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IMPORTANCE OF PANCHAKARMA IN CHILDREN

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ABSTRACT

Panchakarma is a type of Shodhana Chikitsa (detoxification therapy). Panchakarma is unique set of procedures beneficial in the elimination of vitiated doshas of the body, due to improper diet and regimens or seasonal and enviormental changes. The physiological composition of Dosh (vata, pitta, kapha), dushya and mala are different in children as compared to adult therefore the type and prevalence of disease are also different in children and thus pediatric care needed utilization of various approaches for the management of diseases in kaumarbhritya., Panchakarma (shaman and shodhan) play significant role in the management of certain diseases in kaumarbhritya. Majority of the pediatric diseases are shamanoushada saadhya. Even drugs with mridu

and madhyama veerya act very effectively in children. This can be attributed to their mridukaayata and alpaveeryata. Those diseases which persist even after shamanachikitsa have to be treated with sodhana chikitsa. In child panchakarma are equally effective as adults, but presently there is lack of usage because of lack of knowledge of methodology and complications. This paper mainly focuses on various panchakarma procedures carried out in children.

INTRODUCTION

- In Ayurveda the treatment is branched into: *Shodhana* and *Shamana Chikitsa*. *Shamana Chikitsa* includes:- *Deepan, Pachana* etc. *and Shodhana Chikitsa* includes *Panchakarma*.
- Panchakarma is an integral part of Chikitsa. As per our classics it is only method to cure the disease from its roots. Panchakarma process has efficiency to make equilibrium of Dosha which leads to inefficiency to get relapse again.

- As *Panchakarma* is an inseparable part of Ayurvedic management. So, it is unavoidable in pediatric cases.
- *Acharya Kashyapa* told that *Basti is Amritam*^[2] for the children. He wrote *Kashyapa Samhita* to defining the *Kaumarbhritya* to the Ayurvedic physician because it is very difficult Basti procedure in children.
- When baby takes first breath Acharya advised that baby should be undergone the process of *Garbhodaka Vamanam* by the use of Saindhav and Ghritam.
- This proves importance of Panchakarma from paediatrics to geriatrics.

Difference of Panchakarma procedure in Adult and Children

- Children are not a small adult; they have great difference in body structure and physiology too. Acharya Charak said that children are delicate, inable to tolerate heavy work, ill developed sexual characters etc.^[5]
- Babies are always Snigdha in nature due to the habitual of sweet (Madhura), Snigdha diet
 as milk, ghee, butter etc. so the Snehana is not needed in all paediatrics cases as compare
 to adult Panchakarma procedure.^[6]
- Children are not co-operative as adult. Children's skin has under developed sweat glands
 and delicate soft in nature, so during Swedana procedure it should be taken in mind. They
 have immature kidney and liver.
- Babies have chance to easily collapse due to large intestine in compare to body surface
 area, to the adult; so, complication of Panchakarma procedures of Vamana, Virechana
 and Vasti should be kept in mind.
- All Panchakarma procedure can't be used in pediatrics cases as routine process in adult, according to the need procedure should be taken.

Panchakarma in Children

The Panchakarma is defined by all Acharyas, but specification to the pediatric age for Panchakarma procedure and as Amrita for babies is told by Acharya Kashyapa.^[7]

TRIVIDHA KARMA^[8]

- 1. PURVA KARMA- a) deepana-pachana
 - b) Snehana
 - c) swedana
- 2. PRADHAN KARMA- a) Vamana
 - b) Virechana

- c) Basti
- d) nasya
- e) raktamokshan
- 3. PASCHATA KARMA a) samsarjana
 - b) Rasayana
 - c) shamana
- 1) PURVA KARMA This includes a) Deepana- Pachana, b) Snehana and c) Swedan.
- a) *Deepana-Pachana:* The process of improving Agni, has great importance in the normalizing the body physiology. Agni is responsible for *Bala, Varna and Ayu.*^[9] Deepana and Pachana should be done prior to Panchkarma procedure. They should be done for obtaining in *niramavastha* of doshas. For that Peya, Churna, Kwath etc are used. In pediatric cases we can use *Musta, Ativisha, Trikatu* etc medicine for the Deepana-Pachana process. Commonly used Pachanaoushadha in pediatric practice: Trikatuchurna 2.5g thrice daily half hour before food or mixed with first few morsel of food for minimum 3 days. Vaisvanarachurna 2.5g thrice daily half hour before food for minimum 3 days. Panchakolaphanta or Shunthijala 30ml thrice daily half hour before food or food processed with Panchakola for minimum 3 days. Chitrakadivati ½ 1 tab thrice daily half hour before food for minimum 3 days. Tab Hingvastaka ½ 1 thrice daily half hour before food or mixed with first few morsel of food for minimum 3 days, Supachya drops 2.5 to 5 ml thrice daily half hour before food for 3-5 days.
- b) Snehana: Prohibition of Snehana before 6 years of age in children. Accha sneha should be used in Hina Matra- Ardha pala. Sadya Sneha is also used. Importance of Abhyanga and Anuvasan is only seen in Snehana Karma. Anuvasana lubricates the whole body simultaneously. For Snehana use of matra basti is adviced. Snehana is contraindicated from Ubhaya Marga. Kashyapa Samhita Sutra sthana 22nd Chapter is named as Sneha Adhyay where Acharya Kashyapa explains certain principles to be followed during Snehan procedure in a child. Snehana is very important for the making of Dosha in soluble state and by which they easily get fluidity, make easy removal of Dosha from natural orifices.^[11] In pediatrics cases the Abhyangam has great importance to make the baby Snigdha as it helps myelination of the nervous tissue because they are under the process of myelination. Internal Snehana is not needed in every case because they are already Snigdha due to their diet habit as milk, milk product and sweet items.^[12] Snehana

is the process of oleation to the body by using medicated taila and ghrita internally as well as externally. Snehana is optional in Ksheerada and Ksheerannada children as they always remain snigdha by constant use of Ghrita and Ksheera. Sneha Yoni: Sthavara – Taila of Tila, Amra, Sarshap, Vibhitaki, Bilva, Eranda, Atasi etc. Jangham – Sarpi, Majja, Vasa of Birds, Animals and Aquatic creatures. Ghrita, Taila, Vasa, Majja are best in successive order. Ghrita is the superior most among the sneha-yoni. Among Ghrita Goghrita is best due to its sanskarit and satmya property. Sneha Guna: Ghrita- Pittaanilhara, doesn't do sanchay of kapha, increases strength, metabolism, intellect and do purifying action on genital tract. Taila- Ushna, Kapha-anilhara, Swar-varnakar, Tanuasthikar, Dhatu Vranashodhan. Majja, Vasa- Vataghna, Vrushya, it is santankar to Balwan and Satmya Purush. Anupana: Kashyapa says, in general hot water (ushna jala) is best anupana for all types of Sneha. Ghrita- Hot water, Taila- Yusha, Vasa and Majja-Manda. Types of Snehana:- Achapana(Shodhana Purvakarma) - Hrasva matra of Sneha equivalent to Brimhana Matra is advised for children. Vicharana(Shamana Prayoga) - Administered as abhyanga, matra basti, sabhakta sneha, nasya, gandusha, murdha taila, karnapurana and akshi aschotana.

Importance of Snehana - Regular use of external application of Sneha to the children helps in good sleep, acquiring the strength, proper growth of the body and development of the child. It also relieves tiredness. After birth, sprinkling Bala taila immediately for resuscitation of the baby.

- Different contexts in Kaumarbhritya where Snehan is indicated
- Bala Taila Picchu Prayog Pichu dipped with Bala Taila should be kept over Shira pradesha (Bahya-Snehan).
- Saindhav Ghrita Yukta Chardan Baby should be given Ghrita mixed with Saindhav, where, Ghrita will do Snehana and lubrication of the Respiratory tract.
- Raja Taila Raja Taila used in Phakka Roga for Abhyanga (Bahya-Snehan).
- Mushik taila In Guda Bhramsha for Snehan of Guda.
- Kushta Taila Application after Nabhinaal Kartan.
- c) Swedana Swedana is a procedure where sweating induced artificially that relieves the rigidity, heaviness, coldness and brings out sweating. [14] Swedana aims at paka of doshas. In pediatric cases, during Swedana process proper care should be taken due to soft, delicate and ill developed sweet gland. Acharya Kashyapa told two specific sudation

processes Hasta and Pada Sweda. By using this process we can save the baby from complication as burn, fainting, black reddish patch on skin, Trishna, Jwara etc.^[15] In children upto 4-month Sweda by hand applicate and after six-year Sweda by cloth is applicable. Children above 1 year the Nadi Sweda, Pinda Sweda Avagaha Sweda can be used. Mruduswedana is advised. Snigdha Swedana can also be given in children. Ashtavidha Agni Sweda can be given in children. Sthanik Sweda is mostly used in children. Instruction of moderate amount of sweating on the groin and the joints, soft sweating to the heart and eyes should be noted and carried out as said.

Indications: Primarily swedana karma is indicated for the children of krisha and Madhya balwana. Advocated in diseases such as: Karshya, Pakshaghata, Pandu, Khanja, Cerebral palsy, Spastic paralysis, post-polio-myelitic paralysis etc.^[13] as the age proceeds the delicacy of child will be substituted by firmness and hardness. By considering this, intensity of swedana can be increased.

Types of Swedana: (According to Acharya Kashyapa)^[13]

Hasta Sweda:- It is performed by applying warm hand of physician or attendant, over desired part of body. The hand should be warmed in smokeless flame. It is applicable in infants up to the age of four month.

- *Pradeha Sweda:* Luke-warm paste prepared with Eranda, Shigru patra and mula, Gomutra (cow's urine), Kinva & Saindhava is applied over affected area. It is changed frequently as the previous one becomes cold. It is effective in inflammatory conditions of throat, head, back or nape of the neck, ear, eyes, chin and chest.
- *Nadi Sweda:* This type of Sweda is applied with Vamsha, Munja or Nala after covering the desired area with clothes.
- *Prastara Sweda:* Warmed Pulaka (Kshudra Dhanya) of Tusha, Payasa, leaves of Eranda and Arka. After giving proper massage, the child is placed over the layer of above paste, properly covered with clothes.
- *Shankara Sweda:* A lump is prepared with warmed Payasa, Krishara, meat, hard articles (Shikata, Pransu and stone) with Kinva, Alasi, curd and milk. It is applied locally on desired body parts.
- *Upanaha Sweda:* The warm mixture should bind with a piece of cloth or leather, on affected part. It is a type of poultice, prepared with Kinva, Alasi, curd, milk, Saidhava, sour article (Kanji), Kustha and Tila taila.

- *Avagaha Sweda:* It is a Drava Sweda. This Sweda should be performed with the warmed Mamsa rasa of Ass, Sheep, Goat, etc.
- *Parisheka Sweda:* This Sweda should be performed by sprinkling medicated liquid with oil, over the patient.

This all types of sweda are practically applicable in children with certain modifications.

- Shashtika shali pinda sweda:- In SSPS heat, massage and pressure are provided which nourishes muscles and stimulate nerve endings. This is the common method of swedana used in paediatric patients in which specific part or whole body made to perspire by the application of shashtika shali (a variety of rice) in the form of pottalis (boluses tied in a cotton cloth). Shashtika shali is cooked with milk and decoction of herbs. This cooked rice is to be kept in pieces of cloth to make pottalis. Remaining decoction and milk should be mixed and heated in low temperature to dip the boluses for warming the Pottali. After creating pottalis, patient is massaged with suitable warm oil and then warm pottalis gently applied. The procedure takes about half to one hour.
- Precautions: Swedana should be performed only after covering the eyes with leaves of Kumuda, Utpala and Padma or a soft cloth. The cardiac region of child should be constantly touched with mukta or hand dipped in cold water or with a pot filled with cold water.
- **Importance:** It relives heaviness, stiffness and coldness in child. Hasta and Pata sweda are useful in abdominal pain in child. It is useful in hardness, constipation, suppression of voice, nausea, anorexia, tympanitis, cramps etc.

2) PRADHANA KARMA

a) Vamana:- is the process by which vitiated doshas are eliminated through upper tract by act of vamana. Immediately after birth, for removal of Garbhodaka the mixture of Ghee and Saindhava used for the purpose of Vamana. Vamana is best treatment for Kaphaja rogas. In case of vamana being the only option sadyavamana (sadya snehana + mruduvamana) is indicated. Prior to vamana, the stomach of baby should be filled with breast milk. In annada laghu and tanu peya with ghee can be used. Ideal drug is madanaphala as it is good for sukumaras. Kavaladharana is more advisable in children as an alternative method and it is applicable only after 5 years of Age.

- Vamana Vidhi- Prohibition of Vamana before 6 years of age in children. Mrudu Vamana is adviced. Mrudu Aushadhis should be used like indrayava, Saindhav, Pippali and Apamarga. Use Avaleha and Ksheerapak instead of Kalka. After that to remove the remaining kapha, Ushnodak and Panchkol peya should be given for drinking.
- Procedure:- Acharya Kashyapa prescribed some formulations to induce Vamana in children. Kwatha of Gaurasarshapa, Kritavedhana, Beeja of Madanaphala etc. is used for induce vomiting. For ksheerapa apply Vamana drugs over breast of the mother and after drying, it should be washed and baby is made to breast feeding which leads to vomiting. For ksheerannada Vamana drugs is given with breast milk. For annada, kwatha is given for intake. The kwatha should not be too hot or too cold. This procedure should be done in morning in children, after cleaning the mouth. The dosage of drugs is 120mg-4gm depending upon the severity of the diseases. In children, the therapy should be milder, which can not cause any complications. For induction of vomiting Paya, Dadhi or Yavagu should be given. Vomiting is induced by physician or mother by tickling the throat of child by fingers. Normally 2-3 vomiting are appropriate in children.
- **Indications:** Vamana therapy should be started to the children after 6 years. Now a days Vamana is given in chronic skin diseases, Bronchial asthma and psychological disorders. In Kasa, shwasa, Ajeerna, Unmada, Madhumeha and Kushtha vamana is indicated.
- **Complications:-** Dryness of throat, giddiness, vatavyadhi, fresh bleeding.
- Contraindications:- Generally contraindicated in children below 6 years of Age. In Krisha, Kshudhrika(Hungry), Thirsty vamana is contraindicated.
- b) Virechana:- Virechana is the procedure where vitiated doshas are removed from Adhobhaga (anal route). Virechana should be performed in children as a last resort. It should be administered with extreme caution as there lies a potent danger of dehydration children are highly prone too. However, mrudu virechanaushadha the like Trivrutta and Sukhavirechaka aushadha like chaturangula e.g. Virechana in a child with Pitta vikaras, is indicated but suggested to avoid it and used only in emergency conditions. According to Vagbhatta the disease curable by Virechana therapy can be controlled by Basti in children.
- Virechana Vidhi- Relatively simple karma. Suitable for most diseases. Do not give virechana before 10 years. Instead of virechana, Anulomana and sansan are more sukhkar. Best medicine is Aragwadh Sransanartha. Opposing to Tikshna Virechak Aushadi. Using Snigdha Aushadi oftenly. Virechak Kalpa is friutful with kwatha and

buttermilk. After Aushadhipana Mukhasinchan (oral irrigation) is required. After Virechana Samsarjana karma should be done.

- **Procedure:-** For ksheerada Virechana aushada should be given to mother. In ksheerannada and annada anulomana drugs like; Haritaki, Triphala, Trivruta, Aragwadha phalamajja etc. Virechana aushadha should be given in early morning when stomach is empty. Dosage depends on age, sex and bala(strength) of the patient. Virechana will start after 3 hours and continue till samyaka virechana lakshanas are observed. After Virechana follow samsarjana krama and complete rest is needed.
- **Indications:-** Revati is curable by Virechana in child. In Phakkaroga virechana by Trivrit ksheera. In constipation, Krimi, Kamala, Madhumeha, Tamakashwasa, Galaganda etc. Virechana is indicated.
- Contraindications:- In Krisha (emaciated person), Rajyakshma, Nava jwara and Hridroga Virechana is contraindicated. Tikshna virechana aushadha is contraindicated for children.
- Complications:- Dehydration, Giddiness, Shock, Prolapsed rectum.
- c) Basti:- Basti is the process in which the medicine is introduced through the anus. Basti acts as an alternative for virechana. In general, of all shodhana chikitsa, basti is supreme. Brihatrayi permit the administration of basti from 1 year of age. Basti has multi-dimensional action and treatment choice for Vata hence it is known as 'Ardha chikitsa'. Basti is considered as nectar for both children and grown-ups. Basti is used for: Utkleshana (Excitation of dosha), Shuddhikarana(Purification) and Shamana (Pacification).
- Basti Concept:- Very important concept. Half part of Chikitsa. Janmaprabhriti prayukta chikitsa prakar. Aajanma satmya- birth consistency. Anpaaya Sneha yukta Shodhana. Used in shodhana as well as in brihana. Suitable on all three due to drug discrimination.
- **Basti Types with Age:-** Matra Basti- Janmaprabhuti.

Aasthapana Basti- 1 year.

Anuvasana Basti- given with Aasthapana Basti.

Uttar Basti- Aprayojya(unsable).

Procedure:- The patient is advised to lie down in left lateral position. Some oil is applied
on anus and Basti netra. Then Basti netra is inserted into anal canal and Basti putaka is
gently pressed. The pressure is continued till only small quantity of fluid remains in the
bag to avoid air insertion. Then Basti netra is removed and patient is allowed to lie down

until he feels urge to excrete. After bowel patient may take hot water bath and samsarjana krama. According to Kashyapa Basti for children are: - Karma Basti: 30 in number (6 niruha, 24 sneha). Kala Basti: 15 in number (2 niruha, 12 sneha). Yoga Basti: 8 in number (3 niruha, 5 sneha). Chaturbhadra Kalka (4 sneha, 4 niruha, 4 sneha)

- Common Basti yogas are: Mustadi yapana Basti, Madhutailika Basti, Bala guduchyadi
 Basti etc.
- Snehadi Matra in Basti- In Vata roga equal quantity of Kwatha and Sneha taken, and Madhu is taken 1/4th of Sneha. In Pitta roga mixture of Dugdha and Sneha is taken 1/6th part of quantity of kwatha. In Kapha roga mixture of Gomutra and Sneha is taken 1/8th part of quantity of kwatha.

• Basti Matra According to Age

Age in years	Niruha Basti	Anuvasana Basti	Matra Basti
1	30	10	
2	60	20	
3	90	30	
4-5	120	40	
6-11	240	80	40
12-15	480	160	60
16-70	960	320	80

• Basti Matra in children

Age(years)	Sneha Basti Matra	Niruha Basti Matra
1-3	3 karsha (30ml)	9 karsha (90ml)
4	1 pala (40ml)	3 pala (120ml)
6	1 prasruta (80ml)	3 prasruta (240ml)
12	2 prasruta (160ml)	6 prasruta (480ml)
>16	4 prasruta (320ml)	12 prasruta (960ml)

• **Basti Sankhya-** Karma Basti- 30, "5 Anuvasana, 1 Niruha 3 Anuvasan, 6 such times, 1 Anuvasan in the end".

Kaal Basti-16, "3 Anuvasana 1 Niruha 3 Anusandhana, 3 such times in the end 1 Anuvasana".

Yoga Basti- 08, "1 Anuvasana 1 Niruha 1 Anuvasana 3 such times in the end 1 Anuvasana".

Chaturbhada Basti- 12 "4 Anuvasana 4 Niruha 4 Anuvasana".

- Alternate day Basti should be given.
- Do not use same type of Basti continuosly.
- Triguna of Sneha and Niruha Matra should be used.
- Matra should be 1/6th or 1/4th of Anuvasana Basti.
- Jivaniya and Mrudu aushadhis should be used more.
- Karma basti should be used ibn Bahudosha, Kaal Basti in Madhyamdosha and Yoga Basti in Alpadosha.
- **Indications:-** Basti can be indicated in all children and especially those who are contraindicated for virechana can be given Asthapana basti and that brings about quickly similar effects of Virechana including strength, complexion, softness unctuousness in the body. Vatajaroga, Rajonasha, Nirama atisara, Amvata and Ashmari
- Contraindications:- It is contraindicated in Krisha, Chhardi, Madhumeha, Kritahara (Immediately after taking food), Shoona payu (Inflammed anus).
- **Complications:-** Pain in Abdomen, Vomiting, Local anal injury.
- d) Nasya:- Nasya is the use of medicated Sneha through nostrils. It is choice of treatment for disorders above Greeva(clavicle). Nasya is usually contraindicated in paediatric practice, particularly in age group below 8 years. Pratimarsha nasya is advisable in children. Development of paranasal sinuses continues throughout childhood. At birth, only maxillary, ethmoidal and sphenoidal sinuses are formed. Radiological presence of frontal sinus appears at 6 years. Ethmoidal sinus develops by 17 years of age. Summing up, paranasal sinuses attain full development after puberty. Kashyapa advocated two types:-Brimhana(Purana) and Karshana(Shodhana). Katu taila nasya has been explained for children along with Madhu and gomutra by making the baby sit on the lap of mother.
- Nasya Vidhi:- Treats Urdhwajatrugata vikara and post shodhana dosha. Used in Shodhan, Shamana and Bruhana Karya. Only Sthanik Snehan Swedan required. Only Sneha should be used in children for Nasya and not churna or Dhuma. Types by Matra-Marsha Nasya and Pratimarsha Nasya. Do not use Pratimarsha Nasya before 7 years of age in children. Siddhasneha Swaras with Madhu or Saindhav/ Ghrita- saindhav can be used in Pratimarsha Nasya. Purana Ghrita, Nava Ghrita and Bruhan Sneha is also used. Sarshap oil can be used before 1 year of age in children. Shodhana Nasya should be given after every 3 days. Pratimarsha Nasya is used from birth to death (Aajanmamaran). Used in Vata ana Pitta dosha vyadhis.

- **Procedure:-**^[20] The patient should lie down in comfortable posture, then applied gentle massage over the head, forehead and face followed by mrudu swedana. Lukewarm oil is inserted into nostril. After that gentle massage should be done over palm and planter region. After procedure oil on the face is to be wiped off and advice to patient for gargling with warm water.
- **Indications:-** In Urdhwajatrugata vyadhis, Vyanga, Ardita, Vatavyadhis, Shirashula etc. Pratimarsha nasya is indicated in Children.
- Complications:- After raktamokshana, after taking food, Kasa, Shwasa, Acute rhinitis nasya is contraindicated.
- e) Raktamokshana:- Raktadhatu has been attributed the function of jeevana.

Raktamokshana, the process of letting out this Rakta dhatu is highly contraindicated in children. The most safe and comfortable mode of raktamokshana in children is Jalaukavacharana e.g. Gudapaka. Siravedha is again strictly contraindicated in children below 16 years of age as they are composed of Aparipakwa dhatu.

- **f) Jalaukavacharana:-** Jalauka commonly used for the purpose of Raktamokshana in child patients, old people and females.
- **Procedure:-**^[21] 1. The Jalauka should be grasped and kalka of mustard with Haridra in water should be applied all over the body of jalauka. After that jalauka is kept in vessel of water for muhurta. 2. Then try to attach jalauka on desired sites, if they don't attach drop of blood should be withdrawn from that site. 3. When jalauka starts to suck and its middle portion gets elevated assuming the horse shoe shape indicates jalauka stickes well and should be covered with wet cloth. 4. After pricking pain starts jalauka should be withdrawn from that site. 5. After that, Jaulaka's body should be massaged. It is easy to carry the Jalauka when its hind portion is held by left hand in between thumb and finger and gently squeezed out by right hand till it is completely emptied.
- Indications:- Vidradhi, Gulma, Arsha, Kushtha, Vatarakta, Visarpa, Vicharchika, Netraroga, Shiroroga, Kantharoga, Ahiputana etc. Jalaukavacharana is best method adopted for bloodletting in children in case of Pittaja and Raktaja disorder like Kukunaka and Ahiputana. It may be adopted in diseases like Ajagallika, Charmadala, Visarpa and such other skin diseases.
- **Contraindications:-** Children below 12 years. General debility. Cardiac problems. Terminally ill pateints. Life threatning conditions.
- Complications:- Leech migration, Infection, Anaemia, Allergic reaction.

3) PASCHATA KARMA

- a) Samsarjana^[22]
- b) Also, Rasayana (Rejuvination therapy) and Shamana (Palliative therapy) drugs are used.

Day	Samsarjana
1	Pradhankarma jeerana bhakta sukhosita jala and manda.
2	Yavagu panam
3	Deepaniya, Ruksha, ushna, saindhav siddha vilepi
4	Mudga manda sadhita odana.
5	Phalamla mudga manda sadhita odana.
6, 7	Ghrita mudga manda yukta odana.
8	Jangal mamsa rasa & odana.
9	Ghrita yukta mamsa rasa & odana.
10	Ghrita lavana amla mamsa rasa yukta odana.
11	In Vata kapha dominant roga anupan is Usna udaka.

- **Summary-** Shodhana chikitsa should be done in children only if necessary.
- Snigha and Mrudu Shodhan Dravya should be used.
- Samsarjan and parihar should be followed.
- Where both Vamana and Virechana are suitable, there Virechana should be used.
- Where both Virechana and Basti are suitable, there Basti should be used.
- Where both Marsha Nasya and Pratimarsha Nasya are suitable, there Pratimarsha Nasya should be used.
- Raktamokshan is prohibited throughout childhood.

REFERENCES

- Agnivesha, Charaka Samhita with Ayurveda Dipika commentary of Chakrapani Datta,
 Ed. Acharya Yadavji Trikarma Ji, Chaukhambha Surabharati Prakashan, Varanasi:
 Edition 7th. 2002, Charaka sutra Sthana 16/20.
- 2. Pt. Hem raj Sharma Kashyapa Samhita hindi translation by Srisatyapala ch. Rajputreeya Siddhi sthana7/9 P. 146 published by Chaukhambha Sanskrit Sansthan Varanasi.

- 3. Pt. Hem raj Sharma Kashyapa Samhita hindi translation by Srisatyapala ch. Rajputreeya Siddhi sthana 7/10 P. 146 published by Chaukhambha Sanskrit Sansthan Varanasi.
- 4. Agnivesha, Charaka Samhita with Ayurveda Dipika commentary of Chakrapani Datta, Ed. Acharya Yadavji Trikarma Ji, Chaukhambha Surabharati Prakashan, Varanasi Charaka Sharira Sthana 6/43.
- 5. Astanga Hridaya Uttara Tantra 1/10.
- 6. Kashyapa Samhita Siddhi sthana 3 p. 154.
- 7. Agnivesha, Charaka Samhita with Ayurveda Dipika commentary of Chakrapani Datta, Ed. Acharya Yadavji Trikarma Ji, Chaukhambha Surabharati Prakashan, Varanasi Charaka Vamana Sthana 8/122.
- 8. A textbook of Panchakarma by Dr. B.A. Lohith, 1st edition, page no 6.
- 9. Kaviraj Atri Dev Astanga hridaya edited by Yadunandan Upadhyaya Uttara tantra 2/29-34 P.623 Chaukhambha prakashana Varanasi.
- 10. Reena Kulkarni, Concepts and Prospects of Snehapana in Children, Joinsysmed, 2015; 3(4): 175-179.
- 11. Pt. Hem raj Sharma Kashyapa Samhita hindi translation by Srisatyapala ch. Rajputreeya Siddhi sthana 7/9 published by Chaukhambha Sanskrit Sansthan Varanasi.
- 12. Kashinath Shasti and Gorakhanath Chaturvedi Charaka Samhita Chikitsa Sthana 15/3-4 P.452, Chaukhambha Bharti Academy Varanasi.
- 13. Panchakarma for children in clinical and outpatient practice by Dr. Rajagopala Shrikrishna.
- 14. Kashyapa Samhita of Vriddha Jivaka revised by Vatsya, Vidyotini hindi commentary, 23. Swedadhyaya, Sutrasthana by Bhisgacharya S.
- 15. Kaviraj Atri Dev Astanga hridaya edited by Yadunandan Upadhyaya Uttara tantra 2/29-34 P.623 Chaukhambha prakashana Varanasi.
- 16. Kaumarabhrtya(Updated) by Dr. Dinesh K.S., Specific therapeutic procedures in children, page no. 189.
- 17. Ashtanga Samgraha 1st, 2nd and 3rd part by professor K.R. Shrikantha Murthy, 2nd edition.
- 18. Ashtanga Hridaya tantra, volume 1 and 2 by professor K.R. Shrikantha Murthy, 1st edition.
- 19. Gupta K, Mamidi P. Some efficacious Ayurvedic panchakarma procedures in children J Complement 2018; with palsy. Int Alt Med., 11(1): 3-42. DOI: 10.15406/ijcam.2018.11.00344.

- 20. Kashyapa Samhita or vriddha Jivaka tantra, Siddhisthana Nasya karma by P. V. Tiwari, 1st edition.
- 21. Sushruta Samhita of Maharshi Sushruta with Sushrutavimarshini Hindi commentary, Sutrasthana, Jalaukacharaniyadhyaya, 13th chapter.
- 22. Kashyapa Samhita Vriddhajivakiya tantra P V Tiwari Choukambha Vishvabharati Varanasi khilasthana 8/104-105.