

Case Report

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MANAGEMENT OF GRAHANI ROGA WITH SPECIAL REFERENCE TO ULCERATIVE COLITIS: A CASE REPORT

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ABSTRACT

Grahani roga is a disease of significant clinical relevance in the modern era. It is a disease caused by a faulty lifestyle, which includes defective dietary habits, regimen and psychological factors. It resembles the symptoms of Ulcerative colitis. It is a form of inflammatory bowel disease that causes inflammation and ulcers in the lining of the large intestine, especially in the rectum. Aims and objectives: To evaluate the effect of Piccha Basti along with Shirodhara in Grahani roga. Materials and methods: Takra Basti and Piccha Basti followed by Anuvasana Basti with Changeryadi ghrita in Kala Basti pattern, Shiro dhara with Medha kwatha ksheerapaka and shamana oushadhis were administered. Result: The treatment adopted is effective in the management of Grahani and has shown significant changes in the signs and symptoms of Grahani roga. Discussion: Takra Basti and Piccha Basti reduce the inflammation by its grahi, deepana and picchila guna. It also improves the functioning of Grahani. Piccha basti, due to its picchila guna, forms the coating over the intestine, thereby preventing further mucosa damage. Conclusion: Shodhana, shamana yoga, and dietic modification give maximum benefits. Hence, an effort has been made to treat Ulcerative colitis through Panchakarma.

Keywords: Grahani, Ulcerative colitis, Takra Basti, Piccha Basti, Shirodhara

INTRODUCTION

Ayurveda is one of the oldest holistic healing systems in the world. It is supported by the assumption that health and wellbeing depend upon a fragile balance between mind and body. The term Grahani, in the Ayurvedic context, when interpreted anatomically, is said to be situated above the nabhi and between the amashaya and pakwashaya¹. Physiologically, it holds the ingested food during digestion, and it is the part where the absorption and assimilation of the food takes place². The disease affecting this part of the gastrointestinal system is Grahani roga. Grahani roga is a chronic disease vividly explained in our classics, which refers to a disease that occurs in Grahani sthana due to the vitiation of Agni. Grahani roga is the advanced stage of Grahani dosha, where there will be vitiation of Pachaka Pitta, Samana Vayu and Kledaka Kapha, along with Grahani nadi.

Nidana: The nidanas which produce mandagni play a vital role in the pathogenesis of Grahani roga, such as ati katu, snigdha, amla, guru, sheeta ahara, vishamashana, divaswapna, vegadharana, ratrijagarana, chinta, shoka, krodha, bhaya etc³.

Samprapti: When the person indulges in the above-mentioned causative factors, the Agni gets vitiated, which hampers the functioning of the Grahani, leading to the assimilation of both digested and undigested food⁴.

Lakshanas: It presents with the lakshanas like ⁵

- Muhurbaddham muhurdravam (Alternate passage of hard and loose stools)
- Apachana (Indigestion)

- Atopa (Gurgling sound)
- Saruja ama or Nirama poothi mala pravrutthi (Foul smelling defecation)
- Manasaha sadana (Psychological disturbance)
- Alasya (Lethargy)
- Udarashoola (Pain abdomen)

Considering the signs and symptoms of Grahani roga, it can be correlated to the disease Ulcerative colitis.

Ulcerative colitis is a chronic idiopathic Inflammatory bowel disease with an immune-mediated chronic intestinal condition causing irritation, inflammation, and ulcers in the lining of the large intestine (also called colon). The primary symptoms of the active disease include abdominal pain and diarrhoea mixed with blood, weight loss, fever, and anaemia may also occur. Often, symptoms can vary from mild to severe. Symptoms typically occur intermittently, with periods of no symptoms between flares.

The annual incidence is 10.4-12 cases per 100,000 people, and the prevalence rate is 35-100 cases per 100,000 people⁶. Ulcerative colitis is three times more common than Crohn's disease. It also appears to run in families. The causes of Ulcerative colitis are unknown. Theories involve immune system dysfunction, genetics, changes in the normal gut bacteria and environmental factors.

Symptoms

The symptoms are mainly of gastrointestinal origin and extraintestinal origin.

Gastrointestinal symptoms include,

- Diarrhea mixed with blood and mucus
- Bleed on rectal examination
- Abdominal pain
- Altered and increased bowel habits
- Rectal pain with tenesmus
- Anemia
- Weight loss⁷

Extraintestinal symptoms include:

- Aphthous ulcer
- Episcleritis
- Ankylosing spondylitis
- Sacroiliitis
- Erythema nodosum
- Pyoderma gangrenosum

Types

Ulcerative colitis usually is continuous from the rectum up to the colon. The disease is classified by the extent of involvement, depending on how far the disease extends,

- 1. Proctitis- Inflammation limited to the rectum.
- 2. Proctosigmoiditis- Involvement of the recto-sigmoid colon.
- 3. Left-sided colitis- Involves the descending colon, which runs along the patient's left side, up to the splenic flexure and the beginning of the transverse colon.
- 4. Pancolitis- Involvement of the entire colon extending from the rectum to the caecum, beyond which the small intestine begins.

Standard treatment for Ulcerative colitis depends on the extent of involvement and the disease severity. In conventional science, treatment includes administering corticosteroids, immunosuppressive, and iron supplements. None of the treatments has satisfactory results. Hence, Ayurveda is now focused on providing better remedies. Therefore, here, an attempt is made to put forth the importance of Basti in ulcerative colitis.

CASE REPORT

Chief complaints

- · Altered bowel habits since six months
- Mucus mixed with stool for three months
- Increased bowel habits 6-8 times/day- six months
- Burning defecation and incomplete evacuation six months

History of present illness

A female patient aged about 23 years had a history of passing loose stools 2-3 times/day since childhood. It was continued till the age of 19 years. Later, she did not have any such complaints. In the last six months, the patient noticed the passing of blood-mixed stools, abdominal pain, burning defecation, and increased bowel habits. Sometimes, she used to pass stool mixed with mucus. For that, she consulted a gastroenterologist and underwent a colonoscopy and was diagnosed with Ulcerative colitis, took medications and was relieved from blood-mixed stools. For the past three months, she has been complaining of generalized debility and passing of mucus mixed with stools 5-6 times/day associated with incomplete evacuation of bowel, straining during

defecation, psychological disturbance and reduced sleep. She was admitted to SJGAUM Hospital Bengaluru for further management of all these complaints.

Personal History

Table 1: Subject's personal history

Name - XYZ	Bowel habit - Altered
Age - 24 years	Appetite - Irregular
Marital status - Unmarried	Menstrual history - Regular
Occupation - Student	Height – 158 cm
Bala - Madhyama	Weight - 49 kg

Clinical findings

Table 2: Astasthana Pareeksha

Nadi - Vatapittaja 78/min	Shabdha - Prakruta
Mala - 6-8 t/ day, Altered bowel movements,	Sparsha - Anushna
Consistency - Solid, semisolid, liquid	sheeta
Colour- Sometimes yellowish or normal	
Appearance - Mucus mixed stool	
Smell - absent	
Mutra - 4-5 t/day 1t/night	Drik - Prakruta
Jihwa - Alpa lipta	Akrithi - Madhyama

Table 3: Dashavidha Pareeksha

Table 5: Dashavidha Fareeksha					
Aharaja Nidana - Katu pradhana	Pramana Height - 5.2 feet				
ahara frequently, vidahi ahara,	Weight - 49 kg				
excessive intake of pickle,	BMI - 20.4				
adhyashana					
Dosha - Vata pitta	Satmya - Madhyama				
Dushya - Rasa	Aharashakthi - Avara				
	Abhyavaharana shakthi -				
	Madhyama				
	Jarana shakthi - Avara				
Desha - Sadharana	Vyayama shakthi - Madhyama				
Sara - Twak	Vaya - 23 years				
Bala - Madhyama	Satva - Madhyama				

General Examination

Table 4: General Examination

Pallor - Absent	Blood pressure - 110/70 mmHg
Icterus - Absent	Temperature − 37 ⁰ C
Oedema - Absent	Pulse rate - 78/min
Clubbing - Absent	Respiratory rate - 16/min
Lymphadenopathy - Absent	

Systemic examination

Cardiovascular System- S1 S2 heard, no abnormality detected.

Respiratory System: NVBS heard, no abnormality detected.

Gastrointestinal tract: Tenderness - In epigastric and right hypochondriac region, Rigidity/guarding – absent.

Per rectal examination - Posterior chronic fissure in ano, anal erosions were present.

Investigation: Colonoscopy reports showed Colitis with terminal ileitis, infective or inflammatory.

Treatment protocol

Table 5: Treatment Schedule

Phase 1 16/6/23 to 02/07/2023	Phase 2 20/8/23 to 29/8/2023				
Takra Basti followed by Piccha Basti in the Kala Basti pattern. (16/6/23 to 25/6/2023) Shiro dhara with Medha qwatha ksheerapaka for 7 days. (26/6/23 to 02/07/2023)	Piccha Basti in Kala Basti pattern. (20/8/23 to 29/8/2023) Shiro dhara with Medha qwatha ksheerapaka for 7 days. (20/8/23 to 29/8/2023)				
Shamana oushadhis Capsule Mebarid 1-0-1 A/F Changeryadi Gritha 10 ml-0-10 ml on an empty stomach	Shamana oushadhis Capsule Mebarid 1-0-1 Yashti Choorna + Musta Choorna + Shankha Bhasma + Kamadhuga				
Yashti Choorna + Musta Choorna + Shankha Bhasma + Kamadhuga Rasa + Dadimashtaka Choorna with Buttermilk 5 gm - 5 gm A/ F	Rasa + Dadimashtaka Choorna with Buttermilk 5 gm - 5gm A/F				

MATERIALS AND METHODS

Contents of Takra Basti and Piccha Basti

Table 8: Contents of Takra Basti and Piccha Basti

Takra Basti		Piccha Basti			
Contents	Dose	Contents	Dose		
Makshika	50 ml	Makshika	50 ml		
Saindhava	6 gm	Saindhava	6 gm		
Changeryadi Ghrita	60 ml	Changeryadi Ghrita	70 ml		
Yashtimadhu + Shankha Bhasma + Kamadugha Choorna	madhu + Shankha Bhasma 20 gm		2 gm each		
Musta Amalaka Sidda Takra	250 ml	Nagakesara Choorna Shalmali Vrunta Ksheerapaka	300 ml		
Total	380 ml	Total	420 ml		

Preparation of Takra for Takra Basti

- 20 gm of Musta powder is boiled in 250 ml of ksheera + 250 ml of water and reduced to 250 ml the previous night. For this, 10 ml of curd is added and kept overnight.
- Amalaki kashaya is prepared by adding 50 gm of Amalaki choorna to 400 ml of water, boiling and reducing it to 200 ml. This kashaya is then churned with the dadhi prepared out of Musta ksheera.

Preparation of Shalmali vrunta Ksheerapaka for Piccha Basti

 $100~\rm gm$ Shalmali vrunta is boiled in $1600~\rm ml$ of water and reduced to $400~\rm ml$. $300~\rm ml$ of milk is added and boiled to this kashaya until it gets reduced to $300~\rm ml$ of ksheera paka.

Preparation of Medha qwatha ksheerapaka for Shirodhara 100g Medha qwatha choorna is boiled in 1000 ml water + 1000 ml of ksheera and reduced to 1000 ml.

Ingredients of Medha kwatha choorna include Brahmi, Shankha pushpi, Vacha, Gojihwa, Jyotishmati and Shatapushpa.

RESULT AND DISCUSSION

Table 6: Treatment Outcome during Phase 1

			Phase 1							
Criteria's	16/6	17/6	18/6	19/6	20/6	21/6	22/6	23/6	24/6	25/6
Number of bowel passing/times	6	3	2	2	3	2	2	1	1	1
Content	Mucus	Mucus	Mucus	N	N	N	N	N	N	N
Consistency	Solid	Solid	Semi solid	Sem solic						
Abdominal pain	+	+	+	-	-	-	-	-	-	-
Burning defecation	+	+	+	-	-	-	-	-	-	-
Tenesmus	++	++	++	++	++	+	+	+	+	+
Tiredness	++	++	++	++	+	+	+	-	-	-

Table 7: Treatment Outcome during Phase 2

			Phase 2							
Criteria's	20/8	21/8	22/8	23/8	24/8	25/8	26/8	27/8	28/8	29/8
Number of bowel passing/times	4	2	2	2	2	2	1	1	1	1
Content	Mucus	Mucus	N	N	N	N	N	N	N	N
Consistency	Semi	Semi	Semi	N	N	N	N	N	N	N
	solid	solid	solid							
Abdominal pain	+	+	-	-	-	-	ı	-	-	-
Burning defecation	-	-	-	-	-	-	-	-	-	-
Tenesmus	+	+	+	-	-	-	-	-	-	-
Tiredness	+	+	-	-	-	-	-	-	-	-

DISCUSSION

Ulcerative colitis is a chronic Inflammatory bowel disease with a relapsing and remitting course. The cause of Ulcerative colitis is unknown, but several theories have been put forward, mainly infective, nutritional, psychosomatic and immunological. The major symptoms of Ulcerative colitis are mucus or blood mixed with diarrhoea, rectal bleeding, tenesmus, abdominal pain, etc. Based on the similarities in signs and symptoms, it can be compared with Grahani roga.

Grahani roga is one of the prime diseases of annavaha srotas and is seen often in the day to do the practice. Various nidanas led to mandagni and resulted in the formation of ama dosha, which in turn resulted in Grahani roga over time. It is considered one of the eight major diseases (Ashtamahagada) by Acharya Vagbhata⁸.

Takra Basti: Acts on the digestive system, especially on Grahani

Takra is efficacious in Grahani disorders due to its deepana, grahi and laghu guna. Because of its madhura rasa, it will not vitiate Pitta dosha. It is wholesome for Kapha dosha due to kashaya rasa and ruksha guna. It is wholesome for Vata dosha due to its sweet and acidic nature⁹. As the patient presented with ama lakshanas, like foul-smelling semi-solid stools, along with mucoid discharge, abdominal fullness and reduced appetite, Takra Basti was given for two days. Changeryadi ghrita possesses deepana, pachana and grahi guna¹⁰.

The action of Takra Basti is possible by the minuteness (Anuptavanabhava) of Basti dravya, which contains sneha along with other kalka dravyas, and they move up to the minute channels of the body and tissue get adequately nourished. Absorption from intestinal mucosa and later entering systemic circulation. Jejjata, while commenting, says that drugs given by basti will directly reach the duodenum without undergoing any changes.

Action of Piccha Basti in Ulcerative colitis

In Ayurveda texts, we come across various Basti for treating the Grahani roga, and Piccha basti is one among them. It is being practised widely due to its clinical efficacy. Piccha basti acts as a protective layer over intestinal mucosa by avoiding friction and intestinal irritation because of its picchilata or lubricating nature. Ingredients of Piccha basti possesses sheeta veerya, madhura rasa and vipaka, making the Basti as vrana ropaka (anti-inflammatory and ulcer healing), rakta stambhaka (hemostatic) sangrahi (anti-diarrheal).

Because of its picchilata (sticky or lubricant), it forms a protective film over the Intestine and avoids friction over mucosa. Ksheera makes the Basti mridu and alleviates Pitta dosha. Honey and saindhava colloidal solution and sneha form a coating over the entire colon, preventing the attack of inflammatory mediators and thus facilitating healing. The Agni deepana property of Piccha Basti helps ignite the Agni so that absorption and digestion of Basti over the colon takes place effectively¹¹.

The principal ingredient of Piccha basti is Shalmali vrunta. It contains large amounts of tannin and gallic acids acting as astringents, which precipitate proteins helpful in restoring the damaged epithelial mucosal lining of the ulcerated mucosa. Simultaneously, the sangrahi property reduces the bowel frequency, and there will also be no loss of electrolytes and enteropathy protein (prevents hypoalbuminemia)¹².

The action of Shiro dhara using Medha qwatha ksheera paka in Ulcerative colitis

Shirodhara is a sthanika parisheka, which works on the cerebral system and helps in relaxing the nervous system and controlling anxiety and stress. It allows for decreased activity of the central nervous system with a lowering of brain cortisone and adrenaline levels. Shirodhara is mainly indicated in the Vata and Pittaja vikaras. It gives good results in stress-related lifestyle disorders like Ulcerative colitis, Psoriasis and other psychosomatic disorders. As the patient was under stress and had insomnia, Shirodhara using Medha qwatha ksheera paka was done for seven days¹³.

Shamanaushadhis

The following oral medications were prescribed after basti karma. During this period, the patient had significant changes in the symptoms, such as a reduction in bowel frequency, improvement in appetite and improvement in quality of sleep.

Capsule Mebarid: It contains various ingredients like Kutaja, Daruharidra, Bilwa, Dadima, Mocharasa, Jatiphala and Panchamrita Parpati. The methods of castor oil-induced diarrhoea and pylorus-ligation-induced ulcers in rats were used to evaluate the anti-diarrheal and anti-ulcer activity, respectively, while charcoal meal test in mice was the method used for testing its anti-motility effect. Mebarid was found to have significant activity in all three models. Thus, it can be concluded that Mebarid possesses anti-diarrheal, anti-motility, and anti-ulcer properties and can be beneficial in treating the above gastrointestinal disorders¹⁴.

Combination of Shankha bhasma, Kamadugha rasa, Musta choorna, Yashtimuadhu choorna with takra as sahapana. **Shankha Bhasma-** Shankha bhasma pacifies the irregularities of Vata and Kapha dosha. It is an antacid, stool-binding agent, anti-diarrheal, anti-inflammatory and anti-spasmodic in nature¹⁵.

Musta: Possess katu, tikta, and kashaya rasa, laghu and ruksha guna, ushna veerya and katu vipaka. It contains a flavonoid, tannin, triterpenoids sesquiterpenes, and cyperolone, and has the properties of antimicrobial activity, anti-ulceration / anti-diarrheal and anti-inflammatory¹⁶.

Yashti madhu: The functioning of the koshta is mainly monitored by Pachaka pitta and Samana vayu. When there is dushti of these two doshas, which in due course of time will damage the shleshmadhara kala, i.e. gastrointestinal mucosa causing inflammation and erosions. Yashti madhu by its virtue of madhura rasa and vipaka, sheeta veerya, snigdha and guru guna, it acts as Vata and Pitta shamaka and vrana ropaka¹⁷.

Kamadugha rasa: It relieves chronic acidity, heartburn, stomach ulcers and colic pains. Stimulates the production of digestive enzymes¹⁸. Some of the ingredients of Kamadugha rasa, such as Pravala and Mukta, have deepana properties that help cure and prevent the production of ulcers. The kshariya nature of these drugs would reduce the amliyata and help in vrana ropana. It also has calcium compounds, chiefly calcium carbonate, calcium oxide, and some calcium silicates. It treats peptic ulcers, acts as an antacid and reduces gastric acidity¹⁹.

The line of treatment was adopted in two phases based on the signs and symptoms presented by the patient. The patient reported significant relief in the signs and symptoms of Ulcerative colitis. After treatment, the patient gained weight of about three kilograms and the quality of sleep was also improved. All the symptoms of Grahani roga (Ulcerative colitis) have significantly reduced.

CONCLUSION

Grahani and Agni have Adhara adheya sambandha. Mandagni is a root cause of ama dosha, and it is the crucial factor for the manifestation of most of the disease. Grahani roga is considered one among the Ashta mahagada, which is difficult to cure. Despite this, sangrahi and shodhana property of Takra basti and, simultaneously, vrana ropaka and shothahara guna of Piccha basti aided the healing of colon mucosa. From the above case study, it is observed that Takra Basti, Piccha Basti and Shirodhara with ksheera along with shamanaoushadhi and dietary advice showed significant improvement in the management of Grahani roga. Symptoms like abdominal pain, burning defecation, tenesmus and tiredness were significantly reduced. Consistency and stool content became regular with the treatment. The number of episodes of stool was reduced from 6 times/day to 1 time/day.

Declaration of patient consent: The authors certify that they have obtained all appropriate consent from the Patient.

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