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Case Study

Vibandha in Pre-School Children: A Case Study on Functional Constipation

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ABSTRACT:

Vibandha –a common clinical condition of pediatric age group leads to physical, physiological morbidity and poor quality of life. It can be correlated with Constipation as both the terminologies have similar features like *purishnigraha* (obstruction of stool), *pakvashya shoola* (pain in abdomen), *kashtaprad malapravrutti* (pain during defecation) *grathit malapravrutti* (hard stool), *aatop* (infrequent bowel movement). Majority of the children report constipation either due to habitual reasons or reduced intake of fiber and water and sometimes as a result of altered food and lifestyle habits. This often happens when children start school or enter day care and feel shy about asking permission to use the bathroom due to lack of toilet training and fearful new environment at school. That's why functional constipation is one of common prevalent clinical condition in preschool group (3-6years age) and it is one of main reasons for increased parental concern.

We are discussing here a case of 5 year old female child having history of constipation for last 6-8months. She got relief from modern medicine, but recurrence occurs after stoppage. Parents came to us with complaint of passage of painful defecation since last 5-6 days. She is treated with *Mruduvirechan/Anuloman by Aaragwadhmajja* which gave effective result from third day of treatment. *Yogasana, Saghritlavanpana* was added as *Aahar Vihar* modifications. After that significant improvement in condition of patient is seen.

KEY WORDS: *Vibandh*, Constipation*, Mruduvirechan, Aargvadh.*

INTRODUCTION:

Constipation may be defined as decrease in frequency of bowel movements and difficulty/painful passage of hard stool[1]. In 17% to 40% of cases, constipation starts in first year of life[2]. About 3% to 10% of visits to health centers and up to 25% of referrals to pediatric gastroenterologist are related to constipation only[3].Estimated prevalence of constipation is 3% among toddlers and pre-school children worldwide and 95%, of them are considered functional[4].

Functional constipation is the most common cause of constipation in Indian children[5].It is caused by painful bowel movements that prompt the child to volitionally withhold stool and adopt retentive posturing. Withholding of stool leads to fecal stasis with re absorption of fluid in the colon, causing the stool to become bulky, firm, and painful to pass. As a result of which the child fearfully determines to avoid defecation by all of means. Such children respond to the urge to defecate by contracting their external anal sphincter muscles, in an attempt to withhold stool. In response to the urge, they refuse to sit on the toilet, rather rise on their toes, hold their legs and buttocks stiffly and often rock back and forth, holding on to a furniture, scream, turn red until a bowel movement finally takes place. With time, such retentive behavior becomes an automatic reaction. They often perform this while hiding in a corner. Eventually, liquid stool from proximal colon may percolate around hard retained stool and pass per rectum involuntarily (fecal incontinence). This cycle typically coincides with toilet training, dietary changes, stressful events (morning school), illness, lack of accessible toilets[6] (traveling).

Functional constipation (without objective evidence of a pathological condition) is the most common cause of constipation seen in pediatric. Use of laxatives, stool softeners, mechanical removal of blockage with help of polyethylene glycol enema, glycerin suppository is only management available for constipation in Modern medicine. Whereas in *Ayurveda* it revolves around correcting *Hetu-Nidanparivarjan* (underlying cause), *Aahar*(dietary modifications), *Vihar* (behavioral modification like toilet training) *Panchakarma (like Virechana ,Basti)* and use of *deepan pachan aushadhi* for *agnivardhan*. As *ayurvedic*

treatment protocol for constipation has broad view without recurrence, it is more promising to parents.

Previously Studies were done on *Basti* in Constipation; although *Virechana* is contraindicated in *Sukumar, Bala* still use of *Aaragvadhmajja* is mentioned by *Aacharya Charak* in *Kalpasthan*. So this is carried out.

Aim and Objective:

To study different aspects on explanation of *Vibandh* and effect of *AaragvadhMajja* on it at preschool age.

Vibhanda is not described as a separate disease in our classical text, but there is mentioning different presentation of *Purisha* (feces) *like Baddha Purisha Ghana Purisha/Grathita Purish, Mala avabaddhata* in various contexts in Ayurveda. Obstruction to *Apan Vayu* results in *Vibandh.* This clinical feature is explained under *Apan vayu / Purishvah strotas dushti* by *Acharya Charak*. It is more common among those who resist the urge to move their bowels at their body signals (*Vegavarodh*).

पुरीषवह स्त्रोतोदुष्टी हेतू -

'विधारणात अत्यशनात अजीर्णात अध्यषणातथा|
वर्चोवाहिनी दुश्यन्ति दुर्बलाग्नेः कृशस्य च ||[7]' -च.वि ५/२७

पुरीषवह स्त्रोतोदुष्टी लक्षणे-

' कृच्छ्रेण अल्पाल्पम सशब्दशूलमतिद्रवमतिग्रथितमतिबहू चोपविश्न्त दृष्ट्वा पुरीशवहान्यस्य स्त्रोतांसी प्रदुष्टानिती विद्यात |'[8] -च.वि.५/१२

It is also explained as *pakvashaygat vata ,gudagat vata* under *Vatavyadhi* by *acharya* and as *Purishavrutta vata*[12] *,Samanavrutta Apan* under *Aavrutta vata* having same signs as below:

पक्वाशयगत वात लक्षणे-

'पक्वशयास्थ आन्त्रकुजम शूलाटोपौ करोति च |
कृच्छ्रमुत्रापुरीश्त्वम अनाहम त्रिक्वेदनाम ||'[9] -च.चि.२८/२८

गुदगत वात-

'ग्रहो विन्मूत्र वातानाम शूलाध्मानामशर्करा:|'[10] -च. चि. २८/२६

Even *Vatanigrahaj udavarta, Purishnigrahaj Udavarta* has similar signs as-

पुरिषनिग्रहज उदावर्त-

'पक्वाशय शिरःशूलम वातावर्चो अप्रवर्तनम |
पिंडीकोद्वेश्तेन आध्मान पुरीषे स्याद्विधारिते च||'[11] – च. सु. ७/८

Case Report:

A 5 year old female patient was brought to the Out Patient Department of Kaumarabhritya, Ashwin Rural Ayurved College and Hospital, Manchihill by her parents with complaints of difficulty in defecation with passage of hard stool once in 5 to 6 days. Complaints were persisting since last 6-8 months.

The patient was apparently healthy six months back. Then she developed difficulty in defecation. Initially she used to pass hard stool once in 2 days associated with slight pain during defecation. After few days, duration has increased to 4 to 5 days. Parents use to take the child for consultation in a nearby clinic, where they have given a course of medications which child have taken but did not get satisfactory relief. As days passed, she faced more difficulty in passing stool. Condition worsens since last 1 month. Then, the parents have decided to bring the child for a better evaluation and management in our hospital. After a thorough questionnaire with parents regarding diet, life style, habits of the child and history of present illness status of condition is evaluated. She was examined thoroughly and then treatment was given.

Chief Complaints:

1. *VataVarcha apravrutti* (Obstruction to voiding stool)
2. *Grathita, mala pravrutti* (Scybalous stool)
3. *Kruchchhrena Shushk Chiraat pravrutthi* (Voiding of hard stools with straining,withholding)
4. *Sashoola mala pravarthana* (Voiding of stools with pain)
5. *Alpalpam mala pravarthana* (Voiding of small quantity of stool)
6. History of large diameter stool which may obstruct toilet

On Examination:

1) GC-Good	2) Temp- Afebrile
3) Pulse-100/min	4) BP-90/60mm of Hg
5) Icterus-Absent	6) Cynosis-Absent
7) Pallor-Mild	8) Edema-Absent
9) Clubbing-Absent	10) Appetite- Poor

11) Bowel- Irregular, Passage of hard stools once in 3 to 4 days associated with pain.

12) Micturition- Regular 13) Sleep- Sound

***Ashtavidh Parikshan*:**

1. Nadi -Hansgati	2. Mala–Malabaddhata
3. Mutra– Prakrut	4. Jivha –Pale,Niram
5. Shabda-Samyak	6. Sparsha-Sheet,Ruksh
7. Drika-Samyak	8. Akriti-Saumya

P/A Examination (GASTRO INTESTINAL SYSTEM)

- Inspection – No distension, umbilicus in normal position, no scars and no discoloration.
- Palpation –No tenderness.
- Percussion – Normal tympanic note around the umbilicus.
- Auscultation –Normal bowel sounds.

Per Rectal Examination - Presence of large fecal mass in rectum, No bleeding.

MATERIALS AND METHODS:

A 5yr female patient was taken from OPD of Balaroga in ARAC Hospital Manchihill having symptoms of functional constipation and no other motility related organic cause for it. So Hirschsprung's disease, Congenital anomalies, Neurological causes were excluded. Duration of study is 30days.

Follow up-7th, 15th, 30th day

Method-

द्राक्षारसयुतम दद्यात दाहोदावर्तपिडीते |

चतुर्वर्षमुखे बाले यावत्द्वादशवार्षीके ||

चतुरअंगुलमज्जस्तु प्रसुतम वा अथवा अंजलीम |[13] च.कल्प ८/८

Casia fistula (Family-Leguminouse)–

Mridu, Sansran(Mild Purgative) *Guna, Madhur Ras ,Madhur Vipak, Sheet Virya,Vatashamak*

Chaturangul/Rajavruksha (Cassia fistula) is explained as *Mruduvirechan/Anuloman dravya specially for Bala, Kshin Sukumar in case of Udavarta,* although Virechan is contraindicated in these, *Aaragvadh* has no *Upadrav* in them[14].

Preparation and Administration of drug-

Fruits of *Aargvadh* are cultivated, dried under sun then pulp of fruit (*Aaragvadh majja*) is removed and *Churna*/Coarse powder is made from it which is stored in a clean glass bottle. This *Aaragvadh majja* is added in *Drakshrasa* (Vitis Venifer) -*Virechanopag dravya*.

***Purvakarma*:**

Goghritpan is given for 3 consecutive days in dose of 3ml, 5ml, 8-10ml. After gap of 1 day *Til taila abhyanga* and *Pata Swedan* was given and then followed by *Pradhankarma*.

Pradhankarma- 2gm of *Aaragvadh Majja* with 15ml of *Draksharas* given orally.

OBSERVATIONS:

As no signs of *Virechana* seen 2gm of *AaragvadhMajja Churna* was given again .After 2-3 hrs Patients has got 3 *Malaveg, Kaphant* and *Shuddha Udga*r. As *Samyak Virechan Lakshanas* were observed, *Sansarjan Kram* was adviced for next 3 days.

Patient was discharged with following medications for1 month as-

Syp. Triphala 5ml twice a day before meal

Abhayarishta 5ml twice a day after meal

Yogasana-Pavanmuktasana, Vajrasana

Parents are counseled to give *madhur lavanrasatmak aahar*, hydration and toilet training.

RESULTS:

On follow up at 7thday-

Child, who had a habit of passing stool once in 5-6 days, started passing it on every third day. Pain during defecation was reduced. Child has started passing more quantity of semi solid stool instead of small quantity of hard stool.

On follow up at 15th day–

Frequency of stool is once every alternate day. No any pain during defecation. No any straining during defecation. No any obstruction while passing motion. No complaints of hard stool. Overall appetite has improved.

On follow up at 30th day–

Complaint of constipation is relived totally and general health of patient is also improved.

There were significant improvements in the condition of the patient.

DISCUSSION:

The cardinal features of *Vibandha* described in our classical texts are similar to that of constipation in contemporary science. It is a clinical condition which is very common in today's pediatric practice. The timely treatment is most essential to avoid any complication or surgery. The effectiveness of Ayurvedic treatment has proved that there are good results in this case. In present case of *Vibandha*, *Prakopa of Apana vata* resulting in impairment in its function- *Shakrut nishkramana*. Based on the Lakshnas it was concluded that there is Apana vata vaigunya. Hence the basic line of management was Samyak anulomana/Mruduvirechan. *Aaragvadh* is given as best choice drug for *Sukh/mruduvirechan* in children by *Charakacharay*. Internally *Abhayarisht*a and *Triphala* are given which contains *Harithaki* as the major ingredient- *Agrya oushadha* for *Anulomana*. Along with it proper dietary plan, *Yogasana*, Toilet training and adequate intake of water were also advised. Significant reduction in the complaints was observed.

CONCLUSION:

Constipation is one of the major health concerns in pediatric now-a-days. *Aaragvadh* is known for its purgative action. Because of its purgative action it expels the undigested food from large intestine without causing irritation to intestines. Hence *Charaka* has described it as first priority in mild purgative. According to Ayurveda, the purgative drugs consist of *Prithvi* (solid) and *Aap* (liquid) (fundamental elements) which works great in case of aggravated *Vata*. In the present study sun dried fruit pulp of *Cassia fistula* showed mild laxative action with increase in intestinal fluid accumulation and intestinal motility. This study showed significant results in relieving constipation and all related symptoms like *Adhaman, Udgarbahulya, Udarshool, Aatop, Aanah* and *Malsang*. As this was a preliminary study further trial on large sample is required for confirmation.

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