



A COMPREHENSIVE REVIEW OF AYURVEDIC GRAHANI ROGA: PARALLELS AND DIVERGENCES WITH MODERN GI DISORDERS

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ABSTRACT

Introduction: Ayurveda, an ancient Indian medical system, presents Grahani Roga as a gastrointestinal disorder characterized by weak digestive fire (Mandagni) and the expulsion of inadequately digested food, paralleling various modern GI disorders. This study aims to compare Grahani Roga with contemporary ailments viz. Tropical Sprue, Crohn's Disease, Irritable Bowel Syndrome (IBS), Coeliac Disease, etc. highlighting similarities and differences. **Materials And Methods:** Classical Ayurvedic texts (Charak and Sushruta Samhitas) and modern medical sources were reviewed. Symptoms of Grahani Roga and its subtypes (Vataja, Pittaja, Kaphaja) were identified and mapped to modern GI terms using the Namaste portal. Symptom overlaps with modern GI disorders were analyzed and tabulated. **Results:** The analysis identified 12 general symptoms of Grahani Roga and specific symptoms for its subtypes: 23 for Vataja, 8 for Pittaja, and 19 for Kaphaja. Symptom overlap with modern diseases varied with Tropical sprue having 5 out of 12 symptoms with general symptoms of Grahani roga. PUD and Pittaja Grahani show a strong correlation. Crohn's Disease shares similarities with Vataja Grahani. IBS and Functional Dyspepsia align more with Kaphaja Grahani. **Conclusion:** The study identifies significant parallels between Grahani Roga and various modern GI disorders, highlighting the relevance of ancient Ayurvedic descriptions in understanding and potentially treating contemporary ailments. Further research could enhance therapeutic approaches and patient outcomes by integrating Ayurvedic and modern medical insights.

KEYWORDS : Namaste Portal, Tropical sprue, Post Infectious Irritable Bowel Syndrome, Crohn's Disease, Ayurveda, Gastritis.

INTRODUCTION

Ayurveda is an ancient medicinal and wellness science from India, with its roots stretching back thousands of years. It offers a comprehensive approach to health and well-being, encompassing a wide range of diseases and disorders. One such disorder is Grahani Roga, which shares key symptoms with several gastrointestinal diseases like IBS, Crohn's Disease, Coeliac Disease, and Tropical Sprue.

Grahani Roga is characterized by a variety of gastrointestinal symptoms as well as some extraintestinal manifestations. According to the ancient Ayurvedic text, Charak Samhita, Grahani Roga is defined as a condition where food, inadequately digested due to weak digestive fire (mandagni), is expelled through the anus either in a digested or undigested form, referred to as Grahani Dosha. Subtypes of the said Grahani Dosha are mentioned as Vataja Grahani, Pittaja Grahani and Kaphaja Grahani which are caused by vitiation of vata, pitta and kapha dosha (regulatory functional factors of the body)¹ This definition underscores the central role of digestion and the quality of digestive fire in the manifestation of this disease.

In modern medical texts, gastrointestinal diseases are typically associated with symptoms such as abdominal pain, altered bowel habits, heartburn, vomiting, nausea, gastrointestinal bleeding, and jaundice.² These symptoms bear a strong resemblance to those described for Grahani Roga in classical Ayurvedic texts. Despite these parallels, there remains a lacuna in the comprehensive understanding of Grahani Roga, as the symptoms do not entirely match the descriptions found in Ayurvedic literature.

To bridge this gap and achieve a more thorough understanding of Grahani Roga, it is essential to analyze the symptoms detailed in Ayurvedic texts alongside their modern medical counterparts. Such an approach will surely enhance our understanding of this ancient disease potentially leading to more effective treatments and improved patient outcomes.

MATERIALS AND METHODS

A comprehensive analysis was carried out on the literature, which included ancient Ayurvedic texts, works by well-known authors of Ayurveda and Contemporary medicine, contemporary medical texts and articles published in reputable journals. A thorough search on databases such as PUBMED was used to gather data on a variety of modern disease symptoms for the years 2014–2023. Articles from respected journals such as The Lancet, JAMA, American Journal of Medicine, and others were chosen for inclusion.

The general symptoms of Grahani roga, Vataja Grahani, Pittaja Grahani and Kaphaja Grahani were listed from Charak Samhita and Sushruta Samhita. The translation of clinical manifestations mentioned in Ayurvedic texts to their English counterparts was done using namaste portal. These clinical manifestations were matched with the symptoms mentioned in modern medical texts and articles. Data regarding total number of symptoms matching the description was obtained and calculated.

RESULTS

Symptoms of diseases like Peptic Ulcer Disease (PUD), Functional dyspepsia, Coeliac Disease, Tropical sprue, Gastric Carcinoma, Whipple's Disease, Crohn's Disease,

Irritable Bowel Syndrome (IBS) and Small Bowel Bacterial Overgrowth were studied and matched along with the classical symptoms of Grahani roga and their English terminology.

A total of 12 general symptoms of Grahani Roga were identified from the classical texts Charak Samhita and Sushruta Samhita. There are 23 symptoms associated with Vataja Grahani, 8 symptoms for Pittaja Grahani, and 19 symptoms for Kaphaja Grahani. (Table 1, 2, 3 & 4)

Table 1. General Symptoms Of Grahani Roga, Their English Terminology And Symptoms Overlap With Modern Diseases

	Ayurved Symptoms ³⁴	English terminology ⁵	Modern Diseases ⁶
1.	Atishrustam vibaddham va dravam tadupdishyate ³ , Muhurbaddham Muhurdvama ⁴	Irregular bowel frequency, Formed stools at one moment and at another moment loose stools	Tropical sprue (Diarrhoea) ^{78 9} , Whipple's disease (Diarrhoea, Steatorrhea) ^{10 11,12} , Crohn's Disease (Diarrhoea) ^{13 14,15} , IBS (Alternate episodes of Diarrhoea or constipation) ^{16,179}
2.	Trishna ³ , Trit ⁴	Excessive Thirst, Polydipsia	
3.	Arochaka ³	Tastelessness, Anorexia	PUD ^{18 19} , Gastric Carcinoma ²⁰ , Tropical sprue (Anorexia) ^{78,9} , Crohn's Disease (Avoid food, since eating provokes pain) ^{13 14,1515}
4.	Vairasya ³ , Mukhavairasya ⁴	Tastelessness / Disgeusia	
5.	Praseka ³	Salivation	
6.	Tamakanvita ³ , Tamak ⁴	Blackout	
7.	Shoonapadkara ³	Oedema in extremities	Tropical sprue (Ankle oedema, Peripheral oedema) ^{7 8 9}
8.	Sasthiparvaruk ³ , Parvaruk ⁴	Pain in the bones and joints	Whipple's disease (Large joint arthropathy) ^{10 11,12}
9.	Chhardan ³ , Chhardi ⁴	Vomiting	PUD ^{18 19} , Crohn's Disease (Vomiting from jejunal strictures or severe oral ulceration) ^{13 14 15}
10.	Jwara ³	Ability of a disease to cause anguish to mind and body	Functional dyspepsia (depressive illness) ²¹ , Tropical sprue (Diarrhoea accompanied by fever) ^{7 8 9} , Whipple's disease (Low-grade fever) ^{10 11,12}
11.	Lohamgandhi tiktamlaudagaras hchasya ³ , Udgirechshukta tiktam la lohadhoomaam gandhi ⁴	Eructation with metallic smell, Eructation with the smell of raw meat	

12.	Krusha ⁴	Emaciated/ Thin / Malnourished	Gastric Carcinoma (weight loss) ²⁰ , Coeliac disease (weight loss, tiredness) ^{24 25} , Tropical sprue (weight loss) ^{7 9} , Whipple's disease (Weightloss) ^{10 11,12} , Crohn's Disease (Weightloss) ^{13 14}
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Table 2. Symptoms Of Vataja Grahani Roga, Their English Terminology, And Symptom Overlap With Modern Diseases

	Ayurved Symptoms ^{26,27}	English terminology ⁶	Modern Diseases ⁶
1.	Annam pachyate Dukham	Difficulty in digestion of food	
2.	Shukta paka	Sour fermentation of food	
3.	Kharangta	Roughness of bod	
4.	Kanthaasyash opha	Dryness in throat and mouth	
5.	Kshut trushna	Varocious appetite and thirst	
6.	Timira	Partial blindness	
7.	Karnayo Svanah	Tinnitus	
8.	Parshvoruvank shangreevaruj o	Excess pain in flanks, Pain in thighs, Pain in groin, Pain in neck	
9.	Visuchika	Indigestion with vomiting and diarrhoea with colicky pain	
10.	Hritpeeda	Pericardial pain/ Cardiac pain	PUD (Epigastric unease) ^{18 19}
11.	Karshya	Emaciation	Coeliac disease (weight loss, tiredness) ²⁴²⁵ , Gastric Carcinoma (weight loss) ²⁰ , Tropical sprue (weightloss) ^{7 8} , Crohn's Disease (Weightloss) ^{13 14 15}
12.	Dourbalya	Weakness	Coeliac disease (weightloss, tiredness) ^{24 25}
13.	Vairasyam	Altered taste in mouth	
14.	Parikartika	Cutting type of pain in anal region	Crohn's Disease (Fissures) ^{13 14}
15.	Griddhi sarvarasanam	Craving for various tastes	
16.	Manasah Sadanam	Mental depression	Functional dyspepsia (Depressive illness) ^{21 23}
17.	Jeerne jeeryati chadhmaanam	Flatulence after and during digestion of food	Functional dyspepsia (bloating after meals) ^{21 22} , IBS (Abdominal bloating) ^{16 17}
18.	Bhukte Swasthyamup aiti	Sense of wellbeing after taking meals	

19.	Vaatgulma hridroga pleeha shanki	Anxious if he has developed vaat gulma, cardiac disease, splenomegaly		2.	Hrillas	Nausea	PUD ^{18 19} Functional dyspepsia ^{21 23} Gastric Carcinoma (Anorexia and nausea) ²⁰
20.	Cheerad dukham dravam shushkam tanu amam shabdafenvat punah punah srajed varchah	Takes long time to evacuate bowels, defecation with pain, stools liquid in nature, stool in dry state, stool in less quantity, unformed stools, stool is accompanied with loud sound, frothy stools, repeatedly passing stool	IBS (Diarrhoea or constipation) ^{16 17}	3.	Chhardi	Vomiting	PUD ^{18 19} , Crohn's Disease (Vomiting from jejunal strictures or severe oral ulceration but weightloss present) ^{13 14 15}
21.	Shwas	Breathlessness/ Difficult Breathing		4.	Arochaka	Tastelessness	PUD ^{18 19} , Gastric Carcinoma ²⁰ , Tropical sprue (Anorexia) ^{7 8}
22.	Kasa	Cough	Whipple's disease (Chronic cough) ^{10 11,12}	5.	Aasya upadeha	A feeling of stickiness in the mouth	
23.	Shooladhike paayu hrit parshva udar mastake (Su.)	Severe pain in anus, pain in precordium/ cardiac region, severe pain in abdomen, severe pain in head	PUD (Abdominal pain, Epigastric unease) ^{18 19} Functional dyspepsia (Abdominal discomfort) ^{21 23} Tropical sprue (Abdominal distention) Crohn's Disease (Abdominal pain) ^{13 14 15} IBS (Abdominal discomfort) ^{16 17}	6.	Madhurya	Sweetness in mouth	
				7.	Kasa	Cough	Whipple's disease (Chronic Cough) ^{10 11,12}
				8.	Sthivan	Spitting/ Excess expectoration	
				9.	Peenasa	Cold, Catarrh	
				10.	Hridayam manyate stayanam	Feels as if cardiac region/ heart is	
				11.	Udaram stimitam guru	Motionless and heavy abdomen	Functional dyspepsia (abdominal discomfort, satiety, bloating after meals) ^{21,23} IBS (Abdominal discomfort) ^{16 17} Tropical sprue (Abdominal distension, Bloating) ^{7 8 9}
				12.	Dushto Madhura udgar	Unpleasant eructations	
				13.	Sadanam	Exhaustion	Tropical sprue (fatigue but weightloss present) ^{7 8 9}
				14.	Streeshu aharshanam	Not interested in sexual indulgence with women	
				15.	Bhinnam varcha	Passage of unformed (loose) feces	Tropical sprue (Diarrhoea) ⁷⁸⁹ , Small bowel bacterial overgrowth (watery diarrhea) ⁸ ,
				16.	Shleshma sanshrishta guru varcha	Defecation of stools with mucus and bulky/heavy stools	Small bowel bacterial overgrowth (steatorrhea) ⁸ , IBS (Diarrhoea or constipation, passage of mucus) ^{16 17} Whipple's disease (Diarrhoea, Steatorrhea) ^{10 11,12}
				17.	Akrusha Dourbalya	Weakness despite lack of emaciation	Functional dyspepsia (no weight loss) ^{21 22 23} , IBS (no weightloss) ^{16 17}
				18.	Aalasya	Lethargy	Coeliac disease (tiredness) ^{24 25} , Tropical sprue (fatigue but weightloss present) ^{7 8 9}
				19.	Guru (Su.)	Heaviness	

Table 3. Symptoms Of Pittaja Grahani Roga, Their English Terminology And Symptom Overlap With Modern Diseases

Ayurveda Lakshan ^{27,28}	English terminology	Modern Diseases ⁶
1. Ajeernam	Indigestion	
2. Neelpeetabha m	Defecation of blue, yellow coloured stools	
3. Peetabha	Defecation of yellow coloured stools	
4. Putyamlodgar	Putrid eructations	
5. Hridkantha daha	Burning sensation in cardiac region and in throat	PUD (Epigastric unease) ^{18 19}
6. Aruchi	Tastelessness	PUD ^{18 19} , Gastric Carcinoma ²⁰ , Tropical sprue (Anorexia) ^{7 8} , Crohn's Disease (Avoid food, since eating provokes pain) ^{13 14 15}
7. Tri	Thirst	
8. Daha (Su.)	Burning Sensation	

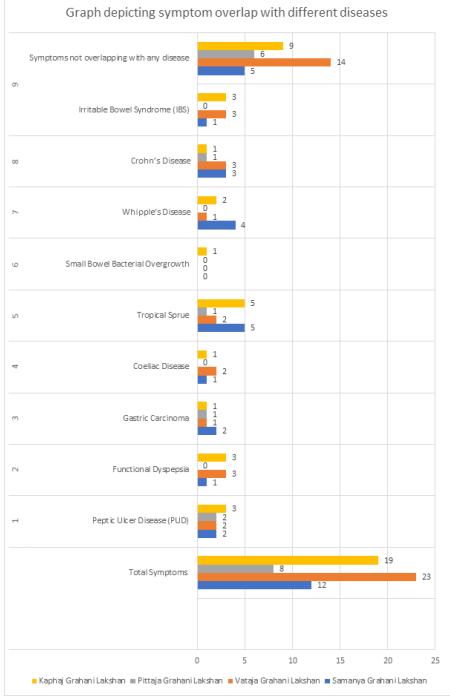
Table 4. Symptoms Of Kaphaja Grahani Roga, Their English Terminology And Symptom Overlap With Modern Diseases

Ayurveda Lakshan ^{27,29}	English terminology	Modern Diseases ⁶
1. Annam pachyate dukham	Food is digested with difficulty	

The proportion of symptoms observed in modern diseases that resemble the general symptoms of Grahani roga, along with its subtypes—Vataja Grahani roga, Pittaja Grahani roga, and Kaphaja Grahani roga—from the total symptoms described in classical Ayurvedic literature were evaluated and tabulated.

Table 5. Depicting Percentage Of Symptom Overlap Between Classical And Modern Diseases

S. No.	Disease	Samanya Grahani Lakshan	Vataja Grahani Lakshan	Pittaja Grahani Lakshan	Kaphaja Grahani Lakshan
	Total Symptoms	12	23	8	19
1	Peptic Ulcer Disease (PUD)	2	2	2	3
2	Functional Dyspepsia	1	3	0	3
3	Gastric Carcinoma	2	1	1	1
4	Coeliac Disease	1	2	0	1
5	Tropical Sprue	5	2	1	5
6	Small Bowel Bacterial Overgrowth	0	0	0	1
7	Whipple's Disease	4	1	0	2
8	Crohn's Disease	3	3	1	1
9	Irritable Bowel Syndrome (IBS)	1	3	0	3
	Symptoms not overlapping with any disease	5	14	6	9



DISCUSSION

Tropical Sprue

The aetiology of Tropical sprue is unknown; nevertheless, it is an acquired disease characterised by mucosal abnormalities in the small intestine, malabsorption, and numerous nutritional deficits.⁷

Tropical sprue is an acquired condition with unknown cause, marked by small intestinal mucosal changes, malabsorption, and nutritional deficiencies. Many of its symptoms—such as diarrhoea, foul-smelling stools, abdominal fullness, muscle weakness, and pedal oedema—closely resemble those of Grahani Roga. Notably, 5 of 12 general Grahani symptoms and several subtype symptoms overlap with Tropical sprue. While Kaphaja Grahani shows the highest symptom similarity, key differences like the absence of significant weight loss in classical texts highlight certain disparities. Similar mismatches are seen with Coeliac disease, Crohn's disease, and others due to prominent weight loss.

Peptic Ulcer Disease (PUD)

An ulcer that is closely linked to a *Helicobacter pylori* infection in the lower oesophagus, stomach, or duodenum is referred to as a peptic ulcer.¹⁸

The most common presenting symptom is epigastric pain, which may be associated with dyspepsia, bloating, abdominal fullness, nausea, and early satiety.¹⁸ These symptoms bears most resemblance with symptoms of Pittaja Grahani among the listed diseases. Consequently, it can be claimed that PUD and Pittaja Grahani Roga have a stronger correlation.

Crohn's Disease

Crohn's disease is a chronic inflammatory condition affecting the gastrointestinal tract that often causes extraintestinal complications very much alike to Grahani Roga. Common presenting symptoms include diarrhoea, abdominal pain, fissures, fever, weight loss, and fatigue along with extraintestinal manifestations such as anemia, inflammatory arthropathies, osteoporosis, scleritis, venous thromboembolism etc.¹³

This disease has a strong correlation to general symptoms of Grahani roga second next to tropical sprue and Whipple's disease. It also bears close resemblance to symptoms of Vataja Grahani roga with 3 out of 12 of identical symptoms. Although Functional dyspepsia and IBS also has similar symptoms resembling to Vataja grahani roga but these are associated with no weightloss despite lethargy which makes them more similar to Kaphaja Grahani. Hence it can be claimed that Crohn's Disease has a stronger correlation to Vataja Grahani roga among the listed diseases.

Irritable Bowel Syndrome (IBS)

The most prevalent gastrointestinal ailment to be diagnosed is Irritable bowel syndrome (IBS). It is a symptom-based disorder defined by the presence of altered bowel habits along with abdominal pain or discomfort without presence of any known disease to cause these sorts of symptoms.¹⁶

Altered bowel habits can be claimed as the single most important characteristic of Grahani roga as defined by acharya Sushruta. Therefore it is most commonly correlated with IBS. But symptoms like absence of weightloss and presence of mucus in stools makes it more closely associated to Kaphaja Grahani Roga.

Functional Dyspepsia

The term dyspepsia refers to a group of symptoms that are specific to the gastroduodenal portion of the gastrointestinal tract. These symptoms include burning or discomfort in the epigastrium, post prandial fullness, bloating after meals and early satiety.²¹ This disease, similar to IBS, has absence of weightloss despite these manifestations. Hence it can be claimed that functional dyspepsia resembles more with symptoms of Kaphaja Grahani Roga.

Coeliac Disease

Coeliac disease is an autoimmune disorder that occurs in genetically predisposed individuals who develop an immune reaction to gluten. The disease primarily affects the small intestine; however, the clinical manifestations are broad, with both intestinal and extra-intestinal symptoms. Classic symptoms include chronic diarrhoea, weight loss, and failure to thrive. The more common, non-classical symptoms include iron deficiency, bloating, constipation, chronic fatigue, headache, abdominal pain, and osteoporosis.³⁰

Symptoms of Coeliac disease also possess resemblance to general symptoms of grahani roga.

Gastric Carcinoma

Infection with *Helicobacter pylori* plays a key pathogenic role

in the development of this disease. This could be said as a complication of chronic ulcerative conditions of GIT.

Small Bowel Bacterial Overgrowth

Presence of symptoms like watery diarrhoea and/ or steatorrhoea along with B₁₂ deficiency makes it more closely linked to Kaphaja Grahani roga among other subtypes of Grahani roga.

CONCLUSION

The review article concludes that symptoms of Tropical sprue align most closely with symptoms of grahani roga along with its subtypes. PUD shows strong correlation with Pittaja grahani while Crohn's disease aligns well with manifestations of Vataja grahani. Irritable bowel syndrome and Functional dyspepsia are more akin to the Kaphaja grahani due to similar symptoms. Coeliac disease and Whipple's disease show significant similarities in general symptoms of Grahani roga. Many clinical manifestations and extraintestinal symptoms mentioned in classical ayurvedic texts were found to not possess resemblance to modern disorders. Some unfound symptoms could be minor manifestations which are often not included in symptoms of disorders, due to such limitations there is further requirement of deep literary research to arrive at a more significant conclusion.

Conflict Of Interest

There is no conflict of interest.

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