

## CONCEPT OF PANCHKARMA PROCEDURES IN PAEDIATRIC CARE AND EXPLORE THE VARIATION AND SIGNIFICANCE OF PANCHKARMA IN BAL-ROGA

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### **ABSTRACT**

Ayurvedic treatment comprises of two major parts viz. Samshodhana chikitsa (Bio-cleansing therapy) and Sanshaman Chikitsa (pacifying therapy). Samshodhana chikitsa envisages panchkarma treatment which is basically a bio-cleansing regimen intended to eliminate the toxic elements from the body and thereby enhances the immunity of the body. Panchkarma treatment can be used efficiently in all the branches of Ashtang- Ayurved, Kaumarbhritya tantra is one of them. Panchkarma treatment beneficial in paediatric care, it cures many child disorders and enhances their immunity. Now-a-days low immunity, neuro muscular disorder, psychological problems, behaviors problems are common in paediatric population. This article useful to explore

panchkarma procedure in paediatric condition and will definitely provide new hope in management of child disorders.

**KEYWORDS:** Ayurveda, Panchakarma, Kaumarbhritya, Child disorders.

### **INTRODUCTION**

One of the oldest forms of holistic healthcare 'Ayurveda' the science of life aims<sup>[1]</sup> 1. To prolong life and promote perfect health 2. To completely eradicate the disease and dysfunction of the body Ayurveda maintain harmony of the body, mind and consciousness shodhana (purification) and shaman (pacification) are the two types of treatment described in Ayurveda. Shodhana means cleansing or detoxification of the body by expelling the deranged

doshas. (Morbid materials inside the body causing various disease) Shamana is pacification of symptoms without eliminating the morbid doshas. Panchakarma therapy believed to impart radical elimination of disease causing factors and maintain the equilibrium of doshas. It act as preventive as well as curative measures and improve the body immunity. Shodhana chikitsa is considered superior to Shamana chikitsa as the chances for recurrence of the disease so treated are remote.<sup>[2]</sup> Panchkarma therapy can be used successfully in all the branches of Astang-Ayurveda, Kaumarbhritya is one of them. Panchakarma therapy useful in many child disorders, Now-a-days burden of neurological developmental disorder in childhood age group is enormous. Not only being childless has been a criticism since ancient times but having child with congenital or developmental deformities is also a curse. As Ayurveda focuses on preventive measures for healthy progeny, panchakarma therapy not only helps in improving the quality of progeny but also relieves the physical, mental and social stress of the parents.<sup>[3]</sup> Panchakarma therapy plays a definite role in the management of disease especially of neuro-muscular, rheumatological and gastro intestinal origin. In addition to this Panchakarma procedures are utilized for the purpose of preservation, maintenance and conservation of health and promotion of longevity.<sup>[4]</sup> this article highlights concepts of panchkarma procedures in paediatric care.

## MATERIALS AND METHODS

References collected from various classical Ayurveda textbooks, related research article, clinical and experimental studies, internet sources, previous work done significance of panchakarma therapy in paediatric care was studied in detail.

### Panchakarma in kaumarbhritya

Panchakarma therapies are an integral part of Ayurveda, they act as preventive as well as curative measures and improve the body immunity.<sup>[1]</sup> It includes five major therapeutic procedures (Pradhan karma) of detoxification and body purification, along with many other supportive procedure. Five fold measures comprehended as panchakarma are<sup>[5]</sup> Vamana (therapeutic emesis), Virechana (therapeutic purgation), Basti (emesis), Nasya(nasal administration), Raktamokshana(bloodletting). These procedures are performed to flush out unwanted substances from the body from the nearest tract. Prior to these five pradhan karmas (main procedures), Purva Karma<sup>[6]</sup> (preparatory measures) are

- i. Deepana Pachana (Administering oral medicines to improve digestion in order to enhance Agni)

- ii. Snehana (Oleation)
- iii. Swedana (Sudation/ fomentation)

After the main procedures, Pashchat Karma<sup>[7]</sup> (Samsarjana karma) a special diet and life regimen. (Period of convalescence) is advocated as post-operative measures. It prevents any further complications, to obtain desired results and also to bring back the patient's body to normal lifestyle. The toxic products of body metabolism can be broadly divided into water soluble, fat soluble and volatile substance. The volatile substance like carbon dioxide can easily be removed from the body through lungs, while there are number of mechanisms available to get rid of the water soluble toxic materials through kidney, sweat and other body secretions, removal of fat soluble toxic materials is very difficult and only liver can play a small role. Hence it is likely that there would be accumulation of fat soluble toxic products in the body liberal use of oil and ghee in various Panchakarma procedure makes it possible to eliminate these toxic products. In Ayurvedic practice of Panchakarma Dosh (fault or disease), prakriti (Body constitution), kala (season) drug availability etc. are always of prime concern.<sup>[4]</sup>

### Purva karma

1. **Deepana pachana** – Root cause of all diseases are diminished Jatharagni<sup>8</sup> so it is important to correct the Jatharagni, for this purpose Deepana and Pachana dravyas are recommended. Both these dravyas modify and balances state of jatharagni, improves digestive secretion, facilitates peristaltic movements etc. Deepana and pachana chikitsa prescribed as purvakarma to improve agni and niramavastha of doshas before main procedure of Panchakarma shunti and dhanyak boiled in water can be used in paediatric patients, initially it will be used warm and in small quantity.
2. **Snehana (Oleation)** – Snehana stands for lubrication of body system by the administration of fatty substances internally and externally. Four types of snehana dravyas are mentioned in the Ayurveda textbooks viz. Ghrita (ghee), taila (oil), vasa (fat) and majja (bone marrow). Out of these Ghrita is considered as the best.<sup>[9]</sup> Ghrita has more importance for snehana in children. There are two types of snehana
  - a. Achapana (shodhana purvakarma) b. virechana (shamana prayoga) Although achcha sneha is the best type of snehana; sneha vicharana is practiced in paediatric group because achcha sneha is most often difficult to be administered in children. In children sneha medicated with mrudu dravya are indicated. Acharya Kashyapa has described lehana

adhyaya and navjat parichrya adhaya where madhu and ghrita are indicated for use in children.<sup>[10]</sup> Acharya Vagbhat has described Abhvanjana with bala bala taila in Navjat paricharya during Prana pratyagaman.(resuscitation)<sup>[11]</sup> Acharya Susruta has mentioned the use of various medicated ghrita during summer in children of different age group i.e. Kshirada, Kshirannada and Annada.<sup>[12]</sup> Charak has pleaded the use of small amount of sneha in children.<sup>[13]</sup> Abhyanjana with Bala taila is recommended in child soon after birth.<sup>[14]</sup> Ghrita has important role in first four days feeding of newborn.<sup>[15]</sup> In children, Ashwagandha Ghrita, Kumarkalyan Ghrita, Samvardhana Ghrita, Abhaya Ghrita, Panchagavya Ghrita, Ashtang Ghrita, Shishu kalyanaka Ghrita, Bramhi Ghrita, Shodhana Ghrita, Ashtamangala Ghrita, Narayana Taila, Mahanarayana Taila, Mahamasha Taila, Bala taila, Mashadi Taila, lakshadi tail are used. Snehana is indicated in swedya, samshodya (before cleaning therapy) Ruksha sharira, krisha, balaka, Timira, Vatarogas, Kasa(cough), Shwasa(dyspnea), Hikka(hiccough), swarbheda(hoarseness of voice, etc.<sup>[16]</sup> Snehana is contraindicated in Kshirad Avastha (breastfeed babies), Chardi(vomiting), Kaphaja Vikara such as sthoulya (obesity), raktapitta (bleeding disorders), Atisara (diarrhoea), jvara (fever), galamaya(throat disorder).<sup>[17]</sup> Kashyapa has restricted the snehana in kshirada.<sup>[18]</sup> Charak has described sneha as contraindicated in grahapidit and talu sosha. Regular practice of abhyanga with medicated oil beneficial in growth and development of children. Abhyanga nourishes the superficial and deep muscles and make the muscles strong and joint stable.

- 3. Swedana:** Swedana is a process to induce sweating (sudation) artificially. Acharya Kashyapa described eight types of swedana.<sup>[19]</sup> Hast, pradeha, nadi, Prastara, saukar, Upnaha, Avgaha and Parisheka. Hasta sweda is indicated upto 4 month of age.<sup>[20]</sup> Hasta sweda, patta sweda are considered useful in neonates and infants especially in abdominal colic. Conditional swedna is recommended for krisha (thin) and medium strength child.<sup>[21]</sup> According to acharya charak swedna karma relieves heaviness, stiffness and coldness of the body.<sup>[22]</sup> Swedana karma used in child suffering from staimitya(rigidity), kathorata (hardness), malabandha (constipation), anaha, vanhi nigraha (suppression of voice), hrillasa (nausea), aruchi(anorexia), alasaka (tympanities), kampana (cramps). Swedana may be mild, moderate or strong in nature according to the body parts exposed for swedana.<sup>[23]</sup> During the process of swedana various articles like pearls, candrakantamani and pots filled with cold water should be kept continuously in contact of hridaya Pradesh (cardiac region).<sup>[24]</sup> Mouth should be filled with powder of karpura or

with juices of citrus fruits mixed with unrefined sugar or with draksha for easy procedure.<sup>[25]</sup> Dagdha (burnt), vishapeeta(poisoned), trishna, nidranasha (Insomnia), chhardi (vomiting), Rakta pitta (bleeding disorders), hridya rogas (cardiac diseases) are contraindication for swedana.

**Shashtika shali pinda sweda** – It is one of the most preferred methods of swedana used in neuromuscular disorders in paediatric patients. In shashtika shali pinda sweda heat, massage and pressure are provided which nourishes muscles and stimulate nerve endings. Specific part or whole body made to perspire by the application of shashtika shali in the form of pottalis (boluses tied in a cotton cloth). Shashtika shali is cooked with milk and decoction of herbs and 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 that pottalis is massaged with suitable warm oil and then warm pottalis gently applied. Shashtika shali pinda sweda increases blood flow locally, relieves muscle spasm, increase tendon extensibility and provides pain relief. It provides nourishment of muscular tissue and prevents from emaciation, atrophy and detrimental changes.<sup>[26]</sup>

### **Pradhana karma**

- 1. Vamana** – Vamana means to induce vomiting; it is a bio-cleansing measure meant for the elimination of doshas. (Mainly kapha) accumulated in the upper gastro intestinal tract (amashya).<sup>[27]</sup> Garbhodaka vamana is the first act performed in children immediately after birth. It can be done by using saindhava and ghrita. Acharya Kashyapa mentioned that, babies who emit vitiated milk from stomach repeatedly; will never suffer from diseases.<sup>[28]</sup> Indication for vamana are ajeern (indigestion), peenasa (sinusitis), madhumeha (diabetes), unmada, kushta(skin disease), kasa (cough), shwasa(bronchial asthma) and shlipada (filariasis). Contraindication of vamana are bala (very young children), hridroga (cardiac disorder), shranta (exhausted), pipasita (thirsty), kshudita (hungry) and atikrisha (emaciated body). Vamana is usually contraindicated below 6 years of age. Drugs with mild potency are used in smaller quantity. In Ksheerada child, vamana could be done with paste of Madanaphala over the nipple along with areola of breast of the mother and often it dries up it should be washed and baby is got ready to breast fed which lead to easy vamana. In ksheerannada administer drugs long with breast milk. In annada the decoction of madanaphala, vacha, saidhava or katphala, nichula, sirisa, decoction, decoction of grahaghni, kritaveda can be used for emesis. Dosage of

drugs for vamana is depending upon severity of the disease. Acharya kashyapa has also mentioned that the dose of emetics should be one vidanga, which is increased by one vidanga every month till a maximum dose becomes one amalaka. Mridhu vamana can be done with full stomach milk of breast milk followed by physical stimulation of the throat by physician or by mother has been indicated. 2-3 vomiting are appropriate for children. After emesis exertion activities should be restricted for few hours.<sup>[29]</sup>

**2. Virechana-** (Therapeutic purgation) Virechana is the procedure by which the vitiated doshas are eliminated through the anal route. It is the treatment of choice for pitta predominant conditions.<sup>[30]</sup> Normally, virechana is contraindicated in children but when it's necessary it can be used as last option, when all other treatments failing to are the disease. Virechana is better avoided in paediatric group except in the emergencies and is substituted by basti. Virechana good for ensuring the growth and development of the child. It also helpful to enhance the functional capacity of the child by purifying the Amashaya and Pakwashaya by regularizing the bowel habit. Acharya Kashyapa described the complication of virechana.<sup>[31]</sup> Indication for virechana karma is Tamak shwasa (bronchial Asthama), Pakshaghat( hemiplegia), Madhumeh (diabetes), Arbuda(tumour), Krimi (worm infestation), Kamala(jaundice). Contraindicated for virechana is Navjwara, Krisha balak, Rajyakshma. In Kshirad balak virechana dravya given to mother. In Kshirannad and annada balak virechana dravya used which is mrudu virechana.

**3. Basti** – Basti karma is the procedure by which the medicines in suspension form are administered through rectum or genito urinary tract using vastiyantra. It is most important procedure among panchakarma also called ardha chikitsa. Basti is the most appropriate remedial measure for vatadosha. Three types of Basti are described asthapana Basti (niruha), anuvasana basti and utara basti (uterine and urinary). Basti is safe and effective is children, also used where virechana is contraindicated. Basti can be administered to one year baby instead of niruh basti. According to Acharya Kashyapa, anuvasana basti or basti in which oil is more than quantity of Kshaya. Kashyapa has stated that basti should be started at annada avastha (about 1 year of age).<sup>[32]</sup> Gargya, Mathara, Atreya, Parashar and Bhela have stated that basti should be started just after birth, after 1 month, after 4 month, after 3 years and 6<sup>th</sup> year respectively. Indication of basti is amavata (juvenile rheumatoid arthritis), vata roga (hemiplegic muscular dystrophy), Rajonasha (secondary amenorrhea), jeerna jwara (chronic fever), cerebral palsy, delayed milestones, niram



atisar (chronic diarrhoea), ashmari(kidney stone, bladder stone). Contraindication of basti amatisara (acute diarrhoea), chardi (vomiting), kasa (cough), shwasa (asthama), krish (emaciated body), shoona paya (inflamed anus), kritahara (immediately after taking food). Acharya Kashyapa has mentioned specific Basti formulation for children while other Acharyas have mentioned various basti preparation of general type and can be used in patients of all age group.

4. **Nasya** – Administration of medicated oil or other medicines through nostrils called Nasya.<sup>[33]</sup> It is indicated in aggravated and accumulated kapha dosha in head and neck. kapha dosha usually blocks upper respiratory tract, is eliminated with help of nasal instillation of herbal juices, oil or powders. Acharya charak described 5 types of nasya, Amongst them Pratimarsh Nasya is mildest one which can be administered in children. According to acharya Susruta and Vagbhat nasya is contraindication in child below 7 years of age. Acharya Kashyapa has mentioned that nasya can be prescribed even in breast feed babies.<sup>[34]</sup> There are again 2 types of nasya. Brimhana(nourishing), Kashana shoshana Nasya (cleaning). Nasya is most important treatment in children; prove to be beneficial in neurobehavioral disorders.
5. **Raktamokshana** – It is the process of taking out blood from the body to manage diseased caused by Rakta and pitta.<sup>[35]</sup> There are 4 method of Raktamokshana shringa, jaluka, alabu and shira vyadha. Because of children having Aparipakva dhatu. Rakta mokshana contraindicated in children. When shaman chikitsa failed then only raktamokshana indicated in ahiputana, kukunak, gudakutta, Ajagallika, mukhapaka, charmadala. Jalauka is the mildest form of Raktamokshana, it can be used in paediatric cases.

**Murdha taila**<sup>[36]</sup>- Shirodhara, shirobasti, shirolepana are the type of murdha taila.

- a) **Shirodhara** – Application of oil to the head/scalp in which prescribed medicated oil/liquid is continuously poured over the forehead and then allowed to flow over the scalp from a specific height for a certain period of time is called shirodhara. Constant flow of liquid in a specified manner relaxes the mind, calms and tranquillizes the patients. It pacifies vata, it has stress- relieving effect.
- b) **Shirolepana** – It is a procedure of application of paste of medicines on head for a specific period of time. It also provides tranquillity to the head and brain soothes the mind and nourishes the brain cells. It is found very effective in mental retardation, loss of memory and in psychiatric problems.

- c) **Shirobasti** – Shirobasti is a type of murdha taila in which the medicated oil is kept over the head with the help of a cap fixed for a prescribed period of time. It is useful in neurological complaints, chronic diseases, strengthen the organs in the head and soothes the mind.

## DISCUSSION

Detailed description of different panchakarma procedure in children is described by every acharyas in Ayurveda text. We should consider age, dosage, drugs, mode of administration, time, frequency and procedure while managing paediatric condition. The child is soukumaryata (having soft body structure), alpakayata (under developed organ system), vividha anna anupasevna (GIT not fit to receive all type of food), aparipakwa dhatu (transformation and development under progression), Ajata vyajanam (incomplete secondary sexual characters), aklesha sahatva (can't tolerate stress of any kind), asampoorna balam (poor strength), sleshma dhatu prayam (drastic growth and development). This is the reason the fixation of dose and duration of therapy/ procedures which should be smaller/ shorter in paediatric group. Quality of medicine in paediatric care should be mridu (low potency), madhura and surabhi (sweet and good odour for better palatability), laghu (easy to absorb).

## CONCLUSION

Panchakarma practice can safely and effectively practice in pediatric group. By proper knowledge and experience in panchakarma practices it can be successfully administered in paediatric condition. By regular practicing panchakarma process in children one can update and modified the treatment. Panchakarma useful in neurodevelopment disorder, brain soothing effects and strengthen the organs in the head which is beneficial for children for healthy and better quality of life. It provide new hope for Ayurveda to manage child disorders by panchakarma procedures.

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