

A COMPLETE REVIEW ON VIBANDHA IN CHILDREN AND THEIR MANAGEMENT THROUGH AYURVEDA**Dr. Kiran Sahu^{*1}, Dr. Neeraj Agrawal², Dr. Lowkesh Chandrawanshi³, Dr. Satyawati Rathia⁴, Dr. Bharti Painkra⁵ and Dr. Anjali Bhange⁶**^{1,5-6}PG Scholars Department of Kaumarabhritya, Shri NPA Govt. Ayurvedic College, Raipur, cg, India.²Professor/HOD Department of Kaumarabhritya, Shri NPA Govt. Ayurvedic College, Raipur, cg, India.³Reader Department of Kaumarabhritya, Shri NPA Govt. Ayurvedic College, Raipur, cg, India.⁴Lecturer Department of Kaumarabhritya, Shri NPA Govt. Ayurvedic College, Raipur, cg, India.***Corresponding Author: Dr. Kiran Sahu**

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ABSTRACT

Constipation is a common gastrointestinal (GI) disorder that affects people of all ages, although it affects kids the most. Constipation can have a variety of functional or pathological causes. In pediatrics, functional constipation is a common issue. Finding the reason of constipation is frequently a very difficult task for the practitioner. A healthy lifestyle, particularly maintaining regular bowel habits, drinking enough fluids, and using a high-fiber diet that shortens intestinal transit time and lowers the likelihood of constipation. Even though drugs are frequently used to treat functional constipation, occasionally parents and patients express resistance to or unhappiness with the existing treatments. Patients frequently express interest in using over-the-counter nutraceutical supplements and botanicals. This article is useful for understanding the typical signs of constipation, impact of various behavioral on child digestion, to treat it with *pathya-apthya ahara-vihara* and proper counseling to parents.

KEYWORDS: *vibandha*, functional constipation, GI disorder, *pathya-apathya ahara-vihara*.**INTRODUCTION**

All ages are susceptible to constipation. Children (toddlers and preschoolers) frequently experience it, and between 17% and 40% of the time it begins in the first year of life. Constipation is a common condition that we treat on a daily basis in the opd. Patient come with the associated complain like abdominal pain, loss of appetite, headache etc. it is difficult to define it precisely since the perception patient or their gardians and doctor differs.

Constipation is related to *vibandha* in Ayurveda. The Ayurvedic *samhitas* do not explicitly and directly describe the illness known as *vibandha*. In most *annavaha* and *purishvaha srotovikriti*, it is seen as a symptom. *Vibandha* is *vyapad* of *Vamana* and *Virechana*. *vibandh* is symptoms of *parikartika* (fissure in ano), a side effect of *sansodhan* (*Vamana* or *Virechana*) in *Ajirna* are present. It is a complication of acute hemostasis in *Raktarsha* (bleeding piles) and an *apatarpanjanya roga* (diseases induced by nutritional deficiencies). In Ayurveda word *vibandh* derived “*vi*” and “*bandha*” which means binding of stool.^[1] Constipation can be defined as a hold up of stool or

strenuous in defecation which present for two or more weeks and sufficient to cause notable distress to patient.^[2]

Constipation may be functional or organic.^[3] Functional constipation also known as idiopathic constipation or fecal with holding. It can be differentiated on the basis of history and physical examination. Functional constipation generally starts after the neonatal periods. Sometimes Children have intentionally or subconscious with holding of stool and the acute episodes may be dietary changes from human milk to cow's milk, because compare to mother's milk, cow's milk fat is more difficult for the newborn to digest.^[4]

Constipation can be defined and diagnosed by the Rome 3 criteria in infants and toddlers are the complaint with 2 or less than 2 defecation per week, 1 or more than 1 episodes of incontinence. Painful or hard bowel movement as a symptom of constipation can be diagnosed by history taking.^[3]

Vibandha/constipation can be managed and treated with medicines according to ayurvedic texts. Many doctors

and medical professionals' favour ayurvedic medications or formulations for treating constipation and disease control with the aid of *pathya* and *apathya ahara- vihar*.

Assessment of a child with constipation^[5]

A complete, thorough history and physical examination, including a digital rectal examination, are essential to evaluate a child who has constipation.

Obtain an extensive **medical history**. Inquiries concerning child's eating habits and exercise routines are also likely to come up. During **physical examination**, a gloved finger will likely be inserted into his or her anus to look for any anomalies or the presence of impacted faeces. It is possible to check the stool in the rectum for blood.

Only the worst cases of constipation typically require more thorough testing. These examinations might involve, if necessary: X-ray of the abdomen. With the use of this routine X-ray, it can determine whether or not child's abdomen is blocked. Motility testing or anorectal manometry.

AIM

To review the disease *vibandha*/constipation in children.
To review the behavioral causes and neurological involvement of constipation through modern science.
To review the management of constipation through ayurveda.

MATERIAL AND METHOD

This study is founded on an analysis of Ayurvedic literature. Materials about *Vibandha*, constipation, and their relationship have been compiled. *Charak Samhita*, *Susruta Samhita*, other important Ayurvedic texts, modern text books, articles and generals were studied in this review.

PATHOPHYSIOLOGY

Functional constipation can be caused by situational psychological, developmental and dietary issues.

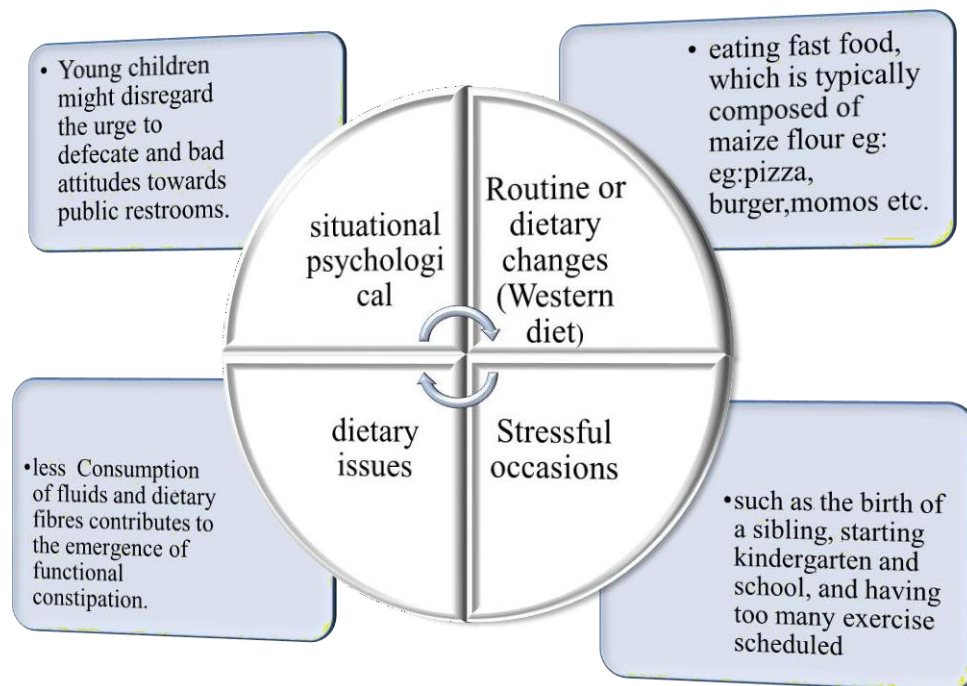


Figure no. 1.

According to Ayurveda, the main causes of constipation include *Purishaja Vegadharana* (with holding of stool, Children nowadays are spending too much time on devices like smartphones and televisions, which causes them to neglect their daily hygiene routines.), *Akal* or *ashamay purish tyag*, a lack of water consumption and a lack of fiber-rich foods, eating fast food, which is typically composed of maize flour eg: eg:pizza, burger, momos etc.^[6]

Anal stenosis or *Sanniruddha Guda*, *Kashaya rasa pradhana ksheera sevana*, *Vata dushithasthanya sevana*, other causes like Anterior ectopic anus Painful perianal

condition (abscess, fissure, hemorrhoid), neuromuscular condition Hirschsprung's disease, Neuronal intestinal dysplasia.

Metabolic or endocrine abnormality- Hypothyroidism, Hypercalcemia, Hypokalaemia, Diabetic mellitus, Vit. D intoxication also causes constipation.

Purishaja krimi—*Krimi* also leads to *vibandha*. (e.g., pinworms, roundworms, unhealthy yeast infections, such as *Candida* yeast).

Up to 30% of kids experience constipation, which is

especially prevalent in kids with autism spectrum disorders. Constipation is characterized by slower, harder bowel movements. The digestion process starts immediately after eating food goes through mouth to stomach there it can be broken down and goes to small intestine where all the good nutrients (*Ahara rasa*) are absorbed. Food can stay in the small intestine for up to 4 hours and transform into a very thin, watery combination throughout this time. The nutrients from food can move from the intestine into the blood at the end of the voyage, making it time well spent. As soon as the complex carbs, vitamins, proteins, and calcium in milk are in the circulation, the body is more likely to benefit from them. And the *kitt bhaga* reach in large intestine in liquid state and water is absorbed there then the solid waste moves to rectum and remove from there certain paths sometimes due to *vikrit Apan vata* and *pachak pitta* excessive water absorbed that makes stool hard and painful to pass.^[7] As a result of which the child fearfully determines to avoid defecation such children respond to the urge to defecate by contracting their external anal sphincter and gluteal muscles, in an attempt to withholding stool it leads to prolonged fecal stasis in the rectum with resultant absorption of fluids and harder stools. Children spend far too much time these days playing on their phones or watching cartoons on television, which keeps them from

eating and affects their digestion and mostly eat fast-foods (*apathya ahara*). Constipation is seen as a condition brought on by gut-brain axis imbalance and ENS (enteric nervous system) dysfunction. The ENS function and constipation symptoms are both closely related to the gut flora at the same time. The need to defecate is brought on by the colon, which also directs faeces towards the rectum. To allow the exit of faeces from the rectum, the puborectalis muscle and external anal sphincter relax. In order to raise intra-abdominal pressure and hasten the expulsion of feces, the Valsalva manoeuvre and abdominal muscular contraction are used. Rectal afferent nerves are in charge of producing the feeling of fullness in the rectus and the urge to defecate. The muscles most crucial to defecation are innervated by sacral nerves S2-S4 through the pudendal nerve.^[8]

According to Acharya's toxin building up in tissue and obstructing circulation. Poor digestion leading to heartburn, flatulence, etc. sleep problems brought on by nervous system imbalance and weakness, tiredness, eye burning, and other symptoms are brought on by poor nutrition. It lowers the body's defenses and natural immunity.

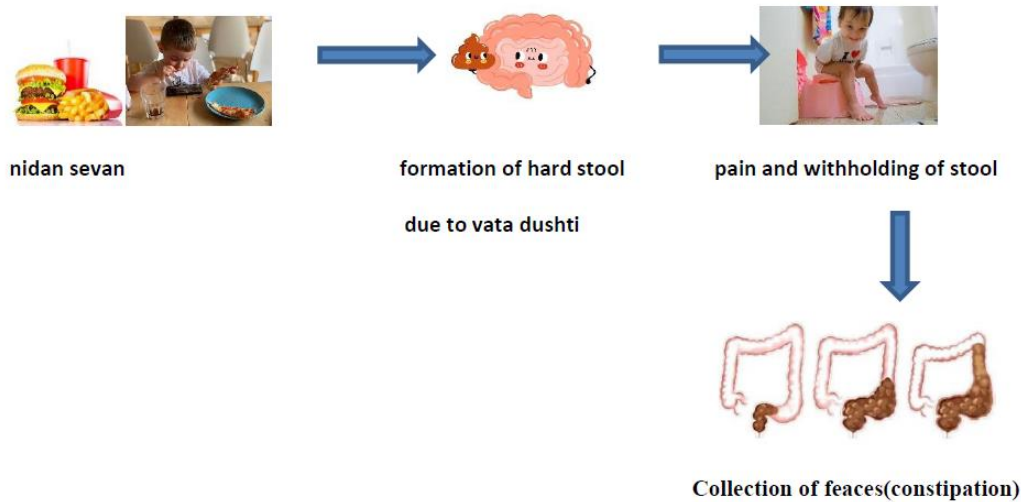


Figure no. 2. Pathophysiology of constipation.

Ayurveda for constipated children

As we frequently observe youngsters withholding stool, which obstructs the passage of vata and causes stools to become dry and hard, apana vata is the primary factor in constipation in children. Medicine with properties of Ushna, Madhur, and Snigdha should be administered to children. *ushana gunap*^[9] act as dilating of srotas, alimentary canal, increase the secretion of glands which generates spasm on sphincteric muscles and helps feces remove from obstructive path. these drugs improve digestions by stimulating Pitta and corrects metabolic activities inside the body. *Madhur guna*^[10] of drug provide strength to the muscles. Because Prthvi and Jala Mahabhuta may predominate in medications with

Madhura rasa, these compounds might be characterized as having an unctuous quality and moistening the body's channels. *Snigdha Guna*^[9] provides the viscosity necessary for easy expulsion as well as softening and lubricating the feces in the alimentary canal.

The colon must be cleared of the hard stool as part of the disimpaction phase of treatment. The colon might start to regain its normal size and function once the impacted, hard stool is removed. Historically, treatments used during this stage of treatment included physical removal, suppositories, and enemas. Constipation is treated by *snehana* and *swedana* in Ayurveda when it is brought on by *purish vegadharana*, which also causes pain in the

abdomen, calf muscles, and headaches.^[11] First, perform *snehana*, *mridu virechana*, *niruh basti*, or use *phalvarti* for chronic constipation. Various *vata shamak*, *vata anulomaka* and *virechak* drug can be used for palliative treatment. Many drugs which have properties like *deepan*, *pachana*, *virechan*, *mala bhedana*, *rechana* and *sramsana* should be given which helps to breakdown stored stool and remove it from their certain path. Drug should be *snigdha*, *agnivardhak*, tone improving. Acharaya Sharangdhar^[12] highlighted a few medications and how they work to facilitate better digestion and the quick removal of waste materials.

Deepan drugs- drugs which enhanced or stimulate *jatharagni*. E.g. *mishi*.

Pachana drugs- the drug which digest *aam* and not stimulates *agani*. *Paachak* drugs enhances digestion, these drugs are *agni mahabhuta* predominant. E.g. *nagkeshar*.

Bhedan drug- the drugs have actions in which *baddha* and *abadhha mala* are expels out is *bhedan* E.g., *katuki*, *shyamadi gana* as *vebhedi*.

Rechana drugs- the drugs have actions in which liquified *pakwa* or *apakwa mala* and *dosha* expels out is *rechana*. These drugs have *tikshana*, *ushan*, *suksham*, *vyavayi*

guna predominance E.g., *trivrita*.

Chedana drugs- the drugs have action in which *dosha* and *malas* are punctured and destroys known as *chedana*. E.g., *maricha*.

Anulomana drugs – the action in which drug will do *malapak* and remove *bandha* to expel *mala* from there certain path is *anulomana*. The medication *anulomana* (aperients) aids in the normal formation of excreta, as well as removing obstructions and bringing them lower. According to *acharya susruta anulomana* is done by *the sara guna* in which *vata* and *mala* are expelled out.

E.g. *haritaki* poor nutrition lowers the body's defense and natural immunity to enhance the immunity by given immunomodulator like *aswagandha*, *tulasi*, *bhomyamlaki* etc. In Ayurveda, *nidaan pariverjana* is the primary line of treatment for the majority of disorders.^[13] Most people experience disease because of their aberrant daily routines as a result of not adhering to *dincharya* and *ritucharya* as prescribed by Ayurveda. Parents and guardians should be informed of the causes of their children's constipation. Due to their hectic lifestyles, the parents are unable to effectively monitor their children's everyday activities. Advised parents or guardians about to give *pathya ahara-vihara* and avoid *apathya ahara-vihara*.

Table no. 1. Do & don't for constipated children.

DO	DON'T
<ul style="list-style-type: none"> • <i>shali</i> rice, <i>wheat</i> (<i>payasa</i>, <i>chapatti</i>, <i>odana</i>), <i>laghu anna</i>, <i>kulatha</i>(horse gram), <i>masha</i>(blackgram), <i>mudga</i>(greengram), <i>kalpana- dal/yush/krushara</i>), <i>garjara</i>(carrot), <i>cabbage</i>, <i>alabu</i>(bottle guard) <i>kalpana- soup/yush/juice/boiled</i> vegetables, <i>kshira</i>(milk), <i>ghrita</i>, <i>navanit</i>, <i>gudh</i>(jiggery), <i>Eranda</i>(castor oil). • <i>mridu virechana</i>, • excessive water intake • Exercise 	<ul style="list-style-type: none"> • Heavy, spicy food, junk food pizza, burger, bread, toast, fast food, potato. • <i>vega vidharana</i> (forcible with holding of natural urges) • excessive awakening during night • Excessive using of gadgets like mobile, tablets, computer etc. • Do not drinking water immediate after eating food.

DISCUSSION

After 6 months, the baby does not remain exclusively milk-fed, but gradually begins to adopt mixed feeding. Milk replace with *yush*, *shak* and *dalia* etc. this diet continues for 2 year then after complete dentition mostly child eat fast food, junk food which leads to *vikrit apana vata* and *sroto sangh*. When 3 to 5-year-old toddler enter school, it keeps them from eating, which decreases their appetite and causes a reduction in the production of digestive juice (*mandagani*), which also leads to constipation. Due to the busy schedules of both parents in modern society, children are often irritable and difficult to pay attention to. They spend all of their time on their phones, playing video games, watching TV, and eating fast food, which is typically composed of maize flour. They also have bad eating habits and incorrect sanitary habits, which interfere with their daily activities and cause constipation most of the time. Children who

live in modern lifestyles frequently complain about constipation. The obstruction of the *vata dosha's* mobility, which results in an aggravation of the *dosha*, causes the faeces to dry and harden more as a result of withholding it. The agony of defecation makes children avoid using the restroom, which makes their constipation worse. An accurate medical history and physical examination could be helpful in determining if constipation is organic or functional disease. Following confirmation of the illness, the doctor should administer *vata shamak* and *virechak* medication and procedures to the youngster and create healthy behaviors and steer clear of unhealthy ones to manage constipation.

CONCLUSION

In Asia, constipation is fairly typical and frequently has a functional cause. A thorough medical history and thorough physical examination, including a digital rectal

exam, can distinguish between functional and organic constipation with ease.

Before beginning treatment for functional constipation, no research is required. In Ayurveda, we can cure constipation with both procedures and medicines. Children are sensitive therefore the process should be gentle, and the medication should be tasty and appealing. Then, in order to avoid the recurrence of symptoms, parents should be informed about *pathya* and *apathya ahara-vihara*.

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