



“CONSTIPATION MANAGEMENT IN PAEDIATRICS AYURVEDA PERSPECTIVE”

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ABSTRACT-

In Ayurveda, Constipation, often referred to as Vibandha or Baddha Purisha, signifies an inhibition or blockage in the Purishavaha Srotas, i.e. Sangha, a term denoting the obstruction of channels responsible for the smooth movement and elimination of stool within the body. It is a frequently encountered issue in the paediatric population and significantly impacts the physical well-being, physiological functioning and overall quality of life of affected children. This disorder manifests as Purisha Nigraha (stool obstruction), Pakvashaya Shoola (ab dominal pain), Kashtaprada Malapravrutti (painful defecation), Grathitha Malapravrutti (hardened stool) and Atopa (infrequent bowel movements). Many children experience constipation due to habitual factors, inadequate fibre and water intake, or changes in dietary and lifestyle patterns. This can mainly manifest when they begin school or daycare as they may feel unwilling to ask for bathroom breaks due to a lack of toilet training and the unfamiliar environment at

school. Various gastrointestinal and other medical conditions can ultimately lead to the development of constipation making it a consequential symptom rather than a standalone disease.

KEYWORDS-Vibandha, Constipation, Purishavaha Srotas, Bowel, chikitsa

INTRODUCTION-

Constipation is a common issue among paediatric patients and shares similarities with the Ayurvedic concept of Vibandha. Both conditions exhibit similar characteristics, such as Purisha Nigraha (stool obstruction), Pakvashaya Shoola (abdominal pain), Kashtaprad Malapravrutti (painful defecation), Grathitha Malapravrutti (hardened stool) and Atopa (in frequent bowel movements). It can affect individuals of any age, often arising when people ignore their body's natural urge to have a bowel movement. [1] In Ayurveda, it is not explicitly identified as a distinct ailment; various references are made to different presentations of Purisha (faeces) like Baddha Puri sha, Ghana Purisha or Grathitha Purisha and Mala avabaddhata in different contexts. [2] The above manifestations occur when there is an obstruction to the proper functioning of Apana Vayu, symptoms of Udavarta (retention of faeces, flatus, urine) like Anaha (obstruction), Adhmana (distension), Malaavastambha (hardness of faeces) due to the Pratiloma Gati (reverse flow) of Apana Vayu (one of the sub types of biological humor of Vata Dosha) mimic the symptoms of Vibandha. [3] The disorder involves the slow passage of faeces through the large intestine, often linked to dry, hard stool accumulation due to excessive fluid absorption. About 5-10% of school-aged children experience this issue, [4] with faulty toilet training and dietary changes as primary culprits. Diagnosis relies on a thorough history and physical examination. [5] Management strategies, including increased fluid intake, a fibre rich diet and age-appropriate toilet training, play a central role and provide effective and low-risk solutions for Constipation (Vibandha).

SIGNS AND SYMPTOMS OF CONSTIPATION IN CHILDREN

- Difficult passage of stools
- straining when passing stool
- Reduced bowel movements
- Dry or hard stool
- Abdominal discomfort
- Abdominal pain
- Bloating

CAUSES OF CONSTIPATION IN CHILDREN

- Dehydration
- Lack of dietary fibre
- Medication side effects
- Underlying pathology
- Problems related to toilet training
- Reduced intake of drinking water
- Cow's milk allergy

PATHOPHYSIOLOGY OF CONSTIPATION IN CHILDREN

Due to the causative factors bowel movements become reduced or stool becomes hard and the child feels difficulty in passing stools.

DIAGNOSIS OF CONSTIPATION IN CHILDREN

- Physical examinations
- Barium enema, anorectal manometry, X-ray is done to find out the underlying pathology.

TREATMENTS OF CONSTIPATION IN CHILDREN

- Constipation in children usually resolves itself without the need for prescription treatment.
- Eating more fibre
- Drinking more water
- Use of mild laxatives
- Enema
- Suppository

PROGNOSIS OF CONSTIPATION IN CHILDREN

It is curable and the symptoms are manageable.

COMPLICATIONS OF CONSTIPATION IN CHILDREN

- Rectal bleeding after straining
- Anal fissure, which is a small tear around the anus
- Rectal prolapse
- Faecal impaction

CONSTIPATION IN CHILDREN AND AYURVEDA

- In Ayurveda, constipation in children refers to vibandha.

NIDANA- AYURVEDIC CAUSES OF CONSTIPATION IN CHILDREN

- Excess consumption of dry and unctuous food
- Vata dosha vitiation
- Suppression of urge of defecation

PURVAROOPAM- AYURVEDIC PREMONITORY SYMPTOMS OF CONSTIPATION IN CHILDREN

- Difficulty in passing stools

SAMPRAPTI – AYURVEDIC PATHOGENESIS OF CONSTIPATION IN CHILDREN

Due to the causative factors, vata dosha becomes vitiated and dries up the stools finally vibandha manifests.

LAKSHANA – AYURVEDIC SIGNS AND SYMPTOMS OF CONSTIPATION IN CHILDREN

- Anaha – abdominal discomfort
- Adhmana
- Difficulty in passing stools
- Shirah Shoola – headache

AYURVEDIC PROGNOSIS OF CONSTIPATION IN CHILDREN

- The prognosis is Sadhya – curable

CHIKITSA- AYURVEDIC TREATMENT FOR CONSTIPATION IN CHILDREN

AYURVEDIC SAMANA TREATMENT FOR CONSTIPATION IN CHILDREN

- Gandharva hasthadi kashaya
- Chiraviwadi kashaya
- Avipatti churna
- Gandharva eranda
- Trivrit lehyam in small divided doses

AYURVEDIC SODHANA TREATMENT FOR CONSTIPATION IN CHILDREN

- Phalavarti – anal suppository

COMMONLY USED AYURVEDIC MEDICINES TREATMENT FOR CONSTIPATION IN CHILDREN

Ayurvedic medicines for Internal administration of constipation in children

- Rajanyadi Churna
- Ashta Churna
- Agasthya Rasayana
- Aravindasavam
- Gandharva hasthadi kashaya
- Chiruvilwadi kashaya
- Avipatti churna
- Gandharva eranda
- Amritotharam kashayam
- Trivrit lehyam
- Sukumara ghritha

YOGA FOR CONSTIPATION IN CHILDREN

- **Nadi Shuddi Pranayam – calms the mind and is effective in stress-induced constipation in children**

The patient needs to be seated in a meditative posture with the head and spine erect, with the body relaxed. The patient has to close his one nostril (e.g. left nostril if using the right hand and vice versa) with the thumb and exhale completely through the other nostril. Again, he will have to breathe in deeply through the other nostril while the opposite nostril is still closed with the thumb.

EPIDEMIOLOGY- The global burden of childhood constipation is often underestimated due to limited data in this age group.

Epidemiological studies use varying definitions and data collection methods, resulting in prevalence rates ranging from 0.7% to 29.6%. The variation in the duration of symptoms needed to diagnose constipation, the age distribution of the children studied and the data collection method may also influence the data. Studies using standard definitions like Rome II criteria also show wide prevalence ranges. Apart from definition differences, factors like symptom duration, age distribution and

environmental, socio cultural and genetic factors contribute to data hetero genetic. Contrary to the belief that constipation is a disease in developed countries, studies in Asia also report high prevalence. Gender-specific prevalence varies across studies, with some showing no gender difference while others find higher prevalence in girls. Age is negatively correlated with constipation prevalence in some studies. In developing countries like India, constipation in children is a significant public health concern with reported prevalence rates around 5.6% [10] to 30.88 %.

In this Anuloma gati of apan is obstructed & becomes pratiloma so purisha is obstructed in pakvashaya and further complication such as unsatisfactory bowel emptying, indigestion of food, etc occurs which leads to deterioration of health of child.

पक्वाधानालयोऽपानः कालेकर्षतिचाप्यधः।

समीरणः शकृन्मूत्रंशुक्रगर्भार्तवानिच।

कृध्दश्च कुरुतेरोगानघोरानबस्तिगुदाश्रयान || सु.नि.1/19⁴

Among the several functions of apanvayu, excretion of faeces and micturation are important functions. It means that if apnvayu is disturbed by any cause it will interrupt the normal function of excretion of faeces which will give rise to the symptom called Mal-vibandh.

The Vibandha is clinical presentation found in children, which is not explained as the separate disease entity in the Ayurveda classics. Many of synonyms are been mentioned in Ayurveda classics as Vit sanga, Mala-sanga, Malabaddhata etc. The term Vibandha is explained as a prodromal symptom, symptom, complication in many of the diseases as Arshas, Udara roga, Vata vyadhi etc. but in contemporary sciences, it is explained as a separate diseased entity-Constipation, one among disease of Gastro-intestinal system. Vibandha leads to misery causing deprivation from routine activities of child, loss of interest, discomfort in abdomen, loss of appetite and fear of defecation which further causes depression and fear towards the act of defecation. Sometimes it may cause several other diseases too. So it is very much necessary to treat Vibandha in time and to prevent further complication occurring in children because of Vibandha.

Haritaki and Aargvadha have anulomak, agnideepak and sransaniya properties. Kutaki acts as Bhedana, the drug also breaks obstruction either constipated or loose faecal matter and expels out. Shunthi improves agni and hence reduces Aam. Guduchi have agnideepak property while Guda acts as Koshtashodhak. All above properties of drugs are described in Bhavprakash Nighantu. All above durgs are easily available and cost effective. It does not lead to dependency.

Liquid medicines are usually recommended in children's. It has ability to mask an unpleasant taste with sweeteners and flavour is crucial. Syrup is palatable and valuable vehicle for administration of durg.

Ayurvedic Treatment for Chronic Constipation in Children⁶⁻⁷

Ayurveda offers several natural treatments to address chronic constipation in children. These remedies work by balancing the digestive system, improving bowel movement frequency, and providing relief from the discomfort caused by constipation. Below are some Ayurvedic treatments and lifestyle changes that may help:

1. Herbal Remedies:

- **Triphala:** Triphala, a blend of three fruits (Amalaki, Haritaki, and Bibhitaki), is one of the most popular Ayurvedic remedies for constipation. It helps regulate bowel movements, detoxify the system, and improve digestive health.
- **Ghee (Clarified Butter):** Ghee is considered a natural lubricant that helps soften stools and facilitates smooth bowel movements. You can give a small amount of ghee to children as part of their diet.
- **Castor Oil:** Known for its mild laxative effect, castor oil can be used in small doses to relieve constipation in children. Always consult an Ayurvedic practitioner before using castor oil for children.

2. Dietary Changes:

- **Fiber-Rich Foods:** Encourage your child to consume more fruits, vegetables, whole grains, and legumes, which are rich in dietary fiber. Fiber helps bulk up stools and facilitates smooth bowel movements.
- **Warm Water and Herbal Teas:** Drinking warm water, along with mild herbal teas such as ginger tea or fennel tea, can aid digestion and help relieve constipation.
- **Probiotic Foods:** Foods like yogurt and kefir promote a healthy gut microbiome, which plays a key role in digestive health and regular bowel movements.

3. Lifestyle Modifications:

- **Regular Exercise:** Physical activity helps stimulate the digestive system. Encourage your child to engage in activities such as walking, cycling, or yoga to promote bowel movement regularity.
- **Regular Bathroom Habits:** Establish a routine where your child goes to the bathroom at the same time each day. Encouraging them to take their time and avoid rushing can also help.

- **Proper Hydration:** Ensure your child drinks enough water throughout the day. Hydration is key to softening stools and preventing constipation.
4. **Panchakarma Therapy:** Panchakarma is a therapeutic Ayurvedic treatment designed to detoxify the body and promote balance. Certain Panchakarma treatments like Abhyanga (oil massage), Swedana (herbal steam therapy), and Basti (medicated enema) may help relieve constipation in children. However, these treatments should only be done under the supervision of a qualified Ayurvedic practitioner.
 5. **Stress Management:** Ayurveda recognizes the mind-body connection, and mental stress can significantly impact digestion. Incorporating stress-reducing practices such as meditation, breathing exercises, and yoga can help improve your child's digestion and reduce constipation.

Benefits of Ayurvedic Treatment for Chronic Constipation in Children

- **Natural and Safe:** Ayurvedic treatments use natural remedies and herbs that are safe and gentle for children.
- **No Side Effects:** Unlike conventional medications, Ayurvedic remedies have minimal or no side effects, making them an ideal choice for young children.
- **Holistic Approach:** Ayurveda takes a holistic approach, focusing on restoring balance in the entire digestive system, addressing diet, lifestyle, and emotional well-being.
- **Long-Term Solution:** Ayurvedic treatments address the root cause of constipation, offering long-term relief and promoting healthy digestion for overall growth and vitality.

Importance of Dietary Fiber

Dietary fibre is critical for preventing and managing constipation by adding bulk to stools, promoting peristalsis, and supporting gut microbiota. It is classified into:

1. **Soluble Fiber:** Dissolves in water, forming a gel that softens stools (e.g., oats, apples, psyllium husk).
2. **Insoluble Fiber:** Adds bulk and speeds intestinal transit (e.g., wheat bran, vegetables).

Benefits of Fiber:

- Prevents constipation by softening and bulking stools.
- Supports gut health by feeding beneficial bacteria (prebiotics).
- Reduces cardiovascular risk by lowering cholesterol.
- Stabilizes blood sugar, aiding diabetes prevention.
- Decreases risk of hemorrhoids, diverticulitis, and colorectal cancer.

Recommended Intake:

- Adults: 25-30 g/day.
- Adolescents (12-17 years): 20-25 g/day.
- Children (6-11 years): 15-20 g/day.
- Children (2-5 years): 10-15 g/day.

Fiber Sources:

1. Whole Grains: Oats, brown rice, quinoa (5-7 g/100 g).
2. Vegetables: Broccoli, carrots, kale (2-5 g/100 g).
3. Fruits: Apples, pears, berries (2-4 g/100 g with skin).
4. Legumes: Lentils, chickpeas, black beans (6-8 g/100 g).
5. Nuts/Seeds: Almonds, chia seeds, flaxseeds (8-10 g/30 g).
6. Psyllium Husk: 5-7 g/tablespoon.
7. Bran: Wheat bran, oat bran (10-15 g/30 g).

30-Day Sample Diet Plan for Constipation (Week-Wise)

This diet plan incorporates fiber-rich, Vata-pacifying foods, adequate hydration, and variety to promote regular bowel movements. It is designed for adults but includes notes for adapting to children. For children, reduce portion sizes and ensure foods are age-appropriate (e.g., pureed for younger kids).

General Guidelines

- Drink 8-10 glasses of warm water daily (4-6 glasses for children 2-11 years).
- Avoid cold, dry, or processed foods.
- Use warm, cooked meals with ghee or sesame oil for adults; ghee or olive oil for kids.
- Eat mindfully at regular times.
- Practice yoga (e.g., Pavanamuktasana, Malasana) or walk for 20 minutes daily (playtime for kids).

Week 1: Hydration and Gentle Fiber Introduction

Goal: Soften stools, hydrate colon, stimulate digestion.

- **Breakfast:** Oatmeal with stewed pears, cinnamon, 1 tsp chia seeds (7 g fiber). Ginger tea.
 - **For Kids:** Smaller portion, use mashed banana instead of pears, diluted ginger tea.
- **Lunch:** Brown rice with moong dal khichdi, steamed carrots, broccoli (10 g fiber). 1 tsp ghee.
 - **For Kids:** Pureed khichdi, mashed carrots, small broccoli pieces, ½ tsp ghee.
- **Snack:** 1 apple (with skin, 4 g fiber) + 5 almonds (2 g fiber).
 - **For Kids:** Apple puree, 2-3 soaked almonds (peeled).
- **Dinner:** Vegetable soup (spinach, zucchini) with quinoa (8 g fiber). Triphala churna (3 g for adults, 0.5-2 g for kids) at bedtime.
 - **For Kids:** Thinner soup, smaller quinoa portion, Triphala only for ages 2+.
- **Daily Fiber:** ~25 g (10-15 g for kids).

Week 2: Boosting Fiber and Peristalsis

Goal: Increase fiber to promote regularity, balance Vata.

- **Breakfast:** Whole-grain porridge with berries, 1 tbsp flaxseeds (8 g fiber). Warm water with lemon.
 - **For Kids:** Porridge with mashed berries, ½ tsp flaxseeds, diluted lemon water.
- **Lunch:** Whole wheat roti with chickpea curry, sautéed kale (12 g fiber). 1 tsp sesame oil.
 - **For Kids:** Soft roti pieces, mashed chickpeas, steamed kale, ½ tsp olive oil.
- **Snack:** 1 pear (5 g fiber) + 1 tbsp psyllium husk in warm water (5 g fiber).
 - **For Kids:** Pear puree, 1-2 g psyllium husk (ages 2+).
- **Dinner:** Lentil soup with carrots, brown rice (10 g fiber). Hingvastak churna (1 g for adults, 0.25-0.5 g for kids 6+).
 - **For Kids:** Thinner lentil soup, mashed rice, Hingvastak only for ages 6+.
- **Daily Fiber:** ~30 g (15-20 g for kids).

Week 3: Supporting Gut Health

Goal: Enhance microbiota with prebiotic foods.

- **Breakfast:** Smoothie with banana, spinach, chia seeds, yogurt (8 g fiber). Fennel tea.
 - **For Kids:** Thicker smoothie (less liquid), mashed banana, diluted fennel tea.
- **Lunch:** Quinoa with black bean stew, steamed green beans (12 g fiber). 1 tsp ghee.
 - **For Kids:** Soft quinoa, mashed beans, pureed green beans, ½ tsp ghee.
- **Snack:** Raspberries (4 g fiber) + 10 almonds (3 g fiber).
 - **For Kids:** Mashed raspberries, 3-5 soaked almonds (peeled).
- **Dinner:** Vegetable stew with barley, broccoli (10 g fiber). Avipattikar churna (3 g for adults, 1-2 g for kids 6+).
 - **For Kids:** Thinner stew, mashed barley, small broccoli pieces.
- **Daily Fiber:** ~30 g (15-20 g for kids).

Week 4: Sustaining Regularity

Goal: Maintain bowel health with variety.

- **Breakfast:** Whole-grain toast with avocado, 1 tbsp flaxseeds (7 g fiber). Ginger tea.
 - **For Kids:** Soft toast pieces, mashed avocado, ½ tsp flaxseeds, diluted tea.
- **Lunch:** Brown rice with moong dal, sautéed spinach, carrots (11 g fiber). 1 tsp ghee.
 - **For Kids:** Mashed rice and dal, pureed spinach, mashed carrots, ½ tsp ghee.
- **Snack:** 1 orange (3 g fiber) + 1 tbsp psyllium husk in warm water (5 g fiber).
 - **For Kids:** Orange segments, 1-2 g psyllium husk (ages 2+).
- **Dinner:** Vegetable khichdi with zucchini, kale (9 g fiber). Triphala churna (3 g for adults, 0.5-2 g for kids).
 - **For Kids:** Soft khichdi, mashed zucchini, small kale pieces.
- **Daily Fiber:** ~28 g (15-18 g for kids).

Lifestyle Recommendations

- **Morning:** Drink 1-2 glasses of warm water to stimulate bowels (1 glass for kids).
- **Exercise:** Practice yoga (Pavanamuktasana, Bhujangasana) or walk for 15-20 minutes daily (playtime for kids).
- **Stress Relief:** Meditate or practice deep breathing for 10 minutes to calm Vata (storytelling or calm play for kids).
- **Sleep:** Maintain a 10 PM-6 AM sleep schedule for adults, 8-10 hours for kids.

Discussion-

In recent years, there has been a remarkable growth in gastrointestinal issues, which significantly impair normal lifestyle, dietary habits and behavioural patterns. These factors disrupt the natural process of digestion. Vibandha, a condition affecting the Annavaha Srotas (gastrointestinal channels), arises when irregular dietary choices, behavioural habits and mental stress disturb the Agni (digestive fire). The administration of Basti via the rectal route (Guda) reaches the Pakvashaya, recognised as the primary site of Vata Dosha. This intervention normalizes Apana Vayu, leading to the restoration of Vatanulomana and improved physiological Vata function. The pacification of Vata is pivotal as it is a major contributor to the disease. Basti administered in the Pakvashaya profoundly impacts the entire body through its unique properties. The main causative factor for constipation is Vata and the best therapy is supposed to be Basti Chikitsa. Snehan with Ksheerbala Taila promotes the Vatashamak, Balya and Anulomaka effects. Ksheer bala Taila contains Ksheer (milk), Bala (Sida cordi folia) and Tila Taila (Sesamum indicum oil). All these drugs possess mainly Snigdha Guna (unctuous property) and Vatahar (alleviates vitiated Vata Dosha) properties. Syrup Amlycure helps restore liver functioning by providing a multidimensional approach by acting as an antiviral, anti-inflammatory, immunomodulator, and anticholestatic activity. Promotes and enriches hepatobiliary secretions, thus accelerating fat digestion and retards fat deposits in liver tissues. Syrup Triphala inhibits lipid peroxide and promotes the scavenging of hydroxyl and superoxide radicals in vitro. Haritaki is a potent laxative. It acts as astringent and lubricant inside the stomach. This action helps in loosening the stools. Amalaki has both laxative and cooling properties. It cools the inner lining of the stomach and reduces inflammation. It helps to reduce the burning sensation that irritates the stomach. Bibhitaki is the most effective of the three fruits in constipation. It is not only a laxative but also contains dietary fibres. The combination helps to fight constipation. [15] Sitz bath is a warm water bath to relieve discomfort in the perineal region. Soaking this area in warm water relaxes the anal sphincter which helps increase the blood flow through anal tissues and promotes healing and reducing the pain.

CONCLUSION –

Constipation is a common gastrointestinal ailment that significantly impacts an individual's quality of life. Several factors could be responsible for it such as dietary choices, dehydration, a lack of exercise and underlying medical issues. Effective methods of management include dietary adjustments, lifestyle alterations and occasionally, the use of drugs under medical supervision. Constipation can be reduced with preventive measures such as eating a high-fibre diet, drinking plenty of water and following a regular bowel routine. For chronic or severe conditions, understanding the significance of prompt medical intervention is crucial to resolving any underlying health issues. Despite being a common problem, constipation is controllable and frequently responds to therapy. To ensure early detection of this disease, promoting awareness and open discussions about it is essential.

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