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Case Report

Remission of Irritable Bowel Syndrome Achieved Through Combined Diet, Lifestyle Modification, and Yoga: A Case Report

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Abstract

This report describes a 33-year-old male initially suspected of Inflammatory Bowel Disease (IBD) due to radiological findings, but finally diagnosed with Irritable Bowel Syndrome (IBS) based on the Rome IV criteria, normal colonoscopy findings and inflammatory biomarkers. When symptomatic pharmacotherapy for pain, constipation and heartburn alone did not bring lasting relief, he was referred for lifestyle therapy. Dietary, lifestyle advice, and physical activity are mainstay in the current guidelines on the management of IBS. However, beyond these generalities, patients receive little guidance on day-to-day decision making and essential elements of healthy living. We addressed the limitations in current guidelines on IBS by following the 21-point Health Building Guideline, along with Yoga and delivered through a seven-point protocol that uses the traffic light approach to promote and sustain behavioural changes in chronic diseases. After seven months of consistent adherence to intervention; following the traffic light approach, the patient achieved remission.

Keywords: irritable bowel syndrome; yoga; life style; remission induction; gastrointestinal microbiome; brain-gut axis; phytotherapy; diet; whole plant-based diet; complementary therapies; quality of life; lifestyle; non-pharmacological therapy

Introduction

Irritable Bowel Syndrome (IBS) is a chronic functional gastrointestinal disorder characterized by recurrent abdominal pain associated with altered bowel habits, in the absence of identifiable structural or biochemical abnormalities. Functional gastrointestinal disorders impact 40% of the global population, with IBS standing out at 14% due to its complexity, quality-of-life effects, and economic impact. cite:Arif2025

IBS is now widely understood as a multifactorial disorder. Its pathophysiology involves disruptions in the gut-brain axis, visceral hypersensitivity, gastrointestinal dysmotility, gut dysbiosis cite:DeFilippis2020, food intolerances, and psychosocial factors. cite:Canavan2014 A positive diagnostic approach allows early intervention and improved patient outcomes. Accurate diagnosis can be made using Rome IV criteria and ruling out diseases that present with similar symptoms . cite:Nathani2025 The **Diagnostic Criteria (Rome IV)** are **recurrent abdominal pain**, on an average at least **1 day per week** in the **last 3 months**; with symptoms onset at least 6 months prior to diagnosis and **two or more** of the following: 1. Related to defecation, 2. Associated with a change in **stool frequency** and 3. Associated with a change in stool **form/appearance**. cite:Rome-IV The **Rome IV diagnostic criteria** have a sensitivity of 82.1% and specificity of 85.1%. cite:Arif2024 Recommended investigations are full blood count, C-reactive protein, celiac serology, and fecal calprotectin. If diarrhea is the predominant symptom, a colonoscopy with biopsies should be considered to rule out microscopic colitis. cite:Sperber2021 Underdiagnosis & mismanagement of IBS leading to excessive diagnostic tests and financial burden on patients is not uncommon.

Once the diagnosis is made, an empathetic approach is recommended to improve quality of life and symptom control, and reduce healthcare expenditure. The mainstays of treatment include patient education about the condition, dietary changes, soluble fibre, and antispasmodic drugs. cite:Ford2020 IBS management based on current guidelines cite:Lacy2021 follows a stepwise, patient-centred approach encompassing dietary, pharmacological, and psychological therapies. **Dietary Interventions** include a limited trial of a low-FODMAP diet. Soluble fibre is effective for global symptoms and abdominal pain, but insoluble fibre should be avoided. Food elimination diets based on IgG antibodies and gluten-free diets are not recommended. **Pharmacological treatment** is symptom dependent (**constipation or diarrhea predominant**) and consists of **antispasmodics & peppermint oil, neuromodulators (Antidepressants)** as a second line treatment, **probiotics, psychological & behavioural** gut-directed psychotherapy like cognitive behavioural therapy (CBT), gut-directed hypnotherapy, and mindfulness-based approaches are also suggested. IBS is a long-term condition with no known cure, which fluctuates in severity over time and can have a substantial impact on quality of life and ability to work and socialise. Yet there is evidence that common bioactive dietary components can be useful in its treatment. cite:DeFilippis2020 Still, there is limited evidence on remission of IBS through a comprehensive lifestyle medicine approach. cite:Shabbir2025 We attempt to bridge this gap.

Our patient’s main concerns were abdominal pain and altered bowel habits, predominantly constipation.

Patient Information

The patient, a 33-year-old male, is an industrial worker belonging to a lower socio-economic class. He presented in April, 2025 to the Gastrointestinal clinic with complaints of chronic constipation interspersed with brief episodes of loose stools with increased frequency, incomplete evacuation, bloating; defecation was consistently associated with lower abdominal pain and tenesmus. His symptoms had persisted for one year. The onset of symptoms was insidious and the progression was gradual. The color and odor of the stools were unremarkable. Notably, there was no history of melena, hematochezia, mucus in the stool, or nocturnal urgency. Associated symptoms included persistent heartburn, bloating, and flatulence. The patient denied nausea, vomiting, or icterus. His abdominal pain was gradual in onset and progressive in nature. It was described as cramping in character, primarily localized to the lower abdomen. The pain was typically aggravated post-prandially and relieved following defecation. There was no referred or radiating pain reported.

The patient’s medical history was negative for tuberculosis, asthma, diabetes mellitus or hypertension. There was no history of similar gastrointestinal illness among first-degree relatives.

His bladder habits were normal and his appetite remained adequate; however, he reported reduced sleep. There was no history of significant weight loss. The patient led a non-sedentary lifestyle with no history of smoking, alcohol consumption, or tobacco use.

Clinical Findings

The patient had a moderate build, was adequately nourished. On examination, he was afebrile, had no organomegaly, palpable abdominal mass, no tenderness per abdomen. His weight and blood pressure were within normal limits. (Table-1)

Table 1. Case therapy timeline.

Date	Department visited	Investigations	Therapy	Outcome
25/3/2025	General Medicine		Vit-D3, Multivitamins, Pentoprazole	No relief
2/4/2025	Gastroenterology Diagnosed as:	- Hepatitis B,C,E antigen, HIV	Cyclopam Tablet Pentaprazole Sucral Syp	No relief

	Inflammatory bowel disease, Non-infective gastroenteritis and colitis, unspecified	- Stool for occult blood - Stool Culture For Carriers Of Salmonella All termed negative		
15/4/2025	Gastroenterology		Isabgol Husk, Lactulose Syp. Meftal Spas , Rifagut 550 Tab.	No relief
30/4/2025	Gastroenterology		Cyclopam MF Tab., Lactulose Syp. Rifaximin Caps, Smooth Relief Granules Pentopen DSR	No relief
6/6/2025 25/7/2025 2/9/2025 8/10/2025 30/10/2025 20/11/2025 9/12/2025 13/1/2026	Gastroenterology Final diagnosis of IBS after colonoscopy.	8/10/2025: CBC CRP ESR Stool routine, stool microscopy All returned normal	- PPI, Antacid, Multi-vitamins - Sucralfate - Anti-emetic (Domperidone) - Anti-spasmodic (anti-cholinergic) -Anxiolytic: Chlordiazepoxide -Lactulose, Dulcolax (for constipation) - Pre-probiotic, Pro-biotic like Bifilac - Antibiotics (Rifaximin)	No relief
6/6/2025	Integrative Health Clinic (IHC)	none	Presumptive Management started on Diet, Lifestyle advice and Yoga. -Calcium Carbonate, Zinc, Mg oxide, Vit. D3; Ferrous fumarate,, Folic acid with multi-vitamins	No relief
9/12/2025	IHC	CRP, ESR, Hba1c All found normal	Diet, Lifestyle advice and Yoga practice + Nurostar Gold RF Caps.	Some relief
13/1/2026 14/2/2026	IHC		Repeated Diet, Lifestyle advice and Yoga practice. Calcium, Iron and Multi-Vitamin	Full relief

Diagnostic Assessment

Routine lab investigations were normal (Complete Blood Count, C-Reactive Protein, ESR). Thyroid Function Test, Iron Studies, Viral markers, Kidney Function Test were also normal. Fecal biomarkers (Fecal Calprotectin) were within normal limits.

Radiology: The patient had undergone a CT scan at the referring hospital on 27/3/2025, which showed diffuse circumferential wall thickening of the colon and ileocolic junction, suggesting Inflammatory Bowel Disease (IBD). When the initial management did not relieve his symptoms, a Colonoscopy was performed (20/11/2025), which revealed a completely normal mucosa from the rectum to the terminal ileum. (Figure)

The CT findings were not supported by clinical history (blood in stool) or inflammatory markers in blood. Hence, they were interpreted as “pseudothickening” due to colonic spasm or under-distension, and based on presentation and investigations and colonoscopy findings, the patient was finally diagnosed with IBS.

His Bristol Stool Scale was assessed to be 1 / 2.

Therapeutic Intervention

For the initial two months of presentation, the patient was managed exclusively in the Gastro clinic with symptomatic, pharmacological treatment with Proton Pump inhibitors (PPI), anti-colic drugs, Sucralfate, laxatives, and a course of antibiotics. Since the patient was not getting a lasting relief, he was referred to the Integrative Health Clinic (IHC) for lifestyle advice. For next seven months, the patient continued to visit both the clinics, continuing the symptomatic pharmacotherapy from the Gastro clinic, and starting the Lifestyle interventions of the IHC. For the most recent month (eighth month of practice), as the patient’s symptoms improved, he discontinued the former and remained on lifestyle therapy alone. At the time of writing, the patient reported near full improvement in symptoms for the past one month after a regular adherence to the lifestyle routine.

The interventions at the IHC Lifestyle clinic were the following:

1. Counseling emphasising the importance of lifestyle modification with foundations in complete exclusion of high-fat, high-sugar (HFHS) diet and Ultra-Processed Foods (UPFs). Instead, the patient was advised to follow a whole, plant-based diet, exercise (Yoga asanas), deep breathing (Pranayam) and to follow the circadian-aligned routine. The protocol followed was the Traffic light approach for diet and lifestyle changes - “Health Building Guidelines”. cite: Sarwal2026
2. Daily morning intake of a glass of lukewarm infusion of four spices viz Cumin, Coriander, Fenugreek & Cinnamon. These spices are known to have laxative properties, and reduce dyspepsia, bloating and flatulence and in addition exert anti-inflammatory effects.
3. Daily practice of Yoga asanas and Bhramari Pranayam for at least 30 minutes which help in stress reduction and better autonomic nervous system regulation. cite: Khajuria2024
4. For the benefit of the patient’s understanding, motivation and compliance, he was referred to a YouTube channel that first hand demonstrates each of the suggested lifestyle interventions. cite: SutraHealth2026

Follow-up and Outcomes

Following seven months of adherence to the lifestyle modifications, the patient reported complete resolution of lower abdominal pain, while bloating & flatulence reduced significantly. His stool consistency normalized and tenesmus was eliminated. (Bristol Stool Scale improved to type 3 from previous type 1/2). His overall quality of Life improved. The outcome of the treatment assessed after seven months using the IBS-SSS questionnaire is given in Table-2.

The patient gained some weight after achieving remission seven months into lifestyle therapy. (Table-3)

Table 2. Pre and Post Treatment status on IBS-SSS parameters.

Parameter (0-100)	Pre intervention	Post Intervention
Pain severity	50	0
Pain Frequency	40	0
Bloating	50	20
Bowel Dissatisfaction	60	10
Life Interference	50	10
Total	250 (Moderate)	40 (Remission)

Total Score interpretation: Mild: 75 - 175, Moderate: 175-300, Severe: > 300, Remission: < 75.

Table 3. Vitals during IHC Visits (* Height of patient : 167 cms).

Visit Date	Weight	BMI*	Blood Pressure
9/12/2025	70.2	25.17	125/84
13/1/2026	71.8	25.74	136/83
14/2/2026	71.6	25.67	129/84

Discussion

Current guidelines on IBS across the world cite:Lacy2021 cite:NICE2026 focus on managing the symptoms, rather than remission and lack a clear direction for management of the condition - even on the specifics of diet beyond the FODMAP, lifestyle or exercise. Multiple best-practice recommendations in management of IBS cite:Chey2022 allude to the challenges that clinicians face in such cases and the limitations of current ACG guidelines. The wide variety of dietary advice and therapeutic agents recommended in IBS cite:Vasant2021 reflects the diversity of cases and difficulty in managing them.

Moreover, lifestyle advice has issues with patient compliance and consistency, which current guidelines do little to help. We followed the comprehensive Health Building Guideline that follows a traffic light approach to lifestyle along with its seven-point administration protocol which seamlessly helped in guiding and managing patients on their journey to a better lifestyle. cite:Sarwal2026

Our multimodal approach combining diet, lifestyle advice and yoga worked in achieving a remission largely by removing triggers and incorporating a favourable gut microbial modulation and working through the gut-brain axis. cite:Dale2023 By leaving food choices to his taste and judgment within broad groups, but with abundance of salad, fruits and vegetables, the “traffic light approach to lifestyle” guidelines provided patients the autonomy to individualize his treatment, which is necessary in IBS. cite:Capili2016 The Health Building lifestyle intervention that we followed is broader in scope, comprehensive, and acts at multiple organ systems (lungs, cardio-vascular, musculo-skeletal, neuro-endocrine, brain and the mind besides the gut) than the FODMAP diet which merely reduces certain difficult to digest carbohydrates.

There is preliminary evidence that **culinary doses of spices might have prebiotic-like effects**. Broader spice research (including coriander, cinnamon) indicates that polyphenol-rich spice mixtures can, even with short term use, **modulate gut microbiome composition** and potentially boost beneficial bacteria like *Bifidobacterium* in humans. cite:Khine2021

- **Cumin** extract have been successful in symptom control in IBS patients in a case series cite:Agah2013
- In pilot studies Carmint, a herbal preparation containing **Coriandrum** sativum, has been found effective in relieving abdominal pain and bloating in patients of IBS in a pilot study cite:Vejdani2006
- Soluble dietary fiber galactomannan, derived from **fenugreek** seeds, has demonstrated the ability to foster regular bowel movements, and the regulation of intestinal flora. cite:Faisal2024 cite:Yao2020 **Animal studies** have shown that **fenugreek** alters the gut microbiome composition (e.g., increases certain beneficial bacterial taxa and microbiome diversity) in mice fed high-fat diets. cite:Jones2022 USDA has reported that “data from our lab shows that fenugreek significantly alters intestinal microbial populations, and reverses key Western diet-induced changes to gut microbiota” to propose a hypothesis that fenugreek induces physiologic resiliency via changes to intestinal microbiota by offsetting diet-induced gut dysbiosis cite:USDA2026
- Aqueous **cinnamon** extract has shown to ameliorate bowel dysfunction and enteric 5-HT synthesis in IBS rats. cite:Yu2023

We supplemented our therapy with Yoga asanas and Bhramari Pranayama. Studies have shown Yoga to be as effective as a low-FODMAP diet in reducing visceral hypersensitivity by modulating the autonomic nervous system and reducing the “stress-induced” proinflammatory environment of the gut. cite:Schumann2018 cite:DSilva2022

The strengths in our case report are :

- Diagnostic Rigor: Organic pathology was reasonably ruled out using colonoscopy and fecal calprotectin
- Holistic, evidence based Management: Our case report showcases that a multi-modal, non-pharmacological but evidence based approach consisting of a whole plant-based diet, lifestyle, Yoga and deep breathing (Bhramari Pranayam) presented with a traffic light approach is successful in inducing remission of IBS.
- Affordability, ease of administration and high compliance given its structured, yet flexible format place the patients in charge of their health to achieve remission.
- Sustainable, by keeping it simple, and self administered.

One limitation of our case report is that it is a single-Case, whose results may not be universally generalizable to all IBS patients. Since the patient continued on symptomatic pharmacotherapy for initial six months of lifestyle therapy, the former present as confounding factors. IBS being a chronic disease that takes time to resolve, its symptoms being distressing and affecting activities of daily living, patients may need pharmacotherapy for symptomatic relief.

Conclusion

This report demonstrates how a whole plant-based diet, Yoga, and lifestyle modifications can achieve remission in a chronic case of IBS. Just as IBS is a disease of multi-factorial aetiology, its management through a set of lifestyle interventions operates at multiple levels to eliminate triggers, and modulate the gut-brain axis. “The Traffic Light Approach” to lifestyle modifications combined with Yoga and Bhramari Pranayam warrants evaluation in larger, controlled studies to establish its efficacy and generalizability in achieving remission from IBS.

Patient Perspective

The patient expressed great satisfaction with the outcome of the treatment. He found the treatment practical and easy to follow. He appeared to have benefited physically, emotionally, socially, and financially. The treatment has helped him regain confidence, energy, and enthusiasm.

Ethics approval: Being a case report, it was not considered necessary.

Informed Consent: The patient gave his consent for this case report.

Declaration of competing interests: The corresponding author runs a free, publicly accessible YouTube channel to promote a healthy lifestyle, which was used by the patient and cited in this paper. The authors declare that they have no competing interests.

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