddhi* and less will be *Pravara* type of *Shodhana*.

Antiki Criteria-

- When the symptoms denoting the elimination of *Pitta* in the vomitus, the sample of vomitus are taken in test tubes and checked on the pH scale
- pH scale ranging from 2 to 10.5 is used for the purpose
- Initially pH of vomitus ranges between the acidic values when pitta is coming out, pH of vomitus will be alkaline so we can stop here.

Laingiki Criteria

Check for features suggestive of Samyak Lakshanaof Vamana

5.2 Modifications required compared to adults

- Allow child to see parents when required or allow parent to attend procedure of *Vamana* to build the confidence in child
- Can keep talking to child with nice stories or songs to get maximum cooperation
- Sippers can be used to administer VamanaYoga

6. Duration and Frequency:

Recommended duration for the procedure

Normally time required to complete the procedure of *Vamana* is 2 to 3 hours

Frequency/repetitions based on age: once treatment is enough. Exceptions are auto immune disorders, perineal asthma and allergies affecting *PranavahaSrotas*leading to *Kasa, Tamaka Shvasa, Charmadala* etc might require once in a year or as and when the condition gets triggered.

7. Post-Procedure Guidelines:

- 1. PaniPada Prakshalanawith Sukhoshna Jala, Mukha PrakshalanawithSheeta Jala
- 2. Kavala with Sukhoshna Saindhava Jala
- 3. *Dhumpana* with *Haridra Varti* with *Ghee* (inhalation of medicated smoke)
- 4. Pariharya Vishaya (dietetic and behavioural restriction)
- 5. SamsarjanaKarma
- 6. Follow up and monitoring
- 7. Adverse effect and management
- 1.PaniPada Prakshalana With Sukhoshna Jala, Mukha Prakshalana withSheeta Jala
- **2**. *Kavala* with *Sukhoshna Saindhava Jala* After the procedure of *Vamana* child is asked to gargle with luke warm salt water for three times
- **3.** *Dhumpana* (inhalation of medicated smoke)

The child is advised to take *SnaihikaDhuma* with *HaridradiVarti* prepared with *Haridra Churna* more quantity of *Ghrita*

All these procedure will aid in removing the residual dosha

4. Pariharya Vishaya (dietetic and behavioural restriction)

Activities (Su.su.9/3-4 and ch.su.15/15)	Diet(ch.su.15/15)
 Loud speech Sitting in one position for long time Continuous standing Long walk and ride Exposure to excess cold, heat or wind Sleeplessness in night or daytime sleep Suppression of urges or provocation of urges 	 ViruddhaBhojana Diet during Ajirna(Indigestion) ApathyaBhojana(Prohibited food habits) Pramita Bhojana(Selective Diet) Excessive diet Guru Bhojana (Heavy diet) Vishamshana(Irregularity in quantity and time)

5. SamsarjanaKrama – (Ch.su 15/6)

- On the day of *Vamana* or as and when the child feels hunger, one should start *Samsarjana Karma* preferably *Peyadi Karma*. If there is suspicion of incomplete evacuation of *Dosha*, go for *TarpanadiKarma*. Base on the *Shuddhi Prakara*, duration of the *Samsarjana* will be decided
- ► There is 3 types based on purification
 - *Pravara Shuddhi* 7 days
 - *Madhyama Shuddhi* 5 days
 - *Avara Shuddhi* 3 days

Modifications:

Children may not comply with classical *Samsarjana Karma*. In such situation it can be substituted with any light liquid diet or preparations of *Laja*

6. Follow-up and monitoring

Follow up after one week after procedure to assess Agni and start Shaman Snehaor Rasayana is appreciable

7. Adverse effects and management

(Ch. Si. 6/29-79 and Su. Chi. 34/4-20)

Vyapada	Management
Adhmana	Abhyang, Swedana, Phalavarti, Basti, Hingwadi Yoga
Parikartika	Langhana, Pachana, Madhur KsheerBhojana
Parisrav	Vaman And Tikshna Virechana
Gatragraha	Snehana., Swedana, Vatahara Karma
Jivadana	PittaharaKarmaraktapana, Kamdudha Rasa withMoktikaPravalaPishti, BollabadhaRaa, Vasavaleha
Ayoga	Vamana
Atiyoga	Abhyanga, Sheetal Jala Snan, Avaleha Prayog, KshirBhojana
Stambha	Langhan, Pachan, Agnitundi Vati, Hingwadi Churna
Klama	Langhan, Pachan, Snigdha Dravya, Tikshna Shodhana
AvasheshaAushadha	Ushna Jala
JeernaAushadha	Tikshna AushadhaPrayoga

Practically seen complications are pain and burning sensation in throat, abdominal pain, distention of abdomen, diarrhoea, persistent vomiting, dehydration, aspiration during vomiting, fresh bleeding, weakness, dryness of mouth, cramps, fainting and giddiness. Accordingly, treatment can be done.

Persistent vomiting:Powdered *Ela* with sugar frequent administration

Blood-stained vomiting: If vitals of the child are normal, continue vomiting till *Kapha Chheda*. Then administer some *RopanaGhrita* like *TiktakaGhrita* for application

Dehydration:Frequent sips of ORS

Cramps: Abhyanga and Swedana

Fainting: Sprinkling of hot water, if not useful then cold-water sprinkling

Aspiration: Immediately do mouth suction followed by nasopharyngeal suction. Stop the procedure immediately and shift the child to emergency care

8. Documentation Protocols:

1. Disease related:

- ✓ Complete case history and clinical examination of the child
- ✓ Minimum necessary investigations

- ✓ Counselling the child and parent
- ✓ Informed assent/consent

2. Procedure related

- ✓ Pachana Deepana
- ✓ Documentation of entire process from *Pachana* till *Samyak Lakshana* of *Vamana*, assessment of complications
- ✓ Assessment of Rukshana, Samyak Snigdha Lakshana, Utkleshana, Vamana, Samyak Lakshana of Vamana, Agni Pareekshashould be documented with validated tools for assessment
- ✓ Follow up after 1 month to document if any late onset adverse reactions

11. Reference books and publications:

- Kashyapa samhita
- · Charak samhita
- Sushruta samhita
- Bhel samhita
- Sharangdharsamhita
- Ashtanghridayam and Sangraham
- Acharya's text book of Kaumarbhritya by Dr Shrinidhi kumar Acharya
- Chavali's Principles and practice of Paediatrics in Ayurveda by Dr. C.H.S. Shastri, Dr. K.D. Chavali, Dr. Anita Gayatri, Dr. Vishwanath Chhavali, published by ChaukhambaVishvabharati Varanasi. Reprint:2018
- Text book of Bala rogaKaumarbhritya by Dr. Brij Mohan Singh
- Principles and practices of Panchkarma by Dr. Vasant C. Patil
- sachin C. et.al, Jamnagar, 2003
- Physiological and biochemical changes with Vaman procedure, Bharti gupta et.al. Ayu.2012 PMID 23723640

Virechana Karma

- 1. Therapy/Procedure Name: Mrudu Sadya Virechana / Snehana Purvaka Virechana (classical)
 - Most commonly used *Shodhana* in adults
 - Simple procedure, more options of drug, *Kalpana* and choices of mode of administration
 - At village, traditionally, Virechana given in Sadyojata— Castor oil licking

पक्वाशयगते दोषे विरेकार्थं प्रयोजयेत्। Cha. Su2/10

पित्तंवाकफपित्तंवापित्ताशयगतंहरेत्। स्रंसनं------ Cha. Ci 3/172

व्याकुलानसन्निपातोत्थान्कफपैत्तिकान्संसृष्टान्कफमुलांश्चसंसनेनाभ्युपक्रमेत् ॥ Ka.Si.7

2. Age Group: *

- Infants (0-1 year)- Recommended for MruduSadyavirechana /Kosthashuddhi
- Toddlers (1-3 years)- Recommended for Mrudu Sadyavirechana /Kosthashuddhi
- Pre-schoolers (3-5 years) Recommended for *MruduSadyavirechana* /*KosthaShuddhi*/usage of*Bhediniya-Aahar*
- School-age (6-12 years) Recommended for SnehanaPurvakavirechana
- Adolescents (12-18 years) Recommended for SnehanaPurvakavirechana

3. Indications and Contraindications:

List of indication and contra-indication for the therapy /procedure in paediatrics patients-

List indications¹

- Vibandha (Constipation),
- *Kamala* (Jaundice),
- Chronic fever
- *Amlapitta*(Dyspepsia)
- Urticaria
- Eczema,
- Shvitra(Leukoderma)
- Visarpa
- Vatarakta
- Gulma
- Allergic dermatitis etc.

- *Krimikoshth*(Worm infestation),
- Pakshaghat (Hemiplegic),
- Arbuda (Tumour),
- TamakShwasa (Bronchial Asthma),
- *Galganda* (Goitre)
- Allergic bronchitis
- Pittavrita Vata
- Pitta-Kapha-Rakta-Meda-AvritaVata

List contraindications²

- Krisha (Emaciated patients)
- Balashosha(Malnutrition)
- Pulmonary Tuberculosis, Intestinal tuberculosis
- Hernia
- IBS
- Ulcerative colitis
- Any other specific information
- Acute fever
- Hridroga (Cardiac disorders)

GENDER: Both genders

- Hemophilia
- Lower GID Bleeding (AdhogaRaktapitta)
- Raktarsha
- Severe Anemia
- Amatisara(Acute Diarrhoea)
- *Ajeerna* (Indigestion)
- *Karshya*(Severe eamciation)
- Kevala Vatavyadhi

WEIGHT OF BABY: Matra of Virechana drug should be fixed according to weight of the baby. महताम्कृशमध्यबलवतांयोग्यमितिपाराशर्य:, त्याध्यवेक्षमितिभुयांश|Ka. Si. 3

There should not be any weight bar; if disease condition demands *Virechana*, than it should be given by considering the weight in to the account. Of course, Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) kind of childrenshould be contraindicated for *Virechana*.

For classical Virechana -

- ➤ Child with Normal or above weight for age —plan for *Uttam Shuddhi*
- > 70-80% weight for age plan for Madhyama Shudhhi
- ➤ 60-70% weight for age plan for *Hina Shuddhi Virechana* only.

4. Pre-Procedure Preparation:

- **&** Guidelines for pre-procedure
- SCREENING FOR VIRECHANA

Ascertain Indication & Contraindication, exploration of general preferences of child for medication formulation etc.

• VIRECHANA FITNESS FORM:

- 1. Fit for *Virechana* as per classical avocations.
- 2. Cardiac fitness –Rule out congenital heart disease
- 3. GI fitness Rule out rectal prolapse, polyp, inguinal hernia, IBS, ulcerative colitis etc. Ask any h/o fissure, fistula 3or 4th degree hemorrhoids etc. In suspicious cases investigations can be done.
 - CONSENT / ASSENT: Written Informed Consent from Parent /LAR, Verbal and written Assent
 - COUNSELLING

- > Showing various results
- Showing videos of various procedures
- > Providing detailed description of the sequence of the procedures.
- ➤ Encouraging the child and parents that the child even younger than you can perform this and getting good results, so you can also do this by sure.
- ➤ Don't remain rigid in any manner and remain available on call for any short of queries. (Actually, patient should be encouraged to ask any short of question through phone, but not to take any decision by them self)

• ENVIRONMENTAL CONTROL DURING PROCEDURE – TEMPERATURE, HUMIDITY, MUSIC ETC.

- \triangleright **Temperature** may be kept between 25 35 $^{\circ}$ C. (near to body' core temperature)
 - Perspiration due to high temperature might interfere with the outcome of *Virechana*; or may cause dehydration.
 - Very cool atmosphere could cause *Vata* vitiation, which in turn interfere with *Virechana* outcome.
- ➤ **Humidity** should be kept moderate. Because of these only, it was mentioned that Panchakarma should be carried out during Moderate season. Hence as far as possible, Panchakarma theater should be maintained with moderate temperature and humidity.
- Music: Soft and soothing music is good to be played during all procedure except after *Virechana*yoga administration till *Suddhi Lakshan* appearance. They will keep the patient relax and hence can easily attain the desired *Shuddhi*. This will also helpful to identify the *Atiyoga* (*Rasa Kshaya*) when patient will ask to stop the music due to *Shabda Asahishnuta*.

AGNI PARIKSHA (assessment of digestive fire)

If digestion process is proper, and then at the end of digestion, it will give rise to, *Jeerna Ahara Lakshaṇa* (Ma. Ni. 6/4). *Utsaha, Laghuta, Udgara Suddhi, Kshudha-Trishna Pravritti* and *YathochitaMalotsarga* are the symptoms of proper digestion.

Table 1. Jarana Shakti

Lakshaṇa	Remark	Score
Absence of all the symptoms orpresence of 1-2	Avara	1
symptoms		
Presence of 3-5 symptoms	Madhyama	2
Presence of All the six symptoms	Pravara	3

Table 2. Abhyavaharana Shakti

Lakshaṇa	Remark	Score
The person not at all taking food or person taking	Avara (least)	1
food in less quantity once in a day		
Taking food in less quantity twice a day or	Madhyama	2
moderate quantity twice a day	(Medium)	
Taking food in normal quantity twice a day or even	Pravara	3
more quantity twice or thrice	(best)	

• DEEPAN –PACHAN:

According to the need of the child, *Deepana- pachan* drugs with appropriate dosage are to be administered till the appearance of *Nirama Lakshana*. Patient should be kept on light diet.

Duration of Deepana Pachana

- Disappearance of SamanyaSamaLakshana
- Disappearance of specific SamaLakshana
- Features of Samyak Jarana (Optimal digestion)
- Signs of Niramata in Jihva, Pureesha, Naḍi, Mootra etc.

Practically within 2-3 days *NiramaLaksahanas* are attained if the right *PachanaAushadi* is given in adequate dose. In some cases it may be required to be given for 5-7 days.

• SNEHA PANA:

After *Deepan – Pachan* appropriate *Snehana Dravya* is to be selected keeping in consideration of disease and child palatability issues. The dosage should be calculated on the basis of *Agni* and *Kostha* consideration. The test dosage and Maximum dosage for the above may be decided from the following:

Age	Agnibala	Test dose	Maximum dosage		
6 -10 years	Alpa Agnibala	10 – 15 ml	120 - 140ml		
	Madhyam Agnibala	15 – 20 ml	140 -160ml		
	Pravara Agnibala	20 – 30ml	160-180 ml		
10 – 16	Alpa Agnibala	25 – 35ml	160-180 ml		
years	Madhyam Agnibala	35 - 40 ml	180 -200ml		
	Pravara Agnibala	40 – 45ml	180 -200ml		

Table 3.Age, Agnibala and dose of Snehapana

The *Snehapana* will be continued for 3 - 7 days or till the appearance of *SamkayaSnehanaSiddhiLakshan*.

- Samyak Sneha Lakshana: Activity of Apana Vata could be the most important factor to decide along with TwakSnigdhata and Mardava.
- *Vishram Kaal*: After achieving *SamyakaSnehana*, A gap of 3 days to be given for achieving *Kaphamandata* post *Snehana*. During this time *Sarvanga Abhyanga* along with *Sarvanga-swedana* is to be done. The meals during this period are fluid based, light easily digestible.
- **Diet for day prior** *Virechana*: The morning diet will befluid based, light easily digestible and comprise of *Amla phaal*. And this could be repeated till late noon. *Snigdha, Ushna, Drava* and *Laghu Ahara* should be given. A few example for the same are -

- 1. Rice and Rasam
- 2. Rice and Thin moong Dal
- 3. Rice and Sambhara
- 4. Rice + Thin moong Daal + Meat soup
- 5. Phalamla (Orange, Pomegranate...grapes and dry grapes)
- After late noon and early next morning: If necessarythe Child may be given light fruit based, juice based, soup-based diet (Yush).

(काखि7 /25, Su.Chi. 33/)

5. Procedure Details:

- ❖ Step-by-step procedure guidelines specific to paediatric patients
- **Prior Examination:** A thorough examination of the child is done (for *jeerna-ajeenta*, vital etc). For *Virechana*, it is important to have fully digested previous day's meal.

Followed by *Sarvangasnehana* and *Swedana*. Re-counseling and Re-assurance areto be provided to parents and child. *VirechanaAushadha* should be given post *Kapha Kala* (9.00 to 10.00am)A.H.Sū.18/33 and Aruna on A.H.Sū.18/33

The child is to be provide with *Ushna Jala Kaval*. The child is made to do *Chankramana* in case of discomfort otherwise remainbe seated on the chair. Meanwhile warm water (except in *Jaypala yoga*) is made to be taken in small sips. In case of abdominal cramps, hot water bag may be used for local application to relive cramps and induce *Vegas*.

• **Duration of Virechana**(starting from Aushadha Sevan till last Vega)

Mrudu Koshta- 2-3 hrs

Madhvama Koshta-3-4hrs

KrooraKoshta- 4-6 hrs

• Assessment of Samyaka Virechana Lakshana – standardization

> Vit-Pitta-Vatakramasahanissarana > Manasa tushti

Vatanulomana
Agni vriddhi:

Udara laghuta
Anamayatva

> Indriya prasada

- *Kaphanta* in *Virechana*. While counting the *Vega*, the first 2 3 *Vega* mixed with *Mala* (stool) should not be counted. The purification may occur in varying number of *Vega* which are influenced by the factors like body constituency, age, and strength of an individual drug and vitiation of *Dosha* (amount of vitiated *Dosha*).
- Guidelines for repeating the *Virechana* in case of *AsamyakVirechana*, *Alpa* or no *Virechna*.-

Time limit to say *Virechana* **failure**:If there is very few *Vega*or No *Vega*after completing the "duration of *Virechana*" as mentioned above, it should be considered *Virechana* failure.

Guidelines to start *Virechana again* in children: In case of *Virechana* failure, if child become hungry on the same day, lightfood or light liquid diet can be given. Next day after *Abhyanga* and *SarvangSvedana*, suitable *Virechana Dravya* in appropriate dose should be given, remembering and correcting the error of previous day.

Again, if fails to produce *Virechana Vega*, then *Langhan* and *Pachana* is advised and after 10 days *ShodhanangaSnehana- AbhyangaSvedapurvakaVirechana* should be administered. (Cha.Kal.12/64, A.S.Su.27/38)

***** Modifications required compared to adults

Snehapana can be adjusted as per the convenience of the patient (not in every children, but only if one cannot follow the classical one; and disease certainly requires *Virechana*)Like –

- 1. *Sneha* can be given with drops of lime juice, pinch of sugar, in some patient with black pepper powder to mask the taste of *Sneha*.
- 2. Child can be allowed to continue their school during initial 3-4 days of *Snehapana*(if at all they do not have any discomfort *Sneha Ajirna Lakshana*). With required instruction to restrain from excessive and loud speaking, direct air contact, junk food intake, anger, grief, excessive travelling etc.

Vishrama Kala:

- 1. Practically 2 days *VishramaKala* is considered in place of 3 days. If *Kaphoutklesh* is more thanwe should plan *Virechana* after 3 days.
- 2. If required Abhyanga and Swedana can be done in both morning and evening.

Samsarjana Krama:

- 1. Sometime despite Madhyama Shuddhi (10-20 Vega), we can adopt one stage Ahara Kala Samsarjana Krama, by looking at the Agni Tikshnata and Bala of patient. Because unnecessary Langhana (Laghu Ahara) could leads to Vata vitiation.
- 2. In unavoidable condition, if patient need to travel during *Samsarjana Krama*, *Kurmure*, *Khakhara*, *Pauha*etc. can also be advised at appropriate *Anna Kala*.

Knowledge of onset time of *Virechana Vega*,³ guides when to give the booster dose & apply other measures for initiation of *Virechana*. Though startingof Vega is also depending on the drug, generally it also depends on the Koshtha of the patient. In case of *Mrudu Koshta* Vega will start within 30 minutes; in *Madhyama Koshta* 60 minutes and in *KrooraKoshta*1 to 1.5 hrs.

After this period if Vega do not initiates and there is *AushadhaJirna Lakshana* then booster dose should be provided.

• **Knowledge of gap between two Vegas**⁴, helps whether further booster dose is needed or not for proper *Shuddhi*.

Even after regular initiation of *Vega*, some time, expected *Vega* do not achieve. In that case to achieve better *Shuddhi*, after waiting for 30 minutes after last *Vega*,

further booster dose could be provided. (*AushadhaJirna Lakshana* is need to be checked here as well)

***** Equipment specifications:

Snehapan: Measuring jars, utensils (pots, and graduated tumblers, spoon)

Abhyanga:Droni, bowls of various sizes, heating apparatus, disposable sheets, disposable wipes/towel, disposable under garments.

Swedana: Bashpa Sweda Yantra or Nadi swedana, wet towels to cover head, cold eye packs, wipes towels, Mukhwas (Kapoor, Sharkar, Mridvika, Amla-Phal, Candy)

Virechandravya: aushad and anupan, thermometer

Virechan:Virechana Chair, Hot water bath, hot water bag, measuring apparatus for *manikisuddhi*, Litmus sheets for *antakisuddhi*, Stop watch for duration measuring between *Vega*, B.P apparatus with appropriate cuff size, pulse oxymeter, Portable ECG machine, glucometer

Sansarjan Karma: food article for dietary need.

***** Medicines and dosages:

Deepan – Pachan drugs:

Vata Vikriti: CitrakadiVaţi(6-10 years:1 tabtds; 10-16 yrs:2 tab tds)

ShunthiChurṇa(6-10 years:500 mg tds; 10-16 yrs:1 g tds)

VaishvanaraChurna(6-10 years:500 mg tds; 10-16 yrs:1 g tds)

HinguvachadiChurna(6-10 years:500 mg tds; 10-16 yrs:1 g tds)

Pitta Vikriti: Sudharashana Ghana Vati (6-10 years:2 tabtds; 10-16 yrs:3 tab tds)

Patola Katurohinyadi tablet (6-10 years:2 tab tds; 10-16 yrs:3 tab tds)

Patolādi Kashāya / tab (6-10 years:2 tab tds; 10-16 yrs:3 tab tds)

Pitta Vikriti: TrikatuChurna(6-10 years:250 mg tds; 10-16 yrs:500 mg tds)

PancakolaChurna(6-10 years:250 mg tds; 10-16 yrs:500 mg tds)

Snehapan:

- Vata: VidaryadiGhrita, MahaKalyanakaGhrita, AshwagandhaGhrita
- Pitta: TiktakaGhrita, YashtimadhuGhrita, ShatavariGhrita
- Kapha: VarunadiGhrita, PanchgavyaGhrita
- Kasa and shvasa:Dadimadighrita, Kantakarighrita, Pippalyadighrita
- Kushta, Visarpa: Mahatiktakaghrita, Panchatiktaguggulughrita, Patoladighrita
- Apasmara, unmada, ADHD, Autism: Saraswataghrita, Kalyanakaghrita, Mahapaishachikaghrita, PanchgavyaGhrita
- •Karshya: Ashvagandhaghrita, Vidaryadighrita, Amritaprashaghrita

Guidelines for common food materials which can be mixed with *Virechana Sneha*

Though it is mentioned by Acharya Charaka that –

स्नेहद्विषःस्नेहनित्यामृदुकोष्ठाश्चयेनराः | क्लेशासहामद्यनित्यास्तेषामिष्टाविचारणा ||८२||

For *ShodhanaSnehapana*, *AcchaSnehapana* should be kept as an option preferably. So, in clinical practices, *Snehapana* for *Virechana* should be *Acchapana*. Medicated *Ghrita* should also be considered as *Acchapana* only.

In cases where AcchaSnehapaan is not feasible following Pravicharnamay be used.

- Masha Payasa
- Shashtika Shali Payasa
- Pancha Parsutika Peya
- > Tila, Guda mishrita Sneha

Virechana Dravya

- ➤ Haritaki (Terminalia chebula) and Gaur Sarsapa(white mustard)
- Haritaki with Pippali (Piper longum) and Saindhava (rock salt)
- Haritaki mixed with Trivrita
- Aragvadha Phala Kwatha (decoction made of fruit pulp of cassia fistula) with Ksheera(milk) or Mamsarasa (meat soup)
- > Triphala, Trivritta, Trikatu withSaindhava and Ghrita,
- ➤ Gandharva Taila (castor oil)- It is also called as best Sneha Virechak
- ➤ DashmulaKwatha, Mamsa Rasa of Jangala animals, DrakshaKwatha and Dipaneya(digestion improving) water
- ➤ Use of *Trivrita*, *Draksha* and *Haritaki* with *Gomutra* (cow urine)
- Draksha and Trivrtta

त्रिवृच्चूर्णं समालोङ्य सर्पिषा पयसाऽपि वा| घर्माम्बुना वा संयोज्य मृद्वीकानां रसेन वा|| Cha.Chi 21 रसमामलकानां वा घृतमिश्रं प्रदापयेत्| स एव गुरुकोष्ठाय त्रिवृच्चूर्णयुतो हितः|| Cha.Chi 21

- ➤ AvipathikaraChurna* (10-20g for 6-10 yr; 20-30 g for >10yrs with warm water or honey)
- Trivrutlehya/Ksheerapaka (20-30g for 6-10 yr; 30-50 g for >10 yr,)
- Franda Taila (10 to 30 ml with Ushna ksheera)
- ➤ Kampillakachoorna (4 g for child 5-10 yr; 8 g for >10 yr)
- ➤ KatukiChoorna (2 to 6 g)
- ➤ Hareetaki khanda (20 to 60 g) Draksha Rasa (100ml) Anupana
- ➤ Kalyanka Guda 10-20g

➤ Manibhadra Guda* or leha 10-30g- in Madhyama and KruraKoshata

*Note: SDM companies AvipattikaraChurna and Manibhadra Guda are more potent than others, so dose should be adjusted accordingly.

Selection of Aushadha according to Dosha: A.S.Su.27/35

Vata – Snigdha, Ushana and Lavana

Pitta- Kashaya, Madhura,

Kapaha- Ushna, KatudravyawithGomutra

Children between the age group of 4-12 years- Drakshā Rasa+ Āragvadha Phala Majjā(Ca.Ka.8/8).

In dominancy of Pitta-TrivritCūrṇa along with Kvātha of Drākshā is preferred.

In dominancy of *Kapha***-** TrivritCūrṇa along with Kvātha of Triphalā and Gomūtra should be given.

Āragvadha Phala Majjā(Ca.Ka.8/8).

- Kalpana modification --- converting *lehaya* into *Gulikakalpa*.
- Trivrit etc. *Churna* mixed rice gruel added with pickle
- Coconut water, NimbuSharabat can be given at the end of Vega
- Guda added to hot water, can be given if there is mild weakness

6. Duration and Frequency:

- * Recommended duration for the procedure
 - ➤ Vaman purvakVirechana duration- 40 days
 - ➤ Only classical Virechana 15 days (including *Deepana Pachana, Snehapana*, *Vishrama Kala* and *Samsarjana Krama*)
 - ➤ SadyaVirechana-2 days (with SadyaSnehana prior to the day of Virechana)
- ❖ Frequency/repetitions based on age
- Interval between 2 *Virechana*course minimum 30 days or regain of normalcy (*Shareera Bala, Agnibala, Dhatu Samyata....*)
 - Minimum 7 days gap between Virechana and Niruha
 - Minimum 7 days gap between Virechana and Nasya
 - Minimum 8 days gap between Virechana and Anuvasana or Matra Basti
 - Minimum 30 days gap between Virechana and Siravyadha
- Depended upon provoked *Dosha* condition of childrenand on nature of disease
 - Udar roga Nitya Virechana
 - ➤ Kushtharoga Every 15 days
- ❖ Any other specific information
- Adjuvant therapies:

Virechana after Vamana and Directly Virechana in specific disorders – Guidelines

Necessity of *Vamana* prior to *Virechana*:Su.Ci.33/19, A.S.Su.27/29, A.S.Su.27/30. It means after completion of *Samsarjana Krama* of *Vamana* and *Snehapana* of upcoming *Virechana*; as it is also mentioned in Sushruta - (15 days)

But, after proper *Pachana*, directly *Virechana*can be given without prior to *Vaman* (*Vanagsena*)

In conditions like *Sthaulya*, *KaphajaGrahani*, *Kapha* predominant *Tamaka Shwasa*, at first *Rukshana* should be done before *Virechana*.

7. Post-Procedure Guidelines:

Diet and activity guidelines

Parihara should be followed till normalcy is attained as-

Ahara: Guru, Abhishyandi, Sheeta, Ati-Snigdha, Ati-ruksha, Sankeernabhojana, Paryushita, Junk food, fast food, stale foodshould not to be taken during parihara kala.

Vihara: Cycling, Jumping, Running, Exercise, Sports, Day sleep, Night awakening, too much use of Mobile, TV are restricted during *Parihara kaal*.

- Follow-up and monitoring
 - Patient should be called on 7thday after successful *Virechana Karma* or earlier in case of any clinical condition.
- Adverse effects and management

Management of complications of *Virechana* – like dehydration etc.

Due care should be taken in case of *Atiyoga* and it should be managed by following measures –

In case of Atiyoga: -

- 1. Cold water should be sprinkled over the lower half of the patient's body and hot water to upper half of the body.
- 2. Rice mixed with buttermilk or curd should be given.
- 3. Coconut water, Amrutoj powder, ORS
- 4. AushadhaYoga- Kuṭaja Ghana Vaṭi, Karpūra Rasa, Ahiphenāsava, VriddhaGangādharaCūrṇa, DāḍimādiPānaka, BilvādiGuṭikā, Bilvādi Leha etc.

Table 4:StambhakaAushadhadose in case of Atiyoga

Age	Kutaja	Dadimashtakachurna	Balachaurbhadrachurna	Bilvachurna	Musta
	Ghana				
	Vati				
0 – 1	125 mg	500 mg	500 mg	500 mg	500
years					mg
1-3	250 mg	1.0 g	1.0 g	1.0 g	1.0 g
year					
3 – 6	250-500	1.5 g	1.5 g	1.5 g	1.5 g
years	mg				

6 to	500 mg	2.0 g	2.0 g	2.0 g	2.0 g
10					
years					
10 to	500-	2.5 g	2.5 g	2.5 g	2.5 g
16	750mg	_			
year					

Table 5 Management of Complications

Complication	Treatment								
Leg cramps	> Fomentation								
Shula (Abdominal pain)	> Sips of lukewarm water and lukewarm water fomentation								
Pravahika	> Haritaki / Dadimastakachoorna in Takra								
Chardi	> Smelling lemon, giving sugar/Ela / Karpoora/ Shunthi, Small chocolate candy to chew.								
Adhyamana	> Jeeraka/ Ajamodajala								
Dehydration	 Dehydration management protocol ORS in case of mild to moderate dehydration. IV fluid in case of Severe dehydration 								

5. Piccha Basti with Basti Yantra

Management of squeezing pain during the procedure -

- 1. Udara Svedana
- 2. Ushnodakapana
- 3. Chewing of *Ela*
- 4. Most important is reassurance that after evacuation you will be relieved from this pain
- 5. Slow walk
- 6. Apply *Hingu* + lukewarm water on and around *Nabhi*
- 7. Shankha Vati
- 8. HingvashtakaChurna

❖ Any other specific information

Assessment

Method of determining the *kaphanata Virechana* – Litmus paper test to assess the Ph. Alkaline pH indicates the elimination of bile (Middle phase of virechana); Presence of Pure Mucus – End point of *Virehcana*

8. Contraindications for Medications:

❖ List medications contraindicated for use in each age group

Formulations containing *Danti / Jaipal* like *Ichchhabhedi Rasa*, *Mishraka Sneha*, *AshwakanchukiRas* etc. should not be used for children.

❖ Any other specific information

9. Precautions and Safety Guidelines:

- Special precautions and safety measures to be followed
 - > Deepan-panchan-
 - > Snehapan-
 - Snehapan should be started after attaining Niram Avastha only.
 - Palatability- appropriate *Sneha Pravicharan*may be considered according to *Satamya* and taste preference of the child.
 - Quantity- test dose or appropriate *Sneha* quantity must be considered first then according to age quantity should be raised to maximum as per child's *Samyak Snehanlakshan*.
 - The dose of *Sneha*should not cause indigestion
 - In case of doubt of Sneha indigestion give Dhanya-Nagara Siddha Jala

> Swedan-

- Swedancan be used according to age like Hasta Swedana, Patta Swedan, steam chambers in the presence of mother or guardians.
- Special precautions should be used in case of patients with sensory impairment.

➤ VirechanAushadh

- VirechanaAushadha should be selected according to the Dosha and Prakruti
- The physician should use the prepared classical *VirechanaAushadha*(every batch)himself and in adult patients and thereafter in children dose should be fixed.
- Always use Mridu VirechanaAushadha and Avara Matra in
- Appropriate Anupana and Sahapana should be selected according to the Dosha
- Liquid *Anupan* or *Sahapan* in large quantity should be avoided with *Virechana*drug to avoid *Karma-Viparyaya*.
- Ati Ushna and Ati Teekshna Aushadhi should be avoided in Pitta Prakriti
- In case of *Atiyoga*, the *Stambhana Dravya* should be given in appropriate dose otherwise severe constipation or paralytic ileus may occur.
- *VirechanaAushadha*can be administered in divided dose within very short duration to avoid immediate vomiting if necessary.

➤ VirechanKala-

• *VirechanaAushadha* should be administered after *Kapha Kaala* (between 9-11am; subject to the *Desha* and *Kaala*)

> Monitoring-

- Vital signs must be monitored at every 30 minutes.
- *Vaidya* should be vigilant to detect any complication like dehydration, electrolyte imbalance and be prepared to adequately address it.

- ➤ Indulgence in any other activity should be strictly avoided like watching TV, excessive talking etc.
- > Intake of excess water should be avoided
- Ensure proper subsidence of Vega before starting Peyadi Krama

10. Documentation Protocols:

☐ Parameters to be documented for the procedure

VIRECANA KARMADOCUMENTATION PROTOCOL (Principles and Practice of Panchakarma- Prof. Vasant Patil

Pūrvakarma: Prakriti: Vyādhi: Agni Avasthā : Sama/Nirāma Koshtha Dosha: Akriti Dūshya : Srotodushți: Bala Pācana (Days/Drug): Anupāna RR BP Wt **Pulse** BP RR**Pulse** Wt

Table 6 Snehapan kala and Matra

	I day	IIday	III day	IV day	V day	VI day	VII day
Sneha Mātrā							
Sneha Sevana Kāla							

Table 7 - SNEHA JĪRYAMĀNA - JĪRŅA LAKSHAŅA

Lakshaṇa	1 st day		2 nd day		3 rd day		4 th day 5 ^t		5 th day		6 th day		7 th day	
	Prā	Pra	Prā	Pra	Prā	Pra	Prā	Pra	Prā	Pra	Prā	Pra	Prā	Pra
	r	S	r	S	r	s	r	s	r	s	r	S	r	s
Śiro-Ruja														
Bhrama														
Lālā-Srava														
Mūrchhā														
Sāda														
Klama														

Trushṇā							
Dāha							
Arati							
Śarira- Laghutā							
Vātānuloma na							
Kshudhāravr itti							
Udgāra- Śuddhi							
Sneha PācanaKāla							
Other							

[Prār-Praramba, Pras-Prashama]

Difficulties Faced by the Patient during Snehapāna:

Table 8- SAMYAK SNIGDHA LAKSHAŅA:

No.	Lakshaṇa	I day	II day	IIIday	IV day	Vday	VIday	VIIday
1.	VātaAnulomana							
2.	Udara Lāghava							
3.	Kshudhā- Pravritti							
5.	PurīshaSamhati							
6.	PurīshaSnigdhatā							
7.	Anga-Lāghava							
8.	Gātra-Mārdavatā							
9.	Gātra-Snigdhatā By Blotting Paper							
12.	Adahstād Sneha Darśanam							
13.	Snehodvega							
14.	Others							

SamyakSnigdha/Ayoga/Atiyoga:

SnehanaPrakara: Uttama/Madhayma/Hina

Table 9 -

Score	Snigdhata Grade
9-16	Uttama
17-24	Madhyama
25-32	Avara
>32	Ayoga
<9	Ati- Yoga

Scoring Pattern-

Vatanulomana(Normalcyof Vata): -

Lakshaṇa						
Upward movement of <i>Vata</i> with excessive belching and flatulence	5					
Upward movement of <i>Vata</i> with occasional belching and flatulence	4					
Mild flatulence and heaviness of abdomen	3					
Vatanulomana but absence of lightness of abdomen	2					
Vatanulomana and lightness of abdomen	1					

(Percussion & Auscultation of abdomen can also be done to further confirm presence of this symptom)

Mala Samhati (Consistency of stool): -

Lakshaṇa	Score
Ati- Sushka (too dry) & Grathita (solidified)	5
Grathita (solidified)	4
Susamhata (semisolid)	3
Sithila (loose)	2
Drava (watery)	1

PurishaSnigdhata (oiliness of stool):

Lakshaṇa	Score
Ruksha Purisha (dry stool)	5

AlpasnehaPurisha (stool with less quantity of fat)		
Madhyama Sneha Purisha (stool with moderate quantity of fat)	3	
Bahu Sneha Purisha (stool with large quantity of fat)	2	
Kevala Sneha Nissaraṇa (only fat excretion)	1	

(This can be examined by examination of stool; the Sneha floats on the surface of water)

TvakSnigdhata (oiliness of skin):

	Score
TvakKharata (excessively dry & rough skin)	5
TvakParushata (roughness of skin)	4
TvakRukshata (dryness of skin)	3
Tvak Samanya (normal skin)	2
TvakSnigdhata (oily skin)	1
(excessively oil skin)	0

(This symptom examined by drawing a line with pointed blunt object. If there is no scratch, then it indicates TvakSnigdhata. Blotting paper can also be used to confirm the presence of oiliness of skin)

Anga Laghava (lightness of body)

Lakshaṇa	Score
Absent throughout 24 hrs.	5
Present after 18-24 hrs. of Snehapana	4
Present after 12- 17 hrs. of Snehapana	3
Present after 6 - 11 hrs. of <i>Snehapana</i> .	2
Present after 3- 5 hrs. of Snehapana	1

Udara Laghava (lightness of abdomen):

Lakshaṇa	Score
Absent in all 24 hrs.	5
Present after 18 - 24 hrs. of Snehapana	4
Present after 12 - 17 hrs. of Snehapana	3

Present after 6 - 11 hrs. of Snehapana	2
Present after 3- 5 hrs. of Snehapana	1

Malanulomana (Normal unobstructed evacuation of stool):

Lakshaṇa	Score
No defecation	4
Asantushta (not satisfactory), Sapravahana (with straining)	3
Santushṭa (satisfactory), Sapravahaṇa (with straining)	2
Santushṭa (satisfactory), Apravahaṇa (without straining)	1

Gatra Mardava (Softness of body parts):

Lakshaṇa	Score
Slight	3
Moderate	2
Excess	1

Snehodvega (Aversion to Sneha Intake):

Lakshaṇa	Score
Alpa Dvesha, yet the person can able to take ghee without force	3
Madhyama Dvesha by tasting, person can able to take Ghee on forcing.	2
Bahu Dvesha by tasting, seeing & smelling, person can't able to take at all	1

Samva	k	Sniodh	a / Avnga	/ Ativoga:
Samva	n	Singui	a / Avuza	/ Auvuza.

SnehanaPrakara: Uttama / Madhyama / Hīna

Vyāpad (If any): Cikitsā:

Pulse BP RR WtAbhyanga&

Svedana

Abhyanga &Svedana	Prathama	Dvitiya	Tritiya
Date			
Time			

Samyak SvinnaLakshana

Śītoparama, Śūlapraśama, Stambha nigraha, Gaurava nigraha, Mārdavatā, Vyādhihāni, Laghutva, Śitārtitva, Svedaprādurbhāva

Pradhāna Karma:

Previous experience of Virecana Dravya:

VIRECANA YOGA

Dravya	Proportion	Preparation

	Dose	Time of administration
Kvātha		
Tablet		
Other		

DATE:

Virecana Yoga Sevana Kāla

Anupāna:

ĀTURA PARICHARYĀ AND NĪRĪKSHAŅA:

Vega no.	Time	Purīsha	Pitta	Kapha	Phenila	Varņa	Vega Svarupa	Others symptoms

VagikiŚuddhi

Onset of Vega	time period between two Vega	Antima Vega Kāla [last bout time]

AntikiŚuddhi:

Malānta / Pittānta / Kaphānta / Vatānta

LaingikiŚuddhi

SamyakViriktaLakshana:

Score

- 1. Vit-Pitta-VātaKramaśahaNissaraṇa
- 2. Vātānulomana
- 3. LaghutāNābhisthāne
- 4. Indriya Prasāda
- 5. MānasaTushṭi
- 6. Agni Vriddhi
- 7. Anāmayatva
- 8. Other

Samyak viriktalakshana:

Ref- Mamta Sharma and Vaidya Vasant Patil⁵

Vit-pitta-vatakramasahanissarana

Lakshana	GRADE
1.No vit-pitta-vatakramasahanissarana	0
2. Alpa vit-pitta -vatanissarana	1
3. vit-pitta-vatakramasahanissarana	2
4. excess evacuation of vit-pitta-vata	3

Vatanulomana

Lakshana	GRADE
1. Upward movement of vata with excessive belching and flatulence	0
2. Upward movement of vata with normal belching and flatulence	1
3. Vatanulomana and lightness of abdomen	2
4. Udara shola	3

Udara laghuta

Lakshana	GRADE
1. Absence of Udara laghuta	0
2. Alpa laghuta	1
3. fairly Udara laghuta	2
4. very fairly laghuta	3

Indriya prasada

Lakshana	GRADE
1.less indriyaprasada	0
2. Moderate indriyaprasada	1
3. fairly indriyaprasada	2
4. Very fairly indriyaprasada	3

Manasa tushti

Lakshana	GRADE
1.No manasatushti	0
2.Mild manasatusthi	1
3.fairly manasatusthi	2
4. Very fairly manasatusthi	3

Agni vriddhi:

Lakshana	GRADE
1.No agnivriddhi	0
2.Very mild agnivriddhi	1
3.optimum agnivriddhi	2
4. Agnimandya	3

Anamayatva

Lakshana	GRADE
1.No improvement	0
2.Mild improvement	1

3. Good improvement in disease symptoms	2
4. Very good improvement in disease symptoms	3

- ➤ Total score= 21
- \triangleright 0-7= Avara
- ➤ 8-14= Madhyama
- > 15-21= Pravara

Virecana: Samyak / Ayoga / Atiyoga

Type of Śuddhi: Pravara/Madhyama/Avara

Vyāpad (If any): Cikitsā:

Pulse BP RR Wt

SAMSARJANA KRAMA

Pulse BP RR Wt

Assessment of effect of Virechana Karma:

A. Assessment of Immediate effects:

- i. Assessment of Samyak-Ayoga-Atiyoga of Virecana
- ii. Assessment of 4 types of Śuddhi
- iii. Stercobilinogen present in the stool can be taken as bio-marker for Virecana
- iv. Assessment of effect on Agni
- v. D-Xylose excretion test for improved absorption (it is bio-marker, if increased after Virecana it denotes the improved absorption function of GIT)

B. Assessment of long-term effect:

- i. assessment of Oja
- ii. assessment of Immunoglobulin levels especially IGg
- iii. changes in Respiratory function tests
- iv. reduction in free radicals by evaluating the SOD
- v. changes in the TSH, T3, T4, ACTH, Androgens & insulin
- vi. changes in the level of serum histamine
- vii. changes in the lipid profile

(Research Updates on Panchakarma – R.H. Singh)

☐ Follow-up notes

☐ Any other specific information

11. References:

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⁴Patil Vasant et.al. Further clinical study on Standardization of shodhanarthaabhayntaraSnehana, Jamnagar, 2006.

⁵ Mamta Sharam, Vasant Patil. A clinical study on standardization of virechana procedure with trivrit avaleha in ekakustha/psoriasis, Ayurveda Mahavidyalaya, HUBLI, RGUHS, 2019-2022.

Basti Karma

1. Therapy/Procedure Name: BASTI

2. Age Group: *

- Infants (0-1 year)
- Toddlers (1-3 years)
- Pre-schoolers (3-5 years)
- School-age (6-12 years)
- Adolescents (12-18 years)
- a) Acharya Gargaye By birth
- **b)** Acharya Mathara Get Sthiratwai.e stability is acquired 1 month
- c) Acharya Punarvasu Atreya— Organs not matured functionally and structurally 4 months
- **d)** *KhanditaNaam* Chance of getting *Santarpanottavikara*, after 1 year child starts taking *Anna* -1 year
- e) Acharya Parashara- In 1 year difficult to look after the child 3 years
- f) Acharya Bhela –In 3 years there is less intestinal capacity 6 years
- g) $Acharya \ Kashyapa$ Child who has started weaning from breast milk and who can take solid food daily -5 to 6 months

3. Indications and Contraindications:

• Indications:¹

1. SarvangaRoga	Neurological disorder involving the whole body.
2. Ekanga Roga	Neurological disorder involving one part of the body.
3. KukshiRoga	Disorders related to the abdomen
4. Vatasanga	Obstruction to the passage of flatus
5. Mutrasanga	Obstruction to void urine
6. Malasanga	Constipation
7. Shukrasanga	Obstructed ejaculation
8. Balakshaya	Reduction in physical strength
9. Mamsakshaya	Emaciation
10. Shukrakshaya	Depletion of the Shukra dhatu
11. Adhmana	Distension of abdomen
12. Angasupti	Numbness in the body parts
13. Krimikoshtha	Worm infestation
14. Udavarta	Reversal of the course of Vata dosha

15. Shuddhatisara	Diarrhea with no association of Ama dosha			
16. Parvabedha	Painful finger joints			
17. Abhitapa	Increased warmth in the body			
18. Plihadosha	Diseases of the spleen			
19. Hridroga	Disease of the heart			
20. Bhagandara	Fistula in ano			
21. Unmada	Psychological illness			
22. Jwara	Fever			
23. Bhradhna	Scrotal swelling			
24. Shirahshula	Headache			
25. Karnashula	Earache			
26. Hridayashula	Precordial pain			
27. Parshvashula	Pain at the sides of the body			
28. Prishthashula	Backache			
29. Katishula	Low backache			
30. Angagourava	Feeling of the heaviness in the different body parts			
31. Atilaghava	Feeling of lightness in the body			
32. Vishamagni	Abnormality of the gastric fire			
33. Sphikshula	Pain in the buttocks			
34. Janushula	Painful knee joints			
35. Janghashula	Pain in legs			
36. Urushula	Pain in thigh			
37. Gulphashula	Painful ankle			
38. Parshnishula	Painful heel			
39. Prapadashula	Pain in feet			
10 77	Tremors			
40. Vepana				

1. Ajirna	Indigestion
2. Atisnighda	Too oily
3. Pitasneha	Who has taken Sneha
4. Utklishta Dosha	Exaggerated/Vitiated Dosha
5. Yanaklanta	Tired by journey
6. Atidurbala	Very weak

7. Ksudhatta	Hungry
8. Trushnarta	Thirsty
9. Sramarta	Tired
10. Atikrusha	Very thin
11. Bhuktabhakta	Taken food
12. Pitodaka	Taken water
13. Vamita	Undergone emesis
14. Virikta	Undergone purgation
15. Krita Nasya Karma	Taken Nasya
16. Kruddha	Angry
17. Bhita	Feared
18. <i>Matta</i>	Delirium
19. Murcchita	Fainted
20. Chard Prasakta	Having vomiting
21. NisthivanaPrasakta	Having expectoration
22. ShvasaPrasakta	Having breathlessness
23. Kasa Prasakta	Having cough
24. HikkaPrasakta	Having hiccough
25. BaddhaGudodara	Intestinal obstruction
26. Chidrodara	Intestinal perforation
27. Dakodara	Ascites
28. Adhmana	Flatulence
29. Alasaka	Pyloric obstruction
30. Visuchika	Cholera
31. Krumi	Helminthiasis
32. Amadosha	Indigestion
33. Amatisara	Diarrhoea due to Ama
34. Kushtha	Skin diseases
35. Madhumeha, Prameha	Diabetes
36. Pandu	Anaemia
37. GulphaShula	Ankle pain
38. Parsva Shula	Pain in lateral aspect of chest
39. Yoni Shula	Pain in female genital tract
40. Bahu Shula	Pain in arms

41. AnguliShula	Pain in phalanges
42. Stana Shula	Pain in breast
43. Nakha Shula	Pain in nails
44. AsthiShula	Pain in bone
45. Danta Shula	Tooth ache
46. Shopha	Swelling
47. Stambha	Stiffness
48. Antra Koojana	Increased bowel sound
49. Parikartika	Fissure in ano
50. Timira	Refractive error

Possible Adverse Effect

- Vasovagal shock
- Injury to anal canal
- Perforation of colon
- Dehydration due to hypertonic enema
- Water intoxication
- Sometime it may stimulate intussusception
- Management
 - 1. Retention Hot water fomentation
 - 2. Peri umbilical pain -Hot water fomentation, *Yavakshar* with buttermilk, *DrakshadiKwath*
 - 3. Dehydration ORS, Tender Coconut water
 - 4. Vasovagal shock Splash cold water on face, Head Low position
 - 5. Proctitis ShatadhoutaGhritLepa, Sitz bath with TriphalaKwath
 - 6. Injury to anal canal Jatyadi Taila can be used

4. Pre-Procedure Preparation:

> General Guidelines

- Better do PR examination before *Basti* for any local lesion or anomaly.
- Basic cardiological examination before major *Basti* like *Lekhana Basti*.
- Examination of vitals and other relevant parameters in disease conditions like DMD, etc.
- Hepatitis B vaccination for Attenders
- Sterilization of *Basti Netra* should be ensured
- Bacterial contamination can be avoided using clean pestle and water.
- Filter the final product of Basti Dravya
- Can use Hinguvachadi, Vaisvaanara, Shaddharanachooras as Kalka

> Poorva Karma required in Nirooha Basti. (AshtangahridayamSuthra 19.36):

- After performing *Sneha Basti* to attain sufficient *Snigdhata* to *Koshta*, *Niruha* is to be performed.
- Sometime after the beginning of *Madhyahna*, after performing *Bali-Mangal* (auspicious, frites), *Abhyanga* (oil massage), *Svedana* (sudation) and voiding *Malas* (faeces & urine) the decoction, enema should be applied.
- The physician, accompanied by experts in enema therapy, should apply a decoction enema after critically analysing the conditions of the patient, his humoral status, etc.
- The patient should not be very hungry while the enema is given.
- Dietary and other guidelines Advised to take very light food in the morning.

InAnuvsana Basti (Ashtangahridayam Suthra19-22):

- The subject (patient) should have *Abhyanga* (oil massage) and *Snana* (bath) (in warm water), and then he should consume food. The food should be limited to one-fourth of the usual quantity, *Hita* (wholesome), *Laghu* (light), neither too unctuous nor too dry, and should be followed by *Anupana* (after drink).
- Then he should loiter for a while, void faeces, and urine, and lie on a comfortable *Shayana* (cot). The cot should be neither too high nor too low. The patient should lie on his left side, folding the right knee and extending the left.
- Examination of the patient before administration of *Basti* Per rectum is done to rule out *Parikartika* (fissure), *Bhagandara*(fistula), etc.
- Season, time of drug administration *TridoshaKopa* occurs in *Varsha Ritu*. It is advised to take *Basti* in *Varsha Ritu* to avoid *Dosha Prakopa*. According to the disease condition, *Basti* can be done in any season.
- **Time of drug administration** *Niruha Basti* at 10.00 AM-10.30 AM and *Anuvasana Basti* is performed just after lunch

Guidelines for pre-procedure fasting

AsthapanaBasti is always preferred in an empty stomach in the morning hours after evacuating the bowel and bladder while AnuvasanBasti is administered after having a light food like Gruel (Yusha), Meat soup (Mansras), Milk (Kshira).

> Oil application

Patient is subjected to *Abhyanga* before the Swedana procedure. Whole body *Abhyanga* is preferred. Application of oil followed by massaging the abdomen, groin and buttocks should be done and is the minimum requirement. Whole body *Swedana* is ideal either in the form of *BashpaSwedana* or any other form of *Swedana* may be performed. It is a minimum requirement to perform *Swedana* over the abdomen and buttocks before administering the *Basti* treatment.

> Equipment's & materials:

- Droni
- Mortar and pestle
- Basti Netra

- Polythene cover of 1litter Capacity
- Utensils
- Hot water
- Good quality sieve
- Nel catheter 12' or 14" or 16", disposable syringe, paper gloves, KhalvaYantra (mortar with pestle), measuring cylinder
- Cotton towel
- Measuring apparatus
- Focus lamp and torch
- Plastic aprons.
- Paper Gloves
- Man Power- 2 Panchakarma Technicians Attendants are needed for the preparation as well a performance of Basti. Physician's presence is needed while performing Basti.

> Infrastructure facilities in terms of manpower, space, equipment's, etc required:

A room with a space of 12x12 feet is needed to perform *Basti*. It is better to have separate stall room of 10 x 8 feet to prepare *Basti Dravya*. An attached latrine is needed near the room where *Basti is* given.

> Critical points to be taken care of during Niruha Basti:

- Proper sterilization of vessels
- Follow the order of mixing and quantity specified
- Time of Preparation of *Dravva* approximately 20 minutes.
- Personal hygiene
- Checking the temp.
- Apply oil on the top of the nozzle
- Introduce nozzle parallel to vertebral column
- Squeeze enema material slowly and uniformly (½ 1 min)
- Do not squeeze fully
- Tell lateral position on lying

➤ **Medicines etc**– Following medicinescan be used:

- a) **Phalini Dravya:** ³Dhamargava, Ikshuvagu, Jimutaka, Krithavedhana, Madana, Trapusha, Hastipami, Kutaja
- b) **AsthapanopagaGana:** ⁴Trivruta, Bilwa, Pippali, Vacha, Vatsakaphala, Shathapushpa, Madhuka, Kushta, Sarshapa.
- c) Anuvasanopaga Ganas:⁵ Rasna, Devadaru, Bilva, Madana, Satapushpa, Vrischira, Punarnava, Gokshura, Agnimantha, Shyonaka.
- d) **Jangama Dravyas:** Ksheera, Ghrita, Vasa, Majia, Dhadhi, Mastu, Takra, Mootra, Mamsa rasa, Madhu
- e) Parthiva: Lavana

f) Others: Triphala, Eranda, Ela, Guduchi, Trikatu, Rasna, Sarala, Devadara, Rajani, Madhuka, Kushtha, Hingu, Devadali, Musta, Usheera, Chandana, Shati, Manjishta, Traayamaana, Yava, Madhuradi Skandadi Dravyas, Dashamoola, Dhanyamla.

5. Procedure Details:

> Step-by-step procedure guidelines specific to paediatric patients

- 1. **Preparation of Patient:** AsthapanaBasti is always preferred in an empty stomach in the morning hours after evacuating the bowel and bladder while AnuvasanBasti is administered after having a light food. Patient is subjected to Abhyanga before the Svedanaprocedure. Abhyanga is preferred over the abdomen, groin and buttocks area and after it, BashpaSvedana is performed over the same area.
- 2. **Position of Patient:** The patient is made to lie down on the table in the left lateral position, with his left leg placed straight and the right leg is flexed at the hip and knee and is drawn up to the chest. Left hand is kept below head as a pillow. Body is draped and the buttock and the anal region are exposed. This is the ideal position for the administration of the *Basti*.
- 3. Administration of *Basti*: The anal orifice of the patient is smeared with oil for lubrication with the help of cotton wool. The tip of the catheter is also dipped in oil or smeared with oil for lubrication. The catheter is then gently introduced into the anal canal in the direction of the patient's spine. About 4½ inches to 6 inches of the catheter is inserted. *Basti PidanaKala* is 30 *Matra*, for this the enema pot can is elevated considerably, rubber tubing is opened by releasing the kink. The *Basti* drug flows into the patient's rectum easily. At the same time the patient is encouraged to take deep breaths. As soon as the catheter is removed the therapist should place gentle strokes on the patient's buttocks for about a minute. Patient is then asked to assume the comfortable supine position. Patient is then allowed to take rest. The patient is encouraged to hold the medicine with in the rectum as long as possible. When there is strong urge for defecation the patient is allowed to excrete.
- 4. **Observation for Evacuation of Medicines:** In most of the cases the patient excretes the stool along with medicines within few minutes of administration of *Basti*. Therapist should wait for the evacuation for a maximum period of 1 *Muhurta* or 48 minutes after the administration of the *NiruhaBasti* and 3 *Yama* or 9 hours in *Sneha Basti*. If the *Basti* drug does not come out by this period every effort should be made to evacuate the bowel. If the medicines administered is retained for more than the prescribed period it is harmful. Also delay in evacuation may cause distension of abdomen, abdominal pain, and pain while passing the urine and discomfort in the chest.
- 5. **Observation for Patient for Effect:** One can expect the desired effect of the treatment if it is planned properly. Any mistake in the planning may cause either excessive or inadequate effect of the *Basti* treatment and is not desirable. The clinical symptoms indicative of these therapeutic effect of the *Basti* administration is observed.

Modifications required compared to adults

• The dose should be calculated based upon the age of patient.

- Temperature of the *Basti Dravya* should be optimum.
- Size of the catheter should be according to the need.
- Size of Basti Putaka should be according to dose of the drug.

Equipment size/specifications

a.*Basti Netra* (nozzle) – Can be made up of brass, plastic. Also, rubber catheters no. 6, 8 can be used.

• According to Astangahridayam Sutra 19-13

Age	Length in Angula (cm)	Base in Angula (cm)	Size of the tip
1 year	5 (7.5cm)	1 (1.5cm)	Green Gram
1 – 6 years	6 (9cm)	1 (1.5cm)	Green Gram
7 – 11 years	7 (10.5cm)	1.5 (2.25cm)	Black Gram
12 – 15 years	8 (12cm)	2 (3cm)	Bengal Gram
16 – 19 years	9 (13.5cm)	2.5 (3.75cm)	Soaked Bengal Gram
20 years onwards	12 (18cm)	3 (4.5cm)	Jujubee seed

b.*Basti Putaka:* Polythene bag measuring 18 x 12 cm size for *Anuvasanabasti*. Polythene bag measuring 26 x 19 cm for *Asthapanabasti* can be used. Practically following instruments are used as *Basti putaka*:

- Double layered plastic bags
- Urine collection bags
- Rubber bags,
- Suction bulb,
- Syringes,
- Basti can / Enema Pot.

Medicines and dosages

- Makshika (honey) -150 ml,
- Saindhava (rock salt) 15 g,
- Tilataila- 150 ml,
- Kalka (paste of fresh herbs or dried powders) 30 g,
- Kvatha(decoction of medicines in water) 660ml
- Total = 960 ml (with classical method)

6. Duration and Frequency:

Acharya *Charaka* explained types of *Basti* according to duration as:⁷

- Karma Basti 1 Anuvasana = 12 Niruha and 12 Anuvasana = 5 Anuvasana (30 Days)
- Kala Basti 1 Anuvasana = 6 Niruha and 6 Anuvasana = 3 Anuvasana (16 Days)
- Yoga Basti 1 Anuvasana = 3 Niruha and 3 Anuvasana = 1 Anuvasana (8 days)

Basti	A	N	A	N	A	N	A	N	A	N	A	N	A	Total
Karma	5	1	3	1	3	1	3	1	3	1	3	1	4	30
Kaal	3	1	3	1	3	1	3							15
Yog	1	1	1	1	1	1	2							08

> Acharya Kashyap Classification of Basti (Ka.Khil 8/6-12)

Basti type	Anuvasan	Anuvasan	Niruha	Anuvasan	Total
Karma	1	12	12	5	30
Kaal	1	6	6	3	16
Yog	1	3	3	1	8
ChaturbhadraKalpa	4		4	4	12

Acharya Kashyapa explained *Chaturbhadra Kalpa* as: (K. Khil.8/22,23,23):

"सोऽयंनिरत्ययः", "ज्वरादिभि:परिक्लिष्टेहीनवर्णबलौजिस"

- This is a special contribution of *Kashyap Samhita*. Apart from *Karma*, *Kala* and *Yoga Basti,Kashyapa* has mentioned a different combination of *Anuvasan* and *Niruhabasti*.
- This *Kalpa* consists of four *Anuvasana* in the beginning and at the end and four *Niruha* in between these *AnuvasanaBasti*.
- This cycle can be repeated for two to three times.
- It is free of complications.
 - Acharya Kashyapa explained types of Basti according to duration as:

Type	No. of Anuvasana	No. of <i>Niruha</i>
Karma	24	6
Kala	12	3
Yoga	5	3

- Karma Uttama Bala and Vata Prakopa
- Kala Madhyam Bala and Pitta Sansarga
- Yoga Kapha Sansarga and Alpa Vata Bala
- Acharya Kashyapa explained dose of Basti as: (Kha.Khil.8/106-108)

Age	Sneha Basti Matra
3 years	3 Karsha

4 years	1 Pala/ 4 Tola (40ml)
6 years	1 Prasruta / 8 Tola (80ml)
12 years	2 Prasruta / 16 Tola (160ml)
> 16 years	4 Prasruta / 32 Tola (320ml)

- Quantity of *Niruha*: The quantity of *Niruha* should be three times the quantity of *Sneha Basti*.
- Acharya *Kashyapa* recommends increase or decrease in the *PrasrutPraman* of *Basti* according to the *Bala* and *Avastha* of patient and diseases as below: (K. Khi8/47,48)
 - VatajVyadhi- Moderate increase in Madhur, Amla, Lavana and Ushna Dravya in Basti
 - Pittaj Vyadhi- decrease in Ruksha and SheetaDravyas- Increase in Madhur, Tikta, Kashay Dravyas. Decrease in Teekshnaand Ushna Dravyas.
 - KaphajVyadhi Increase in Teekshna, Ushna and Ruksha Dravyas.
 - Further it is recommended that this increase and decrease in contents of *Basti Dravyas* should be gradual and sequential.
 - Basti and its Dravya as per Dosha Predominance: (Ka. Khi.8/15-20)

Anuvasan Basti	
Dosha Disorder	No of Basti
Kapha	1 or 3
Pitta	5 or 7
Vata	9 or 11

Niruha Basti				
Dosha	No of Basti	Sneha Matra	Post Basti Diet	
Vata	1	Equal	Mamsarasa	
Pitta	2	1/6 th + milk	Milk	
Kapha	3	$1/8^{th} + gomutra$	Yoosha	

- Yapana Basti Karma: Age Wise Doses
- Guidelines for pre-procedure fasting: The child should be given light food, neither *Snigdha* nor *Ruksha*.

Age	15+	10-15 years	7-9 years	3-7 years	1-3 years
Dose	200 ml	150 ml	120 ml	100 ml	50 ml
Kashaya	80 ml	60 ml	48 ml	40 ml	20 ml
Sneha	100 ml	75 ml	60 ml	50 ml	30 ml

Gomutra	10 ml	7.5 ml	6 ml	5 ml	2.5 ml
Saindhava	2 gm	1.5 gm	1.2 gm	1 gm	0.6 gm
Kalka	2 gm	1.5 gm	1.2 gm	1 gm	0.6 gm
Madhu	6 ml	4.5 ml	3.6 ml	3 ml	1.8 ml

7. Post-Procedure Guidelines:

- Diet and activity guidelines
- After *Basti* patient is advised to take hot water bath and light diet in accordance to dominance of *Dosha*:
 - Vata dosha Mansaras / Yavagu
 - Pitta dosha– Kshira
 - Kapha dosha Yusha
- Quantity of diet should be 1/3 of routine diet.
- After Anuvasana Basti: Dhanya siddha Jala is given for drinking.
- Follow-up and monitoring

Observation for Evacuation of Medicines: Therapist should wait for the evacuation for a maximum period of 1 *Muhurta* or 48 minutes after the administration of the *NiruhaBasti* and 3 *Yama* or 9 hours in *Sneha Basti*. If the *Basti* drug does not come out by this period every effort should be made to evacuate the bowel. If the medicines administered is retained for more than the prescribed period it is harmful.

Observation for Patient for Effect: Patient is observed for the symptoms of desired effect of the therapy. It can also be observed that due to mistake during the procedure it can lead to excessive or inadequate effect of the procedure.

Adverse effects and management

Symptoms of Excessive Effect:⁸

- Angasupti Numbness in the body parts
- Angamarda- Body ache
- Klama- Sense of exhaustion
- Kampa Tremors
- *Nidra* Excessive untimely sleep
- Daurbalya Debility
- Tamah pravesha Feeling of darkness in front of the eyes
- Unmada Irrelevant speech and behaviour
- Hikka Hiccough.

Management:

Excessive effect when present it may be effectively treated with *Grahi*, *Dipana* and *Pachana* drugs administered orally.

Symptoms of Inadequate Effect:9

- Ruja Aches and pains like head ache, precordial discomfort, abdominal pain, hypogastric pain, anal pain, pain in the penile organ etc.
- Shotha Anasarca
- Prathishyaya- Rhinitis
- Parikartika Tearing pain in the anal region
- Hrillasa- Nausea
- *Vatasanga* Obstruction of the flatus
- *Mutrasanga* Retention of the urine
- Shvashakrichchhra Breathlessness
- Alpa Vega Poor evacuation of the bowel, amount excreted is much lesser than the amount of the medicine administered in the form of Basti.
- Aruchi Tastelessness
- *Guruta* Heaviness of the body.

Management:

- Administration of another strong *Basti* consisting of *Yavakshara*, cow's urine, or the drugs having sour taste assists complete evacuation of the *basti* drug.
- > Phalavarti (suppository to evacuate the bowel) may be inserted into to the anus.
- Application of heat to the abdomen, buttocks and pelvic region with a hot water bag facilitates early evacuation.
- ➤ Oral administration of laxatives like the powder of *Trivrita* (*Operculinaturpenthum*) or *Haritaki* (*Terminalia chebula*) empties the bowel.
- Castor oil (*Ricinus communis*) may also be given orally for this purpose.

8. Contraindications for Medications:

- List medications contraindicated for use in each age group
 - Infants (0-1 year)—Trivruta, Triphala, Eranda, Kutaja, Madana, Rasna
 - Toddlers (1-3 years) Trivruta, Dhamargava, Triphala
 - Preschoolers (3-5 years)—Triphala, Jimutaka
 - School-age (6-12 years) Bilwa, Pippali, Vacha
 - Adolescents (12-18 years) Agnimantha, Rasna

9. Precautions and Safety Guidelines:

- Special precautions and safety measures to be followed
 - 1. The amount of *Basti* drugs should be in required amount.
 - 2. Dose should be calculated based upon the age criteria.
 - 3. Proper mixing of the contents should be done till the desired consistency is achieved.
 - 4. Appropriate size of enema pot and catheter should be used.
 - 5. Length of catheter inserted should be limited to maximum to 6 inches.
 - 6. Height of the enema pot from patient position should be about 55 inches.
 - 7. The height of bed should be about knee height to proper facilitate *Basti Dravva*.
 - 8. Temperature of the mixture should be optimum neither too warm nor too cold.

- 9. The *Basti* drug should be administered at optimum speed (30 *Matra*).
- 10. Proper monitoring of the patient should be done to observe evacuation of *Basti*.
- 11. If Niruha Basti remains for longer durations methods should be administered to evacuate the retained Basti.

10. Documentation Protocols:

- Parameters to be documented for the procedure
 - Time for administration of *Basti* and its evacuation should be documented for proper monitoring of duration of retention of *Basti*.
 - Dose of *Basti* should be documented for monitoring of its effect at that particular dose.
 - Duration of therapy should be documented to monitor the desired duration for the procedure.
 - If any complications like that of excess or inadequate effect is present should be documented
 - Also, any adverse effect of the drug is noticed is also to be documented.

• Follow-up notes

- 1. Assessment of the patient should be done after completion of the course and can be compared with the condition at the baseline.
- 2. Patient after discharged should be provided with the details of the type of *Basti*, duration and dose of the procedure.
- 3. Also, after discharge the effect of the *Basti* can be monitored by asking patient to keep records of the relief in symptoms.
- 4. Follow-up date should be given to the patient after which they can be advised for second sitting.

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1. Therapy/Procedure Name: Nasya Karma

Nasya is a therapeutic manoeuvre procedure in which the medicine either in liquid form or in powder form is administered through nostrils to eliminate the vitiated doshas situated in head for the treatment of *Urdhwajatrugata Vikaras* (diseases affecting clavicle and supra clavicular region).

2. Age Group:

- Infants (0-1 year): *Pratimarsha Nasya* is administered irrespective of sex & weight.
- Toddlers (1-3 years): *Pratimarsha Nasya* is administered irrespective of sex & weight.¹
- Pre-schoolers (3-5 years): *Pratimarsha Nasya* is administered irrespective of sex & weight.¹
- School-age (6-12 years): *Pratimarsha* and *Marsha Nasya* should be administered to children irrespective of sex & weight (6-8 only *Pratimarsh*).ⁱⁱ
- Adolescents (12-18 years): *Pratimarsha* and *Marsha Nasya* should be administered to children irrespective of sex & weight.²

Note: In infants and toddlers, if medical condition is indicated for *Teekshna Nasya* then *Nasya Dravya* is advised just to apply in the nasal mucosa.³

Indications and Contraindications:

Table No- 1 General Indications of Nasya karma 4,5,6 -

	Common Indications	
Diseases of Hair / Scalp	Kesha Pata (Hair fall), Akala Palita (Premature greying	
	of hairs)	
Disease of Head	Shirahshula (Migraine, Headache)	
Disease of Eyes	Akshishula (Painful eyes), Shushkakshi (Dry eye)	
	Computer Vision Syndrome	
Diseases of Ears	Karnashula (Earache), Karnakshveda (Tinnitus)	
Diseases of Throat	Svarabheda (Hoarseness of voice), Mukhashosha	
	(Dryness of mouth), Galashaluka (adenoids),	
	Galashundika (Tonsillitis)	
• Diseases of Oral	Dantashula (Tooth ache), Dantapata (falling of teeth),	
cavity	Dantaharsha (odontitis), Dantachala (Lack of stability of	
	teeth/loose tooth), Dental caries	
Diseases of URTI	Pinasa and Pratishyaya (Chronic rhinitis), Recurrent	
	Respiratory Tract Infection	
Diseases of Face	Vyanga (Hyperpigmentation on face), Akala vali	
	(Premature wrinkling of the skin), Acne	
Diseases of Nervous	Ardita (Facial palsy), Mastishka Kshaya (Cerebral Palsy)	
system		

Diseases of Behavioral disorders	Mental retardation, Autism & ADHD Behavioral disorders such as dyslexia, learning disability, Academic Stress, Poor Memory			
	Uncommon Indications			
• Diseases of Head,	Head, Shirahstambha (Stiffness in head), Manyastambha			
Eyes & ENT	(Stiffness in neck), Dantastambha (Stiffness of the teeth).			
	Hanugraha (Rigidity of the mandibular joint), Timira			
	(Cataract), Netragata Shukra roga (corneal opacity),			
	Upajihvika (Ranula), Galaganda (Goitre), Apatantraka			
	(Convulsive disorder)			

Table No- 2. General Contraindications of Nasya Karma 4,5,6 -

Common Contraindications Navapratishyaya (Acute rhinitis), Shwasa-pidita (Acute exacerbate asthma), Kasa-pidita (Condition with continuous bouts of cough) Jwara Pidita (Suffering from fever of recent onset), (Indigestion), Vegavarodhita (Child who suppress natural urgurine & stool), Kshudarta (Child who is very much hungry), Kananarta (Child angry with any reason, grief), Shramarta (Child we exhausted due to physical exercise, excessive play)			
Uncommon Contraindications	Apatarpita (Emaciation-Severe acute malnutrition), Sirahsnata (Child who has taken head bath), Bhuktabhakta (Child who has just taken meal), Peeta Sneha (Child who subjected to oral Snehapana), Peeta Toya (plenty of water excessive intake of fluid), Murchita (Suffering from transient loss of consciousness except Avapidana Nasya), Virikta (Child who is subjected to Virechana), Anuvasita (Child who is subjected to Anuvasana Basti), Gararta (Slow poisoning may be adolescence with drug abuse, tobacco etc), Trishnarta (Suffering from excessive thirst i.e. moderate dehydration), Drug which is Tikshna, Guru and irritating in nature should be avoided in procedure.		

Table No-3 Indications and Type of Nasya according to Karma, selection of drug

S.n	Type of Nasya	Indications	Selection of Drug
0.	according to		
	Karma		
1.	Shiro	Shirahshula (Headache), Abhishyanda	Sigruvadi tailam
	Virechana ⁷	(Conjunctivitis), Shiroajadya/ Shirogaurav	Anu tailam,
		(Heaviness of head), Galamaya (Throat disases	Shadbindu tailam,
		-Tonsilitis, adenoitis), <i>Pinasa</i> (Chronic rhinitis,	Varunadi kshira,
		Sinusitis) Apasmara (Epilepsy)	Ghritam,
		Gandhagyan Nasha (Anosmia)	Tulasi swaras
2.	Brimhana ⁷	Vaksanga (Stuttering, Stammering, Aphasia,	Bala tailam
		delayed speech) Krichrabodha (Lagopthalmus),	Ksheera bala 101
		Nasashosha (nose dryness), Asyashosha	tailam

		(Mouth dryness)	Maha masha
			tailam
3.	Shamana ⁷	Kesha dosha (Premature graying of hairs,	Anu tailam,
		Hairfall), Raktapitta	Bhringaraj tailam,
		Vyanga (Acne vulgaris, Hyperpigmentation)	Bhringaraj swaras
4.	Sodhana and	Stambha, Supti, Gaurav	Jeemutaka
	Snehana		Swarasa
	Navana Nasya ⁸		Apamarga
			Swarasa
5.	Shodhana	Ardita (Facial palsy), Shirakampa	Kshira Bala
	Avapida	Meda & Kapha Vyapta Shira Vikara (Head	Tailam,
	Nasya ⁸	region filled with Kapha), Sarpa Dansha	Maha Masha
		(Snake bite)	Tailam
6.	Stambhana	Nasagata raktasrav (Nasal bleeding)	Durva svaras
	Avapida		
	Nasya ⁸		
7.	Dhuma	Pinasa (Rhinitis, Sinusitis), Galashundika	Dhumvarti
	(Prayogika,	(tonsillitis), Abhishyanda (conjunctivitis),	
	Snaihika,	Shirahshula (migraine, headache),	
	Vairechanika)	Shirahgaurav (Heavianess of head),	
	Nasya ⁹	Karnashula (Ear ache), Dantachala (Teeth	
		instability), Dantashula (Teeth ache), Khalitya	
		(Hair fall), <i>Palitya</i> (Premature graying of hairs),	
		Atinidra (Excessive sleep), Svarbheda	
		(Horseness of voice)	
8.	Snehana ¹⁰	Khalitya (Hair fall), Palitya (Premature graying	Bhringaraj tailam
		of hairs), Dantapata (teeth fall), Karnashula	Anu Tailam
		(Earache), Karnashveda (Tinnitus), Svarabheda	
		(horsenees of voice), Akala vali (Premature	
		wrinkling of skin), Timira, Mukhashosha	
		(Dryness of mouth)	
9.	Pradhamana 10	Murcha (Giddiness/Dizziness), Apasmara	
		(Epilepsy)	
		Chetana vikruti (Psychological disorders),	
		Krimi, Visha (slow poisoning with drug abuse)	
10.	Pratimarsha ¹¹	Preventive aspect of <i>Nasya</i> used in those <i>Bala</i>	Anu Taila
		(children) prone to <i>Urakshata</i> (Pulmonary	
		rupture/Chest injury) and eliminate the risk of	
		disease related to head.	
		disease related to mead.	

Table No-4 Indications and selection of Drug

S.no.	Drug	Indications or Conditions		
1.	Anu Taila ^{12,13}	Akala Palita (Premature greying of hairs)		
		Akala Valita (Premature wrinkling of the skin)		
		Jirna Pratishyaya (allergic Rhinitis & Sinusitis)		
		Shushka Akshi (Dry eye syndrome)		
2.	Shadbindu	Shiroroga (Headache, Migraine, Sinusitis)		
	Taila ¹⁴	Kesha Rogas (Hair fall, Premature graying of hairs)		
		Drishti Balarthi (Prevention of Refrective errors, Dry eye)		
		Chaladanta (Teeth instability),		
		Bahu Stambha (Cervical spondylosis),		
3.	Kshirbala	Neuro behavioral disoders like Anxiety, Depression, Sleep		
	Taila ¹⁵	problems, ADHD, Erbs palsy, Cerebral palsy, Gross		
		Developmental delay, Cervical spondylosis		
4.	Panchabhautika	Socio behavioral disorders, Improper sensory functions (K.S.K.		
	Taila ¹⁶	Shatkalpa/32,36),		
5.	Brahmi Taila ¹⁷	Neuro behavioural Disorders like Generalized anxiety disorder,		
		Depression, Seizure disorders		
6.	Purana	Psychological disorders Learning disability (Increasing memory		
	Ghrita ¹⁸	recall)		
7.	Durva	Nasagata Raktapitta (Spontaneous nasal bleeding)		
	Swarasa ¹⁹			
8.	Karpasathyadi	Bahu Stambha (Cervical spondylosis), Pakshaghata (cerebral palsy		
	Taila ²⁰	/ Hemiplegia)		
9.	Lakshadi	Kaphaja pratishyaya (Chronic Rhinitis)		
	Taila ²¹			
10.	Mahatriphala	Refractive errors		
	Ghrita ²²	Computer vision syndrome		
		Netra Shushkata (Dry eye)		
		Naktandhya (Night blindness)		
		Nakulandhya (Defective vision)		
11.	Jivantyadi	Refractive errors / Degenerative ophthalmic conditions		
	Ghrita ²³	Dry eye syndrome		

Usually three steps are being followed while performing any procedure. They are

- a. Purva Karma (Preparation)
- b. Pradhana Karma (Procedure / Administration)
- c. Paschat Karma (Post care)
- 3. **Pre -** *Nasya* **Procedure Preparation :** Pre –procedure of *Nasya* is carried out in 3 steps including preparation of patient, preparation of panchakarma theatre, Preparation of tools, utensils, medicines and other essential materials.

A) Preparation of patient -

- Counselling the parents & children (By showing videos of successful cases) for easy acceptance of therapy. Child's cooperation is utmost important in performing the procedure; so, gain confidence of both parents and child.
- General Physical examination and Local nasal examination -with nasal speculum & torch to check for nasal polyps, cysts etc
- **Bowel cleansing** Once the child is selected for *Nasya karma*, Mild laxative medicines like *Trivrit Avalehya*²⁴ or *Nayopayam Lehyam*²⁵ or *Abhayarishta*²⁶, etc or any medicine suitable to the conditions may be given on the day before at bed time with warm water. (Prescribe the doses as per the age and weight).
- **Practice of pranayama** (*Anuloma Viloma*) & *Bhastrika Pranayama* for 5-10 min on empty stomach a day before administration of *Nasya karma*.
- **Diet before the Procedure** According to the condition of the child, easily digestible food is advised at least a gap of 2 hours before procedure.
- Check the vitals Monitor temperature, respiratory rate, pulse rate, BP before performing the procedure.

Note: Ask for history of nasal bleeding and allergies to particular foods, substances etc,

B) Preparation of panchakarma theatre –

- Cleanliness and hygiene are maintained in procedure room
- **Temperature of the room** Room temperature (20-22⁰ C)²⁷ is maintained or room temperature maintained as per the convenience of child and season.
- Back ground Music in Panchakarma theatre Om Mantra Chanting, Gaytri
 Mantra Chanting or favorable rhymes of child may be played in low volume.
- Lighting should not be too bright or too dark.

C) Preparation of Nasya karma tools and Items materials for procedure -

Adjustable table (Paediatric *Droni*) with facility to adjust its height and lower the head portion is preferable; if not then simple *Droni* can also be used.



- Medicated oil for *Nasya* procedure (according to the disease) and the temperature of oil should be maintained near to body temperature.
- Lukewarm medicated oil (according to disease) 15-20 ml for localized Oleation
- Thick cotton towel of 1 square feet for localized sudation 1 & napkin 1.
- Medium size vessel 1
- Kidney tray 1
- Bed sheet 1
- 1 1.5 litre hot water
- Rock salt
- Cotton eye pads 2; cotton & tissue papers
- Dhooma Varti or Pottali with Dhooma Dravya
- Nasya Yantram *Dhara Gokarna* (special type of vessel) made of Brass or Steel for liquid large dose medications



4. Procedure Details:

- **Position of child: For older children** The Child is allowed to lie in supine position with head facing east on *Droni*; His head is maintained at a lower position by keeping the pillow below the neck.
- **For Infants-** Mother should sit comfortably on chair with back support and neonate / infant taken in the lap of mother.
- **Position of therapist:** Therapist should stand at the head end of the table/child, facing the foot end to perform the procedure.
- Time of administration (A.H.S.20/13-16) 28 Nasya should be avoided on cloudy and rainy day. Nasya should be advocated on three basis as given below
 - o According to Doshas
 - Vata- Evening & Night
 - *Pitta* Afternoon
 - *Kapha* Morning
 - According to season
 - Sharad, Vasanta (Autumn, Spring)- Morning
 - *Grishma* (Summer)- Evening
 - Varsha (Rainy)- when sun light present

- Shishra & Hemanat (Winter)- Afternoon
- State of Body
 - Healthy state- Morning
 - Vata Roga, Shiroroga (headache, migraine), Hikka (Hiccup),
 Aptanak (tetanus), Manyasthambha (Neck stiffness), Swarbhransha (horseness of voice) Daily Morning & Evening
 - Other State- Alternate Day

PURVA KARMA (Preparation)^{29,30} -

- Head and Face massage (*Pradeshika Abhyangam*) Before starting the *Nasya* localized oleation is done over Childs head, forehead, eye brows, nose, chin, maxillary area of face, ears and anterior neck, with soft and gentle strokes hand. Forehead, eye brows, nose, chin and maxillary area are massaged gently with linear thumb movements while cheek and temporal region is massaged with circular movements of the palm in both clockwise and anti-clockwise direction. Anterior of the neck is massaged by moving the flat of the palms from the base of neck to the mandible in upward direction. This procedure is done for 3 to 5 minutes depends on surface area of child's face.
- **Hot Towel Steaming** (*Pradeshika Sweda*): Towel is soaked in hot water, and the water is squeezed out, then the warm towel is placed on the face and anterior neck. This procedure is done for next 2-3 minutes. Eyes should be covered with cotton pad soaked in sterile water. This helps in loosening of the accumulated toxins in this region which are then expelled out by the upcoming *Nasya* therapy.

PRADHANA KARMA (Procedure / Administration)^{29,30} -

- The prescribed dose of medicated oil is made to flow drop by drop into one nostril followed by other nostril by elevating the tip of the nose with left thumb. Drops are allowed to flow from dropper just above the nostril.
- After instillation of medicine the child is asked to sniff the medicine inside. The ideal time to retain medicine inside the nasal & oral cavity is 100 *Matra* (1-2 min) or as per holding capacity of child. Meanwhile the medicine starts collecting in the oral cavity. The child is trained in such a way that the medicine is not allowed to swallow.
- Help the child to turn head aside to spit out the collected liquid (medicated oil and *Doshas*) into kidney tray filled with some water. Child is not allowed to stand up or sit up till emptying of oral cavity.
- During the procedure if child coughs, sneezes, cries continuously stop administering till child is comfortable; If side effects like nasal mucosal irritation, severe headache, nasal bleeding, excessive secretion arise then stop administration of *Nasya Karma* and treat accordingly.

Note:

- Procedure should be performed under the supervision of Ayurveda Pediatrician or Clinical Registrar (Pediatrics) or person who is skilled and trained to deal children Panchkarma procedure.
- In Therapy room, parent may be allowed to see the procedure. Being a child parents shall be allowed to support the child.

• In Case of female child, a female attendant should be present during whole procedure.

Recommended Time & Duration of procedure

- **Duration of the procedure** Approximately 15 to 20 minutes
- **Duration of Treatment** 3 or 5 or 7 days or as per requirement. ²⁸
- **Frequency of procedure** Depends on severity of condition (Once or twice a day or on alternate days)
- *Pratimarsha Nasya* can be included in *Dinacharya* (Daily regimen) of children i.e., can be administered on a daily basis. Time of administration of *Pratimarsha nasya* In the night or in the day or *Bhuktabhakta* (after food) or after *Vanti* (vomiting) or *Divaswapa* (after day sleep) or *Adhva* (after traveling) or *Shrama* (after exhaustion) or after *Shiroabhyanga* (head massage) or after *Gandoosha* (gargles) or *Mutrosarga* (after urination) or after *Anjana* (applying collyrium) or *Malotsarga* (after defecation) or after *Dantadhavana* (teeth cleaning) or *Hasana* (after laughing).²⁹ (A.H.S.20/27-28)

Additional information -

- *Pratimarsha Nasya* Application of medicated oil in the inner wall of the nose with the finger dipped in the oil is also considered as *Pratimarsha*. [Chakrapani on Cha.Sa.Si 9/92]³⁰
- Avapida Nasya³¹: In case of Avapida Nasya the herbal juice taken in a metal dropper and is then dropped poured into the nostrils.
- **Pradhamana** Nasya³²: In case of *Pradhamana* Nasya the herbal powder is loaded into a glass tube of 6 Anguli (......) fixed with bulb to blow into the nostrils. Then gently compresses the bulb to blow the medicine into the nostrils. The availability of this tool in all places is a matter of concern. If this is not available rolled sterile paper can also be used to blow. The prescribed dose of medicinal powder is placed on a plate.
- Nasya with Breast milk
 - According Acharya Charaka to *Nasya* of Breastmilk should be given in case of *Rakta Pitta*³³ such as bleeding from mouth, nose & ear. This helps to pacify *Pitta Dohsa* and thus helpful to control bleeding.
 - Breastmilk should be mixed with sugar or sugarcane juice is used for Nasya to treat excess thirst or dryness of mouth.

Precautions -

- Breastmilk taken for the process of *Nasya Karma* should be freshly collected and devoid of any vitiation if feasible.
- Breastmilk should be collected in clean container and used immediately as *Pratimarsha Nasya*.
- Stored EBM should be avoided due to contamination of EBM with microorganism.

PASCHAT KARMA (POST PROCEDURE CARE)^{29,30}:

- Post procedure oleation & sudation
- *Kavala* (Gargling with luke warm salt water)
- *Dhumapana* (therapeutic smoke inhalation)
- Observation of child post procedure
- Diet and behavioural monitoring
- Follow up
- Adverse effect and management
- **Post procedure oleation & sudation** Head, neck, face and forehead are gently massaged and sudation should be repeated after the *Nasya* treatment for 2-3 minutes.
- *Kavala* (therapeutic Garglining) with luke warm salt water Child is then allowed to do *Kavala* (therapeutic gargling) with luke warm water as per requirement to cleanse the remaining medicated oil & doshas in the oral cavity. This procedure may be avoided in younger children who cannot perform. The luke warm salt water is prepared by adding 1 pinch rocksalt in 100 ml lukewarm water.
- *Dhumapana* (therapeutic smoke inhalation) In elder children, *Prayogika Dhumavarti* (Prepared with *haridra varti* with ghee) should be performed for 2-3 times in each nostril to dry up the moisture. Eyes should be closed during this procedure. For Younger children, dry powders filled in transparent cloth ball (Vastra Putika filled with herbs like *Pippali*, *Shigru Beej*, *Apamarga Beej*, *Saindhava*, *Sauvarchal*) should be given to remove *Kapha* sticked into the oral cavity. https://www.psychosocial.com/article/PR200987/11414
- Observation of the child post procedure The child should be kept under observation for at least ten minutes for any allergic reactions after the procedure and also for assessment of efficacy of nasya administered i.e., inadequate (Asamyaka), optimal (Samyaka) and excess (Atiyoga). Feeling of lightness in head and chest region, clarity in body channels and proper functioning of sense organs, unobstructed inhalation and expiration, proper sleep and reduction in signs and symptoms of the disease are the outcome symptomatology of Samyaka administration of nasya.

Table No-5 Samvak Nasva 31,32

Shiraso Laghavah Feeling of lightness in the head	
Sukha Svapna	Sound sleep
Sukha Prabodhanam	Easy awakening
Vikaropashamah Remission of the illness	
Shuddhirindriyanam	Clarity of the sense organs

Manah Sukham	State of happiness
Srotas Shuddhi	Clarity of the body channels

Table No-6 Asamyak Nasya & Atiyoga Lakshana of Nasya karma^{31,32}

Asamyak Lakshana of Nasya Karma	Atiyoga Lakshana of Nasya karma
Shirogurutva (Heaviness of the head)	Shirogaurava (Heaviness of the head)
Kandu (Itching)	Indirya vibhrama (Disorders of sense organs)
Angagaurava (Heaviness of the body parts)	Mastulunga gaman (Discharge of Mastulunga
	(body fluid from within the head)
Srotasam Kapha-Samsravah	Vatavriddhi (Vitiation of Vata Dosha)
(Mucoid discharge from the nostrils and other	
body openings)	
Vatavaigunya sense (Morbidity of Vata	Shirah-Shunyata (Sense of emptiness of the
Dosha)	head)
Indriyanam cha rukshata (Dryness of the	
sense organs)	
Roga-Ashanti (No remission of the illness)	

Diet and behavioural monitoring

- Easily digested light diet like rice, Vegetable soup, Daliya and Moong dal should be offered to child before and after the nasya procedure.
- Avoid *Snigdha, Guru* and *Abhsyandi* food items like puri, curd, khatai, urad dal, rajma, chole, nonveg, junk food, ice-cream, chips, alcohol or any *Vata* aggravating diet and other beverages etc.
- Avoid exposure to cold breezes and AC environment (temperature maintenance), driving vehicles, daytime sleeping, late night sleeping and exertional play activities etc.,

Follow- up

• Follow up as per requirement. Monitor for above said *Samyaka*, *Asamyaka* and *Atiyoga Lakshana* of *Nasya Karma*.

Complications due to improper administration of Nasya karma-Table No-10 complication of Nasya due to improper administration³³

S.No.	Condition in which Nasya	Complication
	was administered	
1.	Medicine which is	Cough, Lower respiratory tract infection, Nasal
	administered too fast	obstruction
2.	Vey hot medicated oil used	Burning sensation, irritation, Migraine
	for Nasya	
3.	Rapidly given	Comes out fast

4.	Too much cold	Cough, cold	
5.	Small Quantity	Ineffictive action	
6.	Frequent administration	Nasal mucosa irritation	
7.	Nasya after drinking water	Rhinitis, headache	
8.	Nasya in infective rhinitis	Loss of smell, fowl smell from nose	
9.	Nasya in acute rhinitis	Cough, Lower respiratory tract infection, Vomiting,	
		Fever	
10.	Nasya after head bath	Fevere, anorexia	
11.	Nasya in menstruation	Vaginal disease	
12.	Nasya in hungry state	Dizziness, anorexia	
13.	Nasya in thirst state	Cough, Lower respiratory tract infection,	

Table No-8 Dose of Different type of Nasya³⁴

S.No.	Type of Nasya	Uttama	Madhyama	Hina
1.	Dose of Snehana Navan Nasya	32 Bindu	16 Bindu	08 Bindu
	(Drops in each Nostril)			
2.	Dose of Shodhan Navan Nasya	08 Bindu	06 Bindu	04 Bindu
	(Drops in each Nostrils)			
3.	Marsha Nasya	10 Bindu	08 Bindu	06 Bindu
4.	Pratimarsha Nasya	02 Bindu	02 Bindu	02 Bindu
5.	Avapida Nasya (Kalka Nasya)	08 Bindu	06 Bindu	04 Bindu

Note - The dose showing against each age group is for one nostril.

Table Showing Age wise of 1 Bindu dose for different medicines³⁵

Sr.	Age group	Anu Taila	Shadbindu Taila	Durva Swaras	Milk
No		(1 Bindu)	(1 Bindu)	(1 Bindu)	(1 Bindu)
1.	Infants (0-1 year)	0.06ml	0.06ml	0.03ml	0.03ml
2.	Toddlers (1-3	0.1ml -	0.1ml -0.25ml	0.05ml-0.1ml	0.05ml-
	years)	0.25ml			0.1ml
3.	Pre-schoolers (3-5 years)	0.25-0.3ml	0.25-0.3ml	0.1ml	0.1ml
4.	School age (6-12 years)	0.3 - 0.5ml	0.3 - 0.5ml	0.2 - 0.35ml	0.2 -0.35ml
5.	Adolescent (12-18	0.5 - 0.8ml	0.5 - 0.8ml	0.35 ml - 0.4 ml	0.35ml –
	yrs				0.4ml

Note – Dose of *Bindu* is converted into drops and then into ml. For this child of different age group from 1 to 16 years were selected to establish the dose with *Anu Tail, Shadbindu Tail, Durva Swaras* and *Milk*.

Table No-9 Dose of Different type of *Dhooma Nasya* 34

Type of Dhooma Nasya	Length of <i>Dhooma Netra</i>			Dose
	Charaka	Sushruta	Vagbhatta	
Prayogika	36 Angula	48 Angula	40 Angula	Twice
Snaihika	32 Angula	32 Angula	32 Angula	Once
Vairechanika	24 Angula	24 Angula	24 Angula	thrice
Vamniya & Kasaghna		16 Angula		

Precautions and Safety Guidelines:

- Be cautious while performing procedure. The oil may spill into eyes, mouth etc.
- Observe closely for any adverse effects as younger child cannot express properly; Preparedness and readiness in case of SAE like aspiration.
- Precautions & safety guidelines are maintained during procedure

Special precautions and safety measures to be followed after procedure

- Drinking cold water, Head Bath, bathing with cold Water are not allowed.
- Avoid long distance travelling
- Avoid too much anger
- Usage of gadgets, mobiles, laptop etc
- Exposing the child to wind, dust and pollution.
- Avoidance of Eight major incriminatory factors³⁶ like *Uchchairbhashyam* (speaking loudly), *Rathakshobham* (Irritation of body by excessive travelling), *Atichankramanam* (Prolonged walking), *Atyasana* (Continuous sitting), *Ajirna adhyashana* (Consumption of the food when suffering from indigestion & consumption of excessive food), *Vishamaahit-ashana* (irregular and unwholesome food intake), *Divasvapna* (Day sleep).

10. Documentation Protocols:

- Selection of the patient
- Informed written consent form
- Basic information Name/Age/Sex/ diagnosis/ chief complaints
- Assessment & Evaluation
- Treatment Plan & Procedure details purpose, benefits, any modifications
- Patient assessment/pre procedure preparation
- Procedure area & mention table/ Name of medicine/materials & supplies/procedural steps/ Duration/frequency/follow up notes
- Monitor Samyak lakshana & Outcome measures/ Assessment criteria and grading the symptoms
- Child response/ parent's acknowledgement
- Pathya Apathya of food & life style
- Any side effects to be noted
- Sign & date

List of Oils / Ghee commonly used in Nasya karma

- 1. Anu taila
- 2. Shadbindu taila
- 3. Dhanwantaram 101 avarti taila
- 4. Kshirabala 101 avarti taila
- 5. Maharaja prasarini taila
- 6. Mahanarayana taila
- 7. Mahamasha taila
- 8. Kaspasasthyadi taila
- 9. Sigruadi taila
- 10. Arimedadi taila
- 11. Tekaraja taila
- 12. Vachadi taila
- 13. Brahmi taila
- 14. Tulasyadi taila
- 15. Surasadi taila
- 16. Ashtapallava taila
- 17. Bala dhatryadi taila
- 18. Parinata keri kshiradi taila
- 19. Nasaras taila
- 20. Kshara taila
- 21. Kumkumadi taila
- 22. Karpuradi taila
- 23. Uthama taila
- 24. Rasa taila
- 25. Varanadi ksheera ghritam
- 26. Brahmi ghritam
- 27. Saraswata ghritam
- 28. Mahatriphala ghritam
- 29. Jivantyadi ghritam
- 30. Patoladi ghritam
- 31. Maha kalyanaka ghritam

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Shirodhara

1. Therapy/Procedure Name: Shirodhara

- 2. Age Group: *
 - Pre-schoolers (3-5 years)
 - School-age (6-12 years)
 - Adolescents (12-18 years)

3. Indications

- Behavioural: ADHD, OCD, School Phobia, Anxiety, Social pragmatic communication disorders
- Emotional disorders: Virtual Autism, Screen addiction,
- Cognitive: Intellectual disability, Dyslexia
- Neurological disorders (Cerebral palsy, Degenerative, Seizure)
- Cranial neuropathies eg: facial palsy.
- Endocrine disorders (Hypothyroidism, Hyperthyroidism, Pituitary disorders)
- Speech & language disorders
- Integumentary system : Skin disorders, Khalityam , Palithyam
- Psychosomatic disorders (eg: BronchialAasthma, Aneurism, IBS, Ticks).
- Other common conditions: Head ache, sleep disorders, skin disorders)

4. Contraindications

- Acute inflammations and infections
- Ama Avasta
- KaphajaVyadhiin general
- Local painful lesions or wounds
- Non cooperative and Irritable child
- Child unable to lie down for longer time period.

5. Pre-Procedure Preparation:

Preparation of Patient:

- Educate the child and guardian about the procedure
- Obtain informed consent from parent/guardian /assent of child(as per ICMR Ethical guidelines)
- Ask the patient to remove/cut short the hair
- Ensure that the vitals are within normal limits

- Detailed clinical examination of the child
- Re check patient's condition with contraindications
- Guidelines for pre-procedure fasting: As it is a Snehana procedure, it should not be on full stomach (at least 2 hrs after the food intake). Child should be well hydrated. Child should satisfy natural urges before the procedure.
- Oil application: Abhyanga should be done over head and body, with lukewarm oil. Gentle massage should be done over neck, shoulder, back and another region.

6. Procedure Details:

Preparation of Materials, Equipments and Medicines:

- Taila as per disease specification (RoganuyukthaTaila)- Preferably in Madhyama to Khara Paka depending upon age and disease condition of child
- Amount of Taila: 3-4 litres (1.5 to 2 litres daily) may vary depending on the age, clinical condition and duration of treatment
- Droni (as per BIS Standards above 8 years of age)
- ShiroDhara Stand: Wood, Stainless Steel, Brass, Copper
- ShiroDhara Vessel: Stainless steel, Brass, Copper, Ceramic/Clay
- Chain for hanging ShiroDhara Vessel: Stainless steel, Brass, Copper
- Note: Standard Automated ShiroDhara Stand can also be used
- Vessels, Cotton, Cotton cloth, Gauze, Cotton wick
- Pillow (soft and comfortable) 1
- Towel/ tissue paper to wipe the oil
- Heating arrangements (stove etc.)/ oil should be not heated directly
- Gloves, Headcap for attendant
- Dustbins as per NABH Guidelines

Manpower:

- Ayurveda Physician: 1
- Attendant: Trained Panchakarma attendant 2

Step by Step Procedure details

- Calm room with Dim light (light should not be directed towards eyes of the child)
- Ask the child to sit on the Droni with legs well extended
- Apply Taila over the vertex and do head massage

- Do Abhyanga all over the body with warm Taila for 10minutes (If required according to disease condition)
- Tie a cotton band around the forehead
- Give psychological support to the child engage the child making him/her comfortable throughout the procedure by storytelling, singing songs or any other conversations
- A small pillow should be placed below the head of the patient. The patient is made to lie supine on the Droni.
- Cover the eyes with cotton gauze (if child is cooperating) and keep cotton plugs in ears
- Position patient so that tip of wick comes 4-6cm above mid-portion of forehead
- Warm (warm through indirect heat) the medicated oil to 37-38°C
- Hold Dhara vessel little away from the head
- Pour warm medicated oil into Dhara vessel carefully
- Bring back Dhara vessel above head
- Direct the Dhara coming through wick on patient's forehead
- Adjust the size of wick so as to make the size of Dhara equal to thickness of small finger of patient
- Maintain continuous and steady stream
- Oscillate the vessel with moderate speed from one end of forehead to other with right hand.
- Ensure a stopper/ mechanical regulator to the Dhara pot.
- Maintain uniform rate of oscillations throughout the procedure (17 oscillations per minute)
- The oil flow rate is kept at approximately 50-150 ml per minute (the flow rate depends on oil thickness, quantity used, its temperature, diameter of the nozzle, dose and disease of patient)
- Maintain the temperature of the Tailaat frequent intervalsby re-heating on getting cold
- Do gentle massage overhead frequently with left hand
- Continue the procedure up to 15-30 minutes (15-45) depends upon child coporation
- Ask patient to flex his lower limbs occasionally during the procedure
- After completion of procedure hold the Dhara vessel away from patient's head
- Remove the cotton band, gauze and plug

- Wipe off the oil and sweat with a clean and dry towel
- Ask the patient to sit
- Gentle Abhyanga on vertex
- Dusting of medicated Choorna on the vertex (depending on the dosha can select Rasanadi, Kachooradi etc)
- Allow to take rest for 1hour with the body covered with a blanket.
- Follow the regimen mentioned under Snehavidhi Laghu Ushna Ahara

Note:

- Oil used in Dhara can be changed as per Doshanubandha that sets in during the duration of Dhara procedure
- Patient should be reassessed every day
- There may be chances of child's body getting cold during the procedure for which mild Abhyanga can be done in between the procedure
- Preferably one dose of Gandharvahastadi Kashaya with Saindhava and Guda Anupanacan be administered to child immediately after the procedure (dose depends on age of child)

Oils:

- o DhanwantaraTaila
- o Narayana Taila
- o BalaTaila
- KsheerabalaTaila
- ChandanadiTaila
- KarpasasthyadiTaila
- o VatasaniTaila
- HimasagaraTaila
- TriphaladyaTaila
- AsanabilvadiTaila
- o DhaturapatradiTaila
- NeelibhringadiTaila

7. Duration and Frequency:

- Time period: 8-11 am in the morning and 3-5 pm in the evening(Reference)
- Temperature of oil used for the Dhara: 1°C above core temperature
- Time duration of procedure: 15 45 minutes (vary as per age of patient)
- Total Duration: 3 14 days (can be altered as per physical condition of patient)

8. Post-Procedure Guidelines:

Diet and activity guidelines:

Ahara:

- Ahara consumed should be: Laghu Ushna Ahara
- Drava, Ushna, Anabhisyandi, that which does not aggravate Kapha, Natisnigdham (slightly unctuous), Asankaram (not mixed with unwholesome food).
- UshnodhakaUpachara

Vihara:

- Follow the regimen mentioned under Snehavidhi.
- Safe, composed climate, without having any strenuous activity.
- Avoid temperature variances (temperature difference not more than 5 °c)
- Avoid activities that may cause sweating of child excessive crying which may cause sweating in head region and in such conditions Avachoornana of Rasnadichoorna can be done
- Avoid exposure to too much wind, activities like swimming
- Patient should be allowed to have a normal sleep during the total duration of treatment

Adverse effects and management:

- Heaviness of head: Adjusting the Dhara stream and duration of procedure
- Burn: Local application of Shatadhoutaghrita / Jatyadighrita
- Burning sensation in eyes: Gently wash with Yashti Kashaya
- Ear infection: Manage accordingly according to condition of patient

9. Precautions and Safety Guidelines:

- Oil selected for the procedure should be checked for Upashaya by doing Shiro Abhyanga the day before.
- There is chance of head injury if child is getting up suddenly from the Dhara table during the procedure as there may be a chance of child's head hitting on the Dhara pot.
- Diverting attention from oscillatory Dhara pot is important eg: Telling story by bystanders, parents. body massage.
- Taila suitable for the body has to be used after considering the disease, season,
 Satmya and prakriti of the patient
- Cotton band should not be too tight or loose and ligation knot should be placed on any of the sides of the head.
- The environment should be emotional conducive to the child.

- Child should not be left alone at any time of the procedure
- Effort should be taken to keep the child active during the procedure
- Children who are on Antiepileptic and Psychotropic medications, allergic history should be duly intimated to physician before the commencement of procedure

Special precautions and safety measures to be followed:

- Patients should be observed for any sign of complications or distress during the procedure.
- After the procedure is completed and while the patient is resting on the treatment bed, any adverse events or complications should be noted and appropriate measuresneed to be taken.
- If patient feels any discomfort during the procedure, he/she should inform the concerned Vaidya

10. Documentation Protocols:

Parameters to be documented for the procedure:

- Informed consent
- Prescription including procedural details containing the patient's name, unique identification number, date and time of procedure
- Significant findings and diagnosis, investigation results
- Any procedure performed, medication administered and other treatment given
- Follow-up advice, medication and other instructions in an understandable manner
- Do assessment of these parameters after one week

Follow-up notes:

• Patients who have completed treatment should be assessed after one week evaluate the sustained effect of ShiroDhara.

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