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#### **Review Article**

## ETIOPATHOGENESIS OF VIBANDHA W.S.R TO FUNCTIONAL CONSTIPATION IN CHILDREN

# Pooja Bhat<sup>1\*</sup>, Nagaratna S Jartarghar<sup>2</sup>, Chithralekha<sup>3</sup>

\*¹PG Scholar, ²Associate Professor, ³Assistant Professor, Department of PG Studies in Kaumarabrithya, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Udupi, Karnataka, India.

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#### **ABSTRACT**

Vibandha/Baddapureesha means Sanga or obstruction for the passage of stool, and this condition can be due to the functional or structural. Vibandha (constipation) has been described in numerous places. In conditions like Udavarta, it manifests as a separate entity, and in diseases like Kasa and Shwasa, it plays a significant role in the occurrence of Samprapti. Vibandha as a separate entity has not been described by any major text in Ayurveda. Its Lakshana includes voiding of small quantity of stool with difficulty or voiding a large quantity of watery stool with sound and pain. Current era due to lifestyle, fast and stressful life, humans are frequently led towards irregular and bad habits of Ahara, Vihara and Vegadharana leading to several problems like Vibandha, Ajirna, Sthoulya etc. Vibandha not only caused because Pureeshavahasrotho Dusti it can also be caused because of Apanavata Vaigunya along with Agnimandya. As Agni is responsible for the formation of Pakwa Mala, Agnimandya is considered as main cause for Vibandha. Hence Agni plays a significant role in Vibandha.

#### **INTRODUCTION**

Constipation is a highly prevalent fictional gastrointestinal disorder that may significantly affect the quality of life and health care cost. The frequency of stool depends on the child's age. In neonatal period and early infancy, defecation may occur more than 4 times a day and then progressively decreases to 1-2 per day. At the age of 4 years in which 98% have gained voluntary control of the sphincter. Most of the people have at least three bowel movements per week. However low stool frequency alone is not the sole criteria for the diagnosis of constipation. Many constipated persons have a normal frequency of defecation but having excessive straining, hard stools, lower abdomen fullness or a sense of incomplete evacuation. From infancy to young adult, it occurs in all the pediatric age group. The most common cause of constipation is the functional variety. It is responsible for more than 90 percent of cases of constipation in healthy children.

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In the present scenario functional constipation is more prevalent below the age of 15 years and in the childhood its prevalence varies from 0.7% to 29.6%. It comprises of about 3% general paediatric outdoor visits and around 30% of the visits to paediatric gastroenterologist.[1]

Vibandha/Baddapureesha means Sanga or obstruction for the passage of stool, and this condition can be due to the functional or structural cause which is mentioned as Sanniruddha Guda in our classics which may require surgery. Functionally Sanga indicates the state of Srotodusti especially Pureeshavaha Srothodusti. Its Lakshana includes voiding of small quantity of stool with difficulty or voiding a large quantity of watery stool with sound and pain. Current era due to lifestyle, fast and stressful life, humans are frequently led towards irregular and bad habits of Ahara, Vihara and Vegadharana leading to several problems like Vibandha, Ajirna, Sthoulya etc. Vibandha not only caused because Pureeshavahasrotho Dusti it can also be caused because of Apanavata Vaigunya along with Agnimandya. As Agni is responsible for the formation of Pakwa Mala, Agnimandya is considered as main cause for Vibandha. Hence *Agni* plays a significant role in *Vibandha*.

## **Etimology**

The word *Vibandha* is derived from '*Vi*' and '*Bandha*' which means - To bind or stretch out or to obstruct.

#### Nirukthi

- Shabda Kalpadruma
  - As per *Shabda Kalpadruma Vibandha* means 'to bind', 'to encircle'.
- Vi- The word vi is the Upasarga Bandha- The word Bandha means Band Bandhne.

## **Vyuthpatti**

- Vibandhati Malas Vi + Bandha- Ach (Vachaspatyam)
  To bind faster or to obstruct
- Malabandhakarake Rogabhede (Amarakosha) encircling or a circular bandage.
- Vata Purishyohobandha Vibandha [2]

Further, the *Dosha's* present in the *Srotas* (channels) becomes *Ghana* (solidified state), which in turn causes obstruction to flatus, urine and faeces by binding them and hampering their normalcy.

## Paryaya Used in Different Context

- Vidsanga [3]- Obstruction of faeces
- *Varchagraha* [4]- Obstruction to stool
- Shakritgraha [5]- Pureesha Rodhaha
- Malagraha [6]- Malanam Mutrapureeshadeenam, Graho-Vibandhaha
- Baddha shakrit<sup>[7]</sup>- Pureesha Graha
- Mala baddha [8]- Fecal obstruction
- Gada varchas<sup>[9]</sup>- Gadavarchstwam Cheti Chakaroyam Vatasya Prakarithi karmanotishayatwam Samucchinothi, Evam Pittakapharasadhishwapi Chakaraprayojanam.

#### Contextual Reference of Vibandha

Table 1: Showing Contextual References of Vibandha

As Nidana	Hikka, Swasa,[10] Udavarta,[11] Parikartika,[12] Arshas [13]		
As Poorvaroopa	Arshas,[14] Parikartika,[15] Swasa [16]		
As Roopa	Antarvegi Jwara, <sup>[17]</sup> Sannipata Jwara, <sup>[18]</sup> Vataja Gulma, <sup>[19]</sup> Vatodara, <sup>[20]</sup> Baddhagudodara, <sup>[21]</sup> Sahaj Arshas, <sup>[22]</sup> Vataja Arshas, <sup>[23]</sup> Vataja atisara, <sup>[24]</sup> Anaha, <sup>[25]</sup> Udavarta, <sup>[26]</sup> Amashayagata vata, <sup>[27]</sup> Pakwashayagata Vata <sup>[28]</sup>		
As Upadrava	Vaatavyadhi, <sup>[29]</sup> Vataja Arshas, <sup>[13]</sup> Vataja Gulma <sup>[30]</sup>		

#### Vibandha in Classics

In the different classics the term *Vibandha* is found as *Nidana, Purvaroopa, Roopa, Upadrva* of various diseases, as well as the *Vyapath* of *Panchakarma* procedures. Scattered reference regarding various *Ahara Dravyas* causing and relieving *Vibandha* is also available in different context.

Table 2: References in Classics for the Term Vibandha

S.No.	Term	Context
1.	Vibandha	Udgaara Nigraha <sup>[31]</sup>
		Hikka Swasa Nidana <sup>[32]</sup>
		Vamana Ayoga Lakshana <sup>[33]</sup>
		Vidavruta Vata [34]
		Visuchika Lakshana [35]
		Ajeerna Lakshana <sup>[36]</sup>
		Jwara Lakshana <sup>[37]</sup>
		Netra Basti Vyapat <sup>[38]</sup>
		Basti Vyapat <sup>[39]</sup>
		Madatyaya Lakshana [40]
		Vatavyadhi [41]
		Vamana Virechana Vyapat [42]
2.	Vibandhagnam	Jambira <sup>[43]</sup>
		Draksha [44]
3.	Vibandhahara	Sheeta Rasa [45]
		Varuni [46]

	7 7	
		Matulunga [47]
		Sarja Kshara & Yava Kshara <sup>[48]</sup>
		Souvarchala Lavana [49]
		Rasona <sup>[50]</sup>
4.	Vibandhanut	Hingu [51]
		Nagara [52]
5.	Vibandhakrit	Shimbi Dhanya <sup>[53]</sup>
		Kashaya Rasa <sup>[54]</sup>
6.	Vid Vibandha	Gulma Purvarupa <sup>[55]</sup>

#### Nidana

There is no direct reference for the *Nidana* of *Vibandha* in classical text. Based on *Doshapradhanyatha* and *Lakshanas, Vibhandha* can be considered as *Vatapradhana Vyadhi* and can be considered as *Pakwashaya Vyadhi*. Hence the factors which are responsible for the vitiation of normalcy of *Apanavata, Agni* and *Nidana* mentioned under *Pureeshavaha Srotodusti* can be considered as *Nidana* for *Vibandha*.

# These factors can be collectively described as:[56,57] *Aharaja Nidana*

Table 3: Showing Aharaja Nidana of Vibandha

Items	Ayurvedic Nidana	Modern Implication
Rasa	Atisevana of Katu, Tikta, Kashaya Rasa Dravya	Foods which are more of pungent, bitter, astringent in taste e.g., pickle, papad, spicy meals etc.
Guna	Ruksha, Sangrahi, Guru, Abhishya <mark>ndi</mark>	Dry foodstuffs e.g., all bakery Items
Lacking some qualities	Asnehata, Kshiraanupase <mark>va</mark> nata	Trend to avoid ghee or oil, milk
Pulses	Atisevana of Mudga, Chanaka, etc.	All types of pulses
Grains	Atisevana of Kodrava, Jurnahva, Odana	Less calorie diet
Fruits	Karira (Capparis decidua), Karkandhu (Carissa carandas), Kappittha (Limonia acidissima L), Lakucha (Artocarpus lacucha), Parvata (iziphus mauritiana), Bhavya (Dillenia indica)	Fruits of pungent in taste
Vegetable	Vetra shaka	Vegetable of bitter in taste
Matra	Abhojana, Hinamatra, Upavasa	Fasting, taking food in less quantity
Dietary habits	Vishamasana	Irregular dietary habit
Other food items	Shuktaka, Pinyaka, Vallura	Sour gruel, a kind of acid liquid, oil cake

## Viharaja Nidana

Table 4: Showing Viharaja Nidana of Vibandha

Ayurvedic Nidana	Modern Implication
Sandharana	Suppression of natural urges
Atirodana	Excessive crying
Prajagarana	Night awakenings
Vyayama	Excessive physical exertion
Maithuna	Excessive sexual intercourse
Udirana	Forcible initiation of the urges

## Manasika Nidana

Table 5: Showing Manasika Nidana of Vibandha

Ayurvedic Nidana	Modern Implication
Shoka	Grief
Bhaya	Fear

## Roopa

Rupa is nothing but important Vyadhi Bodhaka Hetus among Nidana Panchaka for understanding and interpreting disease. It gives the knowledge regarding the involvement of Dosha, Dushya and their severity. As the Purishavegadharana is considered as Nidana for Vibandha, its Lakshanas can be considered as Vibandha Lakshana.

Table 6: Showing Lakshana of Vibandha

Pureesha nigraha Lakshana	C S [58]	A H [59]
Pakvashaya Shola	+	
Pindikodveshtana	+	+
Shirashoola	+	+
Adhmana	+	
Vatavarcho Apravritti	+	
Parikartika		+
Hridayasyoparodha		+
Urdhwavayu		+
Pratishyaya		+
C.S Charaka Samhitha, A.H Astanga Hridaya		

Vibandha can also be considered as Lakshana of Udavartha. Pain in different areas of the body especially thorax and abdomen is mentioned by all Acharyas as the symptom of Udavarta. Then due to Vimargagamana of Vata the symptoms of gastrointestinal tract i.e., Adhmana, Hrillasa, Avipaka occur. This condition leads to constipation. This constipation has been defined as straining during defecation; not passing or delayed the passing of the stool; stool which comes is dry, hard, cold, or in less quantity.

Table 7: Showing Lakshana of Vibandha According to Different Acharyas

S.no.	Sign/symptom	C.S	A.H	B.S	K.S
1	Koshta Ruja		+		
2	Prushtha Ruja	+	+	+	
3	Hrit Vedana	+	+	+	+
4	Parshwa Ruja	+	+	+	+
5	Basti Vedana	+	+	+	+
6	Kukshi Ruja	+		+	+
7	Udara Shola				+
8	Vankshana Shola				+
9	Guda Shola				+
10	Shoola			+	
11	Parikartana		+		+
12	Vikartika	+			
13	Toda	+			
14	Udaraveshta	+	+		
15	Adhmana	+	+		

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16	Hrillasa	+	+		
17	Avipaka	+			
18	Varcho Apravriti	+		+	
19	Anaha		+		
	C.S. Charaka Sambitha, A.H. Astanga Hridaya, K.S. Kashyana Sambitha				

C.S.- Charaka Samhitha, A.H.- Astanga Hridaya, K.S.- Kashyapa Samhitha

Rome III Criteria system was developed to classify the functional gastrointestinal disorders (FGDs) based on their clinical symptoms.

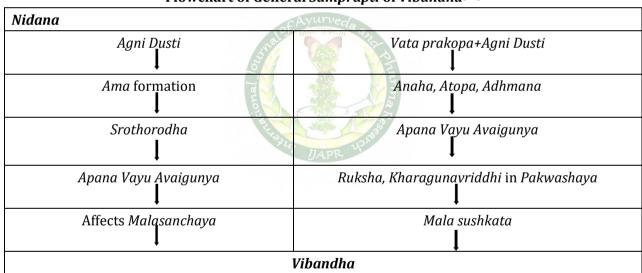
ROME III criteria for functional constipation is defined as presence of two or more of the following in absence of any organic pathology and the duration should be at least one month in <4 years of age and at least once per week for at least 2 months in  $\ge 4$  years of age;

- i. Two or less defecations per week.
- ii. At least one episode of fecal incontinence per week.
- iii. History of retentive posture or stool withholding manoeuvre.
- iv. History of painful or hard bowel movement.
- v. Presence of large fecal mass in the rectum.
- vi. History of large-diameter stools that may obstruct the toilet.

## Samprapthi

The changes which take place in the body starting from initiation of the etiological factors to the manifestation of symptoms are called as *Samprapti*. As long as the *Dosha*, *Dhatu* and *Mala* in the state of normalcy there is no disease. When *Nidana* disturbs this balanced state then there will be disease manifestation.

## Flowchart of General Samprapti of Vibandha[60]



## Samprapthi ghataka

Dosha-Vata especially Apana Vata Pradhana Tridosha

Dushya - Rasa, Pureesha

Agni - Jataragni

Ama - Jataragnimandya Janya Ama

Srotas - Annavaha, Pureeshavaha

Srotodushti - Sanga

Udbhava stana - Amashaya, Pakvashaya

Vyaktasthana - Koshta

Adhisthana - Pakvashaya

Rogamarga - Abhyantara

#### Upadrava

Only Acharya Bhela has described the Updrava of Vibandha/Udavarta.

- *Nishwasita* (expires excessively) or faints
- *Trushyati* (becomes thirsty excessively)
- Hikka (hiccups)

These are the complications mentioned by Acharya *Bhela, Acharya Vagbhata* given a detailed description of the disease. *Udavarta* itself is a dreadful complication of *Arsha*.

#### Chikitsa Sutra[61]

By considering the pathology of *Vibandha*, the main line of treatment should be *Agni Deepana* and *Vatanulomana*. *Apana Vata* is the main factor involved in causing *Vibandha* and *Vibandha* itself is one of the symptoms of *Udavarta*, *Udavarta* line of treatment can be adopted. The selection of treatment depends upon *Rogabala*, *Rogibala*, *Kala*, *Vaya*, *Agni*, *Aushadha* etc.

## **General Management**

- 1. Nidana Parivarjana: [62] Mithya Aahara and Vihara can be considered as the main cause of Vibandha so avoidance of Nidana should be the main line of treatment. Nidanas of Vibandha mainly includes Vegavarodha, excessive use of Katu, Tikta, Kashaya, etc. Nidana Parivarjana is related with patient's discipline and attitude, so Vaidya must instruct the patients about the diet. The diet regimen includes following of Ashtavidha Ahara Ayatana and Dwadasha Asana Pravichara.
- 2. Shamana Chikitsa: When there is an imbalanced Dosha resulting in mild condition Shamana Chikista is used. To correct the imbalance of Dosha both internal and external medications are used. This is based on concept of Guna. Mainly the drugs possessing Madhura Kashaya amla rasa, Ushna, Tikshna, Sukshma, Vyavayi, Vikasi Guna, Madhura Vipaka will be beneficial.

Eg: Triphala Churna, Draaksha etc

## 3. Shodhana Chikitsa

- a. Snehana
- b. Swedana
- c. Virechana
- d. Anuvasana Basti
- e. Niruha Basti
- f. Varti

## a. Snehana[63]

Vibandha is a Vata Pradhana Vyadhi and Snehana is the best line of treatment for Vata Shamana. Both Bahya and Abhyantara Snehana can be adopted in Vibandha.

#### b. Swedana<sup>[64]</sup>

After *Snehana, Swedana* procedure is done which helps in *Asanna Gamana* of *Doshas* from *Shakha* to *Kosta*. Helps in *Srotoshodhana*.

## c. Virechana[65]

Virechana is one among the Pachakarma, which expels the Dosha from Adhomarga. With this Shodhana procedure Pakva and Apakva Malas are expelled out of the body through Guda Marga. The Virechana Dravya are mostly Ushna Veerya, having Guru, Teekshna, Sukshma, Vyavayi, and Vikasi Guna. Virechana Dravya has Parthiva and Jala Mahabhuta predominance and because of their Guru Guna they can produce Adhogami Prabhava and downward movement of the Doshas.

#### Types of Virechana[66]

- 1. Mridu Virechana- e.g., Markandika, Draksha, Ikshurasa
- 2. Madhya Virechana- e.g., Trivuta
- 3. Teekshana Virechana e.g., Danti, Jayapala

## Other types of *Virechana* are:

## Anulomana Karma<sup>[67]</sup>

The act of digesting the *Sama Mala* which obstructs easy excretion of stool, followed by their excretion per anus is called *Anulomana*. e. g. *Haritaki* 

#### Sramsana Karma<sup>[68]</sup>

The action by which *Mala* adherent to the gastrointestinal tract are expelled by anal route without causing prior *Amapachana* is called *Sramsana*. This action is stronger than *Anulomana*. E.g., *Aaragwadha*, *Markandika*, etc.

## Bhedana Karma<sup>[69]</sup>

The substance which expels soft or hard mala and doshas by anal route by rendering them liquid is *Bhedana*. e.g – *Katuki* 

## Rechana Karma<sup>[70]</sup>

The process of expulsion of *Pakva* or *Apakva mala* and dosha in the liquid state is called as *Rechana* or *Veerechana* e.g – *Markandika Patra Churna*.

## d. Anuvasana Basti<sup>[71]</sup>

Sometimes even after relief from Udavarta, the retention of flatus and stool continues because of then child should be given unctuousness. of Anuvasana type medicated enema. Vataanulomaka Taila or Ghrita, Anuvasana Basti can be practiced with main intention of Koshta Snehana, Vatanulomaka and relieving Pureesha Rookshata.

## e. Niruha Basti[71]

This *Niruha* type of medicated enema immediately relieves the retention of urine, stool, and flatus and promotes the normal functioning of the rectum as well as connected vessels. If the *Varti* fails to produce desired effect, then the child should be given with *Snehana, Swedana* followed by *Niruha* type of enemas given.

*Vibandha* is generally caused by the aggravated *Vayu*. This aggravated *Vayu*, at times, provokes the aggravation of *Pitta* and *Kapha*. Therefore, medicated enemas for the three aggravated doshas causing *Udavarta* are, sour and alkalis along with oil should be used if *Vayu* is aggravated in excess; milk should be used if *Pitta* is aggravated in excess, and cow's urine should be used if *Kapha* is aggravated in excess.

## f. *Varti*<sup>[72]</sup>

A suppository having the thumb thickness should be prepared with drugs like *Pinyaka*, *Sauvarchala*, *Hingu*, etc by adding jaggery and inserted into oleated anus. It causes *Vata Anulomana* and facilitates the passage of stool and flatus.

## As per Alternative Science Non-pharmacological Treatment Education

It is the first step in management of functional constipation. The parents and caregivers should be educated regarding functional Constipation is an important treatment, the affected child also should be educated if old enough to understand this medical problem and treatment. By explaining the physiology of functional constipation, family physicians can help parents and caregivers understand why the child is unable to have bowel movements of normal calibre and frequency. The child's fear of a painful bowel movement is the most common motivating factor for fecal retention. The fecal retention seldom is an oppositional behaviour.

# **Toilet Training, Reward System, and Defecation Diary**

Since the stasis of faeces in the rectum can maintain constipation, it is important to evacuate the rectum frequently. In children with a developmental age of  $\geq 4$  years, this can be established by introducing a toilet-training program. Toilet training involves sitting on the toilet for 5 min after each meal to actively try to defecate. By going to the toilet after a meal, the patient takes advantage of the gastro colic reflex that increases colonic peristals upon distension of the stomach, facilitating defecation. The importance of a relaxed posture during defecation should be explained. To ensure a relaxed posture, foot support (using a footstool) is needed for children

whose feet do not touch the floor when they are sitting on the toilet. To motivate a child for toilet training, a reward system can be introduced, where small gifts (e.g., stickers) are earned for completing toilet training. A daily stool diary can help to objectify the bowel pattern of children with functional constipation; this diary also has a motivating purpose and is a helpful tool to evaluate treatment.

## Dietary Modification<sup>[73,74]</sup>

A balanced diet that includes whole grains, fruits, and vegetables is recommended as part of the treatment of constipation in children. First line of management in case of uncomplicated primary constipation is to ensure adequate dietary fibre, fluid intake and the physical activity level.

#### **Behavioural Modifications**

Approximately one-third of patients with functional constipation have behavioural problem. A toileting regimen that dedicates time for defecation is valuable. Most people who have normal stooling habits tend to defecate at the same time each day. This conditioned reflex tends to occur within 1 hour of eating, and usually in the morning. A constipated child should have a routine scheduled toilet sitting for 3 min to 10 min (age dependent), once or twice a day. Ensure that the child has a footstool on which they can support their legs to effectively increase intraabdominal pressure. There should be no punishment for not stooling during the toileting time; praise and reward for stooling and the behaviour of toilet sitting can be offered.

## **Pharmacological Treatment**

	7067cui 11 cucinone	
Oral laxatives	Dose	
1. Osmotic laxatives		
• Lactulose	1-2mg/kg body weight twice/day	
PEG 3350 with electrolytes	1-1.5 g/kg/day	
PEG 3350 without electrolytes		
• Lactitol	250-400mg/kg/day	
2. Fecal softeners		
Mineral oil	3ml/kg body weight twice/day for 7 days	
3. Stimulant laxatives		
Bisacodyl (oral)	3-10years: 5mg/day	
	Above 10 years: 5-10mg/day	
Bisacodyl (suppository)	2-10 years: 5mg once/day	
	Above 10year: 5-10 mg once/day	
• Senna	2-6years: 2.5-5 mg once or twice/day	
	6-12years: 7.5-10mg once/day	
Sodium picosulfate	1month - 4years: 1.2-2mg once/day	
	4-8 years: 2.5-20mg/day	

## **Pathyapathyam**

*Patha* means path. It can be considered as any path in the body like *Srotas* or channels which flow throughout the body supplying nutrition to all the dhatus to sustain life.<sup>[75]</sup> Diet plays an important role in sustaining life and diet is very essential for maintaining good health. The diet which is unwholesome to the body is considered as *Apathya*, which is considered as *Nidana* of diseases.

Table 8: Different *Pathya* for *Vibandha*[76-79]

S.No	Dravya	Rasa - vipaka	Guna	Karma
1	Shashtika Shali	Madhura	Snigdha	Deepana
2	Raktha shali	Madhura	Laghu, Sheeta, Snigdha	Srshta Vit Karaka
3	Yava	Madhura-Katu Vipaka	Sheeta, Guru, Ruksha	Agni Deepana
4	Godhuma	Madhura	Guru, Snigdha, Sheetha	Sara
5	Masha	Madhura-Amla Vipaka	Snigdha, Guru, Sara	Virekakruth-Bahu
				Shakruth
6	Kulattha	Madhura-Amla Vipaka	Ruksha, Laghu,Usna	Bhedhana
				Arsho-Adhmana-
				Anilahara
7	Karjura	Kashaya, Madhura –	Sheeta, Snigdha, Guru	Deepan, Vaatapha
		Madhura Vipaka		
8	Pakwa draksha	Madhura	Sara, Sheetha	Srustha Mutra and Vit
9	Tanduleeya	Madhura	Sheeta,	Srustha Mutra and Vit,
			Laghu, Ruksha	Deepana

# Anya Pathya [80]

Mamsa (Mamsa Rasa)	Jangala Mriga-Pakshi Mamsa
	Gramyaudhaka
	Anoopa Mamsa Rasa
Ksheeradi Drava Dravya	Gavya Payasa, Goghrita, Takra
Anupana	Shishira Jala, Takra, Tushodhaka
	Dadimamanda, Nagara
	dhanyaka Shruta Jala, Arishta
Vihara	Nidra, Vishranti

Table 9: Different Apathya for Vibandha [81-83]

S.No	Dravya	Rasa - vipaka	Guna	Karma
1	Nishpava	Kashaya-Madhura	Ruksha, Sheetha	Grahi
2	Raja Masha	Kashaya Rasa	Guru	Na Pureesha Bhedi
3	Nishpava	Madhura-Amla Vipaka	Guru, Ruksha	Vaata Vishtambakruth
4	Chanaka	Kashaya	Laghu, Sheetha, Ruksha	Vishtambhi
5	Nava Dhanya	Madhura	Guru	Vishtambhi
6	Kapitta	Kashaya	Laghu	Sangrahi-vaatakruth
7	Bilva	Madhura	Guru, Vidahi	Graahi, Agnisaada
8	Dadima	Madhura Amla- kashaya Anu Rasa	Snigdha, Laghu	Sangraahi, Varcho Vibandhanam
9	Jambhu	Kashaya, Amla Rasa	Ruksha, Guru, Sheeta, Ruksha	Aatavibandhakruth- Sangraahi
10	Ama Moolaka	Madhura, Katu	Ruksha, Ushna, Guru	Stambhana

#### Yoga and Pranayama [84]

Constipation can be relieved by regular practise of some Yogasana (postures) like

- *Utkatasana* (chair pose)
- Bhujanghasana (cobra pose)
- *Trikonasana* (triangular stretch pose)
- Ardha Matsyendrasana (Half spinal twist)
- *Supta Vajrasana* (the sleeping pelvic pose)
- *Dhanurasana* (Bow pose)
- Pavanamuktasana (wind-relieving posture)
- *Paschimottanasana* (Head to knee pose)
- Kapalabhati, Pranayama

#### DISCUSSION

Constipation is passage of firm or hard pellet like stools at infrequent (<3 stools/week) and long intervals with difficulty to expel. Typically, functional constipation begins after the neonatal period. Intentional or subconscious stool withholding is seen here. It accounts for more than 85-95% of all constipation in children.<sup>[85]</sup> In toddlers inappropriately early toilet training is a factor that can initiate the pattern of stool retention. In older children, it can develop after entering a situation that makes stooling inconvenient like in school. As the passage of bowel movement is painful, voluntary withholdings of faeces to avoid the painful stimulus develops. Before puberty, constipation appears to be equally common among girls and boys. After puberty and in young adulthood, females are more likely to develop constipation than males. The treatment of constipation depends upon the age of the child and the duration of symptoms. It may involve education, dietary changes, behaviour changes and/or pharmacotherapy.

Ayurveda explains the causes, Lakshana of Vibandha which resembles to what is mentioned in Alternative medicine. By considering the pathology of Vibandha, the main line of treatment should be Agni Deepana and Vatanulomana, drugs predominant in Madhura, Tikta, Kashaya Rasa helps in subsiding the Pitta Dosha, Katu, Tikta, Kashaya Rasa helps in subsiding Kapha Dosha, whereas the Amla, Madhura Rasa helps in subsiding Vata Dosha. Katu Rasa and *Ushna Veerya* increase the *Agni* there by relieving the Mandagni. Due to Agnideepana, Katu Rasa and Teekshna Guna perform the Pachana of Aam Dosha. Due to Katu Rasa and Laghu-Teekshna guna it causes Sroto Shodhana and by this relives Vibandha. Most of drug explained as pathya are having Madhura Rasa, Snigdha-Laghu-Sara Gura and Ushna Veerya helps in normalizing vitiated Vata Dosha. Majority of the drug with Deepana, Pachana, Vatanulomana properties helps to increase Agni and thereby prevents the formation of ama and vitiation of Vata Dosha. Thus, helps in proper digestion of Ahara and its expulsion.

Yoga and pranayama enhance digestion, get rid of belly gases, as well as relieve constipation.

#### CONCLUSION

Vibandha is a condition caused by vitiation of Vata Dosha especially Apana Vata along with Agnimandya. Vibandha as a separate disease entity is not mentioned in the Avurveda classics, but described as either symptom or complication in association with many diseases. Vata Prakopa Ahara and Vihara are the prime causes of Vibandha. This can be understood as improper dietary habits and lifestyle and constant mental stress that results in disturbances of Agni and Apanavata. Agnimandya and Apana Vata Dushti are invariably present in the Samprapti of the Vibandha along with derangement in the function of Pachaka Pitta, Avalambaka Kapha and Samana Vata. Early intervention, dietary modifications like fibre rich food, proper toilet training helps to relieve constipation and prevents further complications.

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## \*Address for correspondence Dr. Pooja Bhat

PG Scholar Department of PG Studies in Kaumarabrithya, Sri Dharmasthala

Manjunatheshwara College of Ayurveda, Karnataka, India. E-mail: pooja.h.bhat@gmail.com

Ph: 8151033103

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