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Exploring Role Of Panchakarma In Pediatric Disorders: An Overview

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ABSTRACT:

Kumara or Bala Avastha refers to the childhood stage as per traditional Indian medical science, Ayurveda—the science of life. Ayurveda classifies treatment into two main types: Shodhana Chikitsa (purification therapy, including Panchakarma) and Shamana Chikitsa (palliative therapy, including Deepana, Pachana, etc.). Childhood disorders, known as **Bal Rog**, are addressed in this stage of physical and mental development.

Panchakarma procedures like Vamana, Virechana, Nasya, Niruha/Yapana and Anuvasana Basti, along with Raktamokshana, are advised during early childhood to address various abnormal physiological states.

This review focuses on understanding the concept and applications of Panchakarma in paediatric age, particularly in the context of Bala Roga. Panchakarma, being an integral therapy in Kaumarbhritya, holds therapeutic value in managing various childhood disorders and finds relevance across all branches of Ashtanga Ayurveda.

Keywords: Ayurveda, Panchakarma, Kaumarbhritya, Bala –Roga.

INTRODUCTION:

Ayurveda, one of the earliest holistic healing systems, is the science of life focused primarily on disease prevention and maintaining harmony between the body, mind, and spirit. It encompasses the use of herbs, dietary guidance, yoga, lifestyle modifications, and various therapeutic practices. Ayurvedic healing relies on two main approaches: Shodhana (purification or detoxification) and Shamana (symptom management). Panchakarma plays a vital role in Ayurveda, offering both curative and preventive care while also supporting immune function.^[1]

Panchakarma, a key branch of Kayachikitsa, comprises five primary detoxification therapies along with supportive procedures aimed at internal cleansing. It is especially beneficial in Kaumarbhritya for managing various paediatric disorders and holds therapeutic value across all eight branches of Ashtanga Ayurveda. This review explores the concept and modifications of Panchakarma in Bala Roga. Before

initiating therapy in any age group, factors like age (Bala), time (Kala), region (Desha), digestive strength (Agni), and individual tolerance must be carefully evaluated. [2]

Fivefold procedure comprised as Panchakarma:

- 1) Vamana (therapeutic emesis)
- 2) Virechana (therapeutic purgation)
- 3) Basti (medicated enema)
- 4) Nasya -(nasal insufflations)
- 5) Raktamokshana- (blood cleansing and purification therapy)

MATERIALS AND METHODS:

The literature on Panchakarma in Children was gathered from a variety of traditional Ayurvedic textbooks, published research papers from online resources, earlier studies, and compilations. Children's understanding of panchakarma was thoroughly examined.

Kaumarbhritya's Panchakarma description:

In Kaumarbhritya, Panchakarma involves three stages: Purvakarma (preparatory phase), Pradhanakarma (main procedures), and Paschatkarma (post-care). Purvakarma includes Deepana and Pachana to kindle Agni, followed by Snehana (oleation) and Swedana (sudation) to prepare the body. Pradhanakarma comprises the main detox procedures—Vamana, Virechana, Basti, Nasya, and Raktamokshana—to expel toxins through the most appropriate route. Paschatkarma focuses on post-therapy care through dietary regulations and lifestyle modifications to ensure proper recovery, prevent complications, and re-establish normalcy. [3]

Kaumarbhritya encompasses care from the prenatal stage to postnatal period. Childhood involves crucial physical, mental, and social development. While most classical texts define childhood (Balya-kala) up to 16 years, variations exist. The texts also mention modifications of Panchakarma suited for paediatric use.

Purva karma:

Deepana and Pachana are essential before Panchakarma to ensure the doshas are in a state of Nirama. Accurate assessment and careful diagnosis are crucial before initiating Panchakarma in children.

Deepana and Pachana:

Before Panchakarma, enhancing Agni and attaining Nirama Dosha state is essential. In children, warm water infused with Dhanyak or Shunthi is given in small, warm doses initially. [5]

Snehana:

Snehana involves internal and external oleation using medicated ghee or oils. It is a key preparatory step before Panchakarma procedures. ^[6] In children, Snehana follows the same principles regarding substances from Jangala and Sthavara sources, along with their indications, contraindications, signs of proper digestion (Sneha Ajirna), and features of adequate oleation (Samyak Lakshana). Ghrita, Taila, Vasa, and Majja are primary Sneha agents, with emphasis on Pravicharana Sneha using these materials. ^[7] In kshirap Avastha of child does not demand compulsory SnehaPana due to daily intake of milk and oily substances as the main diet. ^[7]

Procedure of Snehapana:

Snehapana is administered in the early morning in a prescribed dose based on Agnibala, disease type, and patient's condition. When Dosha or Agni status is unclear, a minimal dose (Hrasiyasi Matra) that digests within two hours is preferred. On the first day, 10–20 ml of Sneha Dravya like Taila or Ghrita is generally given.

Table:1 Indication And Contraindication of Snehan.

Indications	Contraindications	
Prior to Panchakarma (bio cleansing therapy)	Kshirad Avastha (breastfeed babies), Chardi (vomiting), Rukshata (Roughness all over body)	
Jvara (fever), Galamaya (throat disorder) July-Aug 2019 Krisha Balaka (Emaciated child)	Chardi (vomiting),	
Atisara (Diarrhoea), Vatarogas (hemiplegic, cerebral palsy)	Raktapitta (Bleeding disorders)	
Darun Pratibodhan (difficulty in eye opening)	Kaphaja Vikara - Sthoulya (obesity)	
Hikka (Hiccough)	Dhatri (wet nurse)	

Swedana:

Swedana is the therapeutic process of inducing sweating, which helps reduce stiffness, heaviness, and coldness in the body. Kashyapa has elaborated on its use in children with conditions like rigidity (Staimitya), hardness (Kathorata), constipation (Malabandha), bloating (Anaha), voice suppression (Vani Nigraha), nausea (Hrillasa), anorexia (Aruchi), tympanitis (Alasaka), and cramps (Kampana). Depending on the area treated, Swedana can be mild, moderate, or intense. Eight types of Swedana are described in the texts. [9]

Table: 2 Indication And Contraindication of Swedan.

Indications	Contraindications	
After Snehana and prior to Panchakarma	Dagdha (burnt), Acute fever, Kamala (jaundice)	
Shwasa (asthma), Kasa (cough),	Pratishyaya Pittarogi, Madhumehi (diabetic)	
Jadya, Kathinya and Ruksha Sharira (heaviness,	Karshya (emaciated)	
stiffness, dryness of body)		
Vata Rogas (hemiplegic, cerebral palsy)	Chardi (Vomiting), Trishna (dehydrated)	
Rheumatic and degenerative conditions	Raktapitta (Bleeding disorder), Obstruction to Mala	
	(stool), Mutra (urine) and Shukra (semen) Hridaya	
	Rogas (Cardiac Diseases), Visharta (poisoned)	

Types:

Kashyapa mentioned 8 types of swedana Karma –

Hast, Pradeha, Nadi, Prastara, Sankar, Upnaha, Avgaha and Parisheka.

- Hasta Sweda up to 4 months of age
- Pata Sweda after 6 years of age are considered useful in neonates and infants especially in abdominal colic (citation). Conditional Swedana is recommended for Krisha (thin) and medium strength child.

"Hasta Sweda is recommended for infants up to 4 months. Other suitable types for children include Nadi, Prasthara, Sankara, Pradeha, Upanaha, Avagaha, and Parisheka. Shashtika Shali Pinda Sweda is preferred in pediatric neuromuscular disorders. Swedana is beneficial in Purvakarma and conditions like cerebral palsy, stiffness, asthma, and obstruction. It is avoided in cases like burns, fever, jaundice, Pitta disorders, diabetes, dehydration, heart disease, and poisoning. During Swedana, the cardiac area should be cooled using pearls or cold water vessels [11]. Mouth should be filled with powder of Karpura or with juice of citrus fruits mixed with unrefined sugar or with Draksha for easy procedure. [12]

Vamana (Therapeutic emesis):

Vamana is a bio-cleansing procedure used for the elimination of doshas (mainly Kapha) accumulated in the upper gastro intestinal tract. [12] Aacharya Kashyapa mentioned that, babies who emit vitiated milk from stomach repeatedly will never suffers from diseases. [13] Aacharya Kashypa explains Vamana as the main stay of treatment in Bala Rogas due to dominancy of Kapha Doṣa by indulging in Kapahavardhaka ahara like

Kshira, Ghrita etc. the Vamana has been done to clear the stomach from liquor the meconium like substances.^[13]

Vamana dravya and dosage: (As per kashyapa)^[14]

- Vaman drug given in a quantity which equal to vidanga phala (fruit of Embelia ribes) Kashyapa.
- 2-3 seeds of Apamarga (Achyranthes aspera) with honey and sugar- Vaideha janaka
- 11/2, 2 or 3 Pala (60 to 120 ml) Vriddha kashyapa
- Others- milk: 750ml, yashthimadhu kwatha (decoction of Glylirrhiza glabra): 750ml, lavanodaka (salted water): 500ml.

Procedure [15]:

The patient is seated comfortably on a Vamana chair and given Vamanopaga dravya or milk to fill the stomach. Vamana medicine is administered in appropriate dose based on age, strength, and season. Emesis typically begins within 10–15 minutes. If not, mild throat stimulation may be used. Samyak Vamana signs are observed, followed by rest and Samsarjana Karma. Classical texts outline assessment criteria for the Vamana procedure.

Indications:

Gastric problems – Ajee<mark>rna (Indigestion) Kasa (Cough), Shwasa (Bronchial Asthma) Madhumeha (Diabetes) Unmada (Schizophrenia) Kushtha (Skin diseases)</mark>

Contraindication:

Acute peptic ulcer Atikrisha (Emaciated body) Pipasa (Thirsty) Kshudhrika (Hungry).

Complications of vamana:

Dryness of throat, vatarogas (Neuromuscular disorders), fresh bleeding, giddiness.

According to Kashyapa, Vamana therapy can be started to the children from the age of 6 years. He told that it is better to use the mild potency of the drugs in smaller quantity.

Ksheerada- Apply Vamana drugs over thebreast of the mother and after is dries up it should be washed and baby is made to breastfed which lead to easy Vamana.

Ksheerannada - administer of Vamana drugs along with breast milk.

Annada- the decoction of Madanaphala, Vachaand Saidhava or Katphala and Sarsapa.

Virechana (Therapeutic purgation):

It is the procedure where vitiated doshas (mainly pitta) are eliminated from lower gastro-intestinal tract through the anal route. Therapeutic purgation administers very cautiously in paediatric patients because their chances of severe complication like dehydration. ^[16] Virechana in a child with Pittaja Rogas, has been also indicated but suggested to avoid it as for as possible reserve the same only in emergency conditions. ^[17] It is well known fact that Virechana is best for Pittaja disorders and imparts the clarity of Indriyas (sense organs) and good for ensuring the growth and development of the child.

Trivrit (Operculina turpethum), Kalyanak, Eranda Tail (Castor oil), Shankhini Taila (Euphorbia oil)

Procedure:

Purgative medicine is administered early morning on an empty stomach. The dose is determined by the patient's age, gender, strength, and disease condition. Bowel movements usually begin within three hours. Once Samyak Virechana signs appear, the procedure is considered complete. Post-procedure, rest and Samsarjana Krama are advised. Classical texts provide criteria for assessing Virechana..^[18]

10, 15, 30, of Vegas of Virechana is considered as Hīna, Madhyama and Uttama Vega, while 4, 3, 2 Prastha of the total medicine eliminated are considered as Uttama, Madhyama and Hīna Mātra of the Virechana. Revati is curable by Virechana in childhood practice. [19]

Indications constipation:

Krimi (Worm infestation), Kamala (Jaundice), chronic fever Eczema, Allergic dermatitis etc. Pakshaghat (Hemiplegic), Madhumeha (Diabetes), Arbuda (Tumour), Tamak Shwasa (Bronchial Asthma), Galganda (Goitre),

Contraindications:

Krisha (Emaciated patients), Rajayakshma (Tuberculosis), Garbhini (Pregnant women), Navajwara (Acute fevers), Hridroga (Cardiac problems). Complications: Dehydration, giddiness, shock, Malena, prolapsed rectum.

- Ksheerada Virechana Aushadha to mother
- Ksheerannada and Annada Anulomana drugs like
- Hareetaki, Triphala, Trivrit, Aragwadha Phala Majja
- Eranda taila with Ksheera are preferred.

Basti (Medicated enema):

It is the procedure where the medicines in suspension form are administered through genitourinary tract using Bastiyantra (Specific apparatus). Among all therapeutic procedures, Basti is superior because it is like amruta (nectar) in child patient and the most appropriate remedial measure for vata dosha. [20]

Basti is best indicated for the child and told that it imparts Ārogya to the child, offspring for parents and name and the fame for the Doctor, and considered as nectar for the child. [21]

Procedure: [22]

The patient is advised to lie down in left lateral position. Small amount of oil is applied on patient's anus and Basti netra. The Basti netra (nozzle) is gently inserted into the anal canal up to a specific length and Bastiputaka containing mixture (Basti dravya) is pressed with a uniform pressure. The pressure is continued till only small quantity of fluid remains in the bag to avoid air insertion. Then the nozzle is removed gently and the patient is allowed to lie down on supine position till he feels urge to excrete. The maximum time specified for retention of Basti dravya is 48 minutes. After evacuation of the bowel; the patient may take hot water bath and follow samsarjan kram.

Commonly used basti yogas:

Madhutailika vasti, bala guduchyadi vasti, patolanimbadi vasti, vaitarana vasti, mustadi yapana basti, tikta kshira basti.

Table: 3 Matra (dose) of Basti Dravyas

Age	Sneha Basti Matra	Niruha Basti Matra
1-3 yrs	3 Karsha (30ml)	9 Karsha (90ml)
4yrs	1 Pala (40ml)	3 Pala (120ml)
6yrs	1 Prasruta (80ml)	3 Prasruta (240ml)
12yrs	2 Prasruta (160ml)	6 Prasruta (480ml)
>16yrs	4 Prasruta (320ml)	12 Prasruta (960ml)

Indications:

Vat rog (hemiplegic, muscular dystrophy), Rajonash (Secondary Amenorrhea), Niram atisar (chronic diorhhoea), (cerebral palsy, delayed mile stones), Amavata (Juvenile Rheumatoid Arthritis), Ashmari (kidney stone, bladder stone).

Contraindications:

Krisha(Emaciated body), Chhardi (Vomiting),Madhumeha (Diabetes), Kritahara (Immediately after taking food), Shoona Payu (Inflamed Anus).

Complications:

GIT symptoms like pain in abdomen, vomiting, Local anal injury.

Nasya:

Nasya is the process of administration of medicines through nostrils. ^[23] It is indicated mainly in aggravated and accumulated Doshas (disease causing factor) of head and neck. The aggravated Kapha Dosha, which usually blocks the upper respiratory tract, is eliminated with the help of nasal instillation of herbal juices, oils, or powders. Charaka has described five types of Nasya in which Pratimarsha is mildest one and can be administered in children. ^[24]

Kashyapa detailed different types, dosages, and methods of Nasya in children. However, Sushruta and Vagbhata advise against its use in children below 7 years of age. [25] Kashyapa has mentioned that it can be prescribed even in breast feed babies. [26] Nasya helps manage childhood conditions like excessive thirst, headaches, and dryness. The child should be seated or lying comfortably, followed by gentle massage on the head and face, then mild fomentation before administering NasyaNasya is suitable for children and mainly includes two types—Brihmana and Karshana. Other forms like Shodhana and Purana Nasya are also described. For pediatric use, Katu Taila Nasya with honey and Gomutra is given while the child sits on the mother's lap. Types of nasya:

Kashyapa mentioned two types of nasya; namely

- 1. Brihana (Purana) nasya
- 2. Karshana (Shodhana) nasya

Marsha nasya matra (Dose)

Uttama matra (Maximum dose) 10 drops

Madhyam matra (Medium dose) 8 drops

Hraswa matra (Mild dose) 6 drops

Pratimarsha nasya: 2 drops

Procedure:

The patient should be positioned comfortably, followed by light massage on the head and face and mild fomentation. Lukewarm oil is then instilled into each nostril in the prescribed dose. Post-instillation, gentle massage is done on palms, soles, shoulders, and back. If discomfort occurs, the patient may spit. Finally, the face is wiped clean, and warm water gargling is advised.

Indications:

Vyanga (Hyper pigmentation), Ardita (Facial paralysis), Vat rog (Delayed mile stone), Urdhwajatrugata Roga (E.N.T. disorders), Shirahshula (Headache), Nav pinasa (acute rhinitis).

Contraindications:

Nav pinasa (acute rhinitis), After bloodletting, Immediately after taking food, water, Kas (cough), Shwas (bronchial asthma).

Raktamokshana:

This involves drawing blood from the body in order to treat illnesses brought on by Pitta and Rakta. Raktamokshana employs Shringa, Jalauka, Alabu, and Shira Vyadha as techniques. Since children have Aparipakwa Dhatu, this treatment is not recommended in the first place. As with Kukunaka, Ahiputana, Gudakutta, Ajagallika, Mukhapaka, and Charmadala, Rakta Mokshana is advised if sickness is not cured by Shamana and other methods. Since Jaulaka is the least harsh of all the techniques, it is the only option for Raktavasechana in pediatric instances. [27].

Indication:

Vidradhi (abscess), gulma (lump), arsha (piles), kushta (skin disorders), vatarakta (sclerosis), visharpa (pemphigus), vichrchika (eczema), netraroga (eye disorders), shiroroga (headach),. kantharoga (throat disease), ahiputana (napkin rash).

Complication:

Leech migration, Infection, Anaemia, Allergic reaction.

Paschat karma:

Peyadi krama (Dietary regime)

Rasayana drugs (Rejuvenation therapy)

Shamana drugs (Palliative therapy)

DISCUSSION

Although children share similar Doshas, Dushyas, and diseases with adults, treatment must be tailored considering age, dosage, drug type, method, and frequency. Due to their tender bodies, immature organs, developing Dhatus, and low tolerance, pediatric therapies require milder, shorter interventions. Medicines should be gentle, palatable, and easily digestible. Management in Bala Roga mainly relies on medication, with classical texts and research supporting the role of Panchakarma in pediatric care [28]

"The review highlights that Panchakarma, a vital component of Ayurvedic treatment, holds significant value in pediatric care. Though classical texts describe it in detail, its limited use today is due to inadequate practical training and poor understanding of pediatric-specific principles. When applied with proper attention to disease stage, dosage, method, age, and strength of the child, Panchakarma proves effective for both prevention and treatment, enhancing overall health and longevity. [29]

CONCLUSION:

The review highlights that Panchakarma, a vital component of Ayurvedic treatment, holds significant value in pediatric care. Though classical texts describe it in detail, its limited use today is due to inadequate practical training and poor understanding of pediatric-specific principles. When applied with proper attention to disease stage, dosage, method, age, and strength of the child, Panchakarma proves effective for both prevention and treatment, enhancing overall health and longevity.

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