

Irritable Bowel Syndrome with Diarrhea Predominance (IBS-D): Current Understanding and Homoeopathic Perspective – A Narrative Review

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Abstract—Background: Irritable Bowel Syndrome with Diarrhea Predominance (IBS-D) is a chronic functional gastrointestinal disorder characterized by recurrent abdominal pain associated with frequent loose stools. It significantly affects quality of life and imposes a considerable socioeconomic burden. The pathogenesis of IBS-D involves disturbances in the gut-brain axis, visceral hypersensitivity, altered intestinal motility, immune activation, and gut microbiota dysbiosis.

Objective: To review the current understanding of IBS-D and explore its management from a homoeopathic perspective.

Methods: Literature from peer-reviewed journals, gastroenterology guidelines, and homoeopathic sources published between 2020 and 2026 was reviewed.

Conclusion: IBS-D is a multifactorial disorder requiring individualized management. Homoeopathy may offer a holistic therapeutic approach when prescribed according to the totality of symptoms.

Index Terms—IBS-D, Functional Gastrointestinal Disorder, Gut-Brain Axis, Microbiome, Homoeopathy, Individualization

I. INTRODUCTION

Irritable Bowel Syndrome (IBS) is one of the most prevalent functional gastrointestinal disorders worldwide. According to the Rome IV criteria, IBS is characterized by recurrent abdominal pain associated with altered bowel habits in the absence of identifiable structural pathology. The disorder imposes a substantial burden on both patients and healthcare systems owing to its chronic, relapsing nature and its significant impact on quality of life.

IBS is classified into four clinical subtypes based on the predominant stool pattern:

- IBS-D (Diarrhea predominant)
- IBS-C (Constipation predominant)
- IBS-M (Mixed type)
- IBS-U (Unclassified)

Among these subtypes, IBS-D is particularly troublesome owing to stool urgency, frequent bowel movements, fear of incontinence, and social embarrassment. The present narrative review aims to consolidate the current understanding of IBS-D and examine the potential role of homoeopathy in its holistic management.

II. EPIDEMIOLOGY

The global prevalence of IBS ranges between 5% and 10%, with substantial variation across geographical regions and study methodologies. IBS-D accounts for approximately one-third of all IBS cases. Important epidemiological observations include:

- More common in females than males.
- Usually affects individuals aged 20–50 years.
- Frequently associated with anxiety and depression.
- Significant contributor to absenteeism, reduced workplace productivity, and increased healthcare utilization.

The socioeconomic burden associated with IBS-D underscores the importance of identifying effective and well-tolerated therapeutic strategies.

III. ETIOPATHOGENESIS

The pathophysiology of IBS-D is multifactorial, involving complex and interacting mechanisms as described below.

3.1 Gut-Brain Axis Dysfunction

The bidirectional communication between the gastrointestinal tract and the central nervous system is altered in IBS-D. Dysregulation of this axis leads to abnormal sensory processing and motility changes, mediated through neuroendocrine pathways, the autonomic nervous system, and the enteric nervous system.

3.2 Visceral Hypersensitivity

Patients with IBS-D experience exaggerated pain responses to normal intestinal stimuli. Peripheral sensitization of afferent neurons and central sensitization contribute to this heightened pain perception, leading to the characteristic abdominal discomfort associated with routine physiological events such as peristalsis or gas distension.

3.3 Altered Intestinal Motility

Accelerated gastrointestinal transit is a hallmark of IBS-D, contributing to diarrhea and urgency. Disruptions in serotonin (5-HT) signaling, which plays a critical role in regulating intestinal motility, have been widely implicated.

3.4 Gut Microbiota Dysbiosis

Recent studies demonstrate reduced microbial diversity and altered bacterial composition in IBS-D patients compared to healthy controls. Dysbiosis may compromise the intestinal epithelial barrier, promote immune activation, and amplify visceral sensitivity.

3.5 Immune Activation

Low-grade mucosal inflammation and increased mast-cell activity have been identified in the intestinal mucosa of IBS-D patients. Elevated levels of pro-inflammatory cytokines and increased intestinal permeability ("leaky gut") may perpetuate symptom generation.

3.6 Genetic Predisposition

Genetic susceptibility may influence intestinal motility and serotonin signaling pathways. Twin studies and family aggregation data suggest a heritable

component, although the specific genetic determinants remain under investigation.

3.7 Psychological Factors

Stress, anxiety, depression, emotional trauma, and adverse life events significantly influence symptom severity in IBS-D. Psychological comorbidities are common and may both trigger and perpetuate gastrointestinal symptoms through neuroimmunological pathways.

IV. CLINICAL FEATURES

4.1 Gastrointestinal Symptoms

- Recurrent abdominal pain or cramping
- Loose or watery stools
- Increased stool frequency
- Urgency to defecate
- Abdominal bloating and distension
- Excessive flatulence
- Mucus in stool

4.2 Extraintestinal Symptoms

- Fatigue and malaise
- Headache
- Sleep disturbance
- Anxiety and depression
- Fibromyalgia-like musculoskeletal symptoms

V. DIAGNOSTIC CRITERIA – ROME IV

Diagnosis of IBS-D is based on the Rome IV criteria, which require recurrent abdominal pain occurring at least one day per week during the previous three months, associated with two or more of the following:

- Pain related to defecation
- Change in stool frequency
- Change in stool form (appearance)

Symptoms should have been present for at least six months before a definitive diagnosis is made. The absence of alarm features and structural pathology is essential to confirm a functional diagnosis.

VI. DIFFERENTIAL DIAGNOSIS

The following conditions must be excluded before establishing a diagnosis of IBS-D:

- Inflammatory bowel disease (Crohn's disease, Ulcerative colitis)

- Celiac disease
- Microscopic colitis
- Lactose intolerance
- Hyperthyroidism
- Colorectal carcinoma
- Chronic intestinal infections (e.g., giardiasis, amoebiasis)

VII. INVESTIGATIONS

IBS-D is primarily a clinical diagnosis. Investigations are directed at excluding organic pathology, especially when alarm features are present.

7.1 Laboratory Investigations

- Complete blood count (CBC)
- Erythrocyte sedimentation rate (ESR)
- C-reactive protein (CRP)
- Stool examination (routine and culture)
- Thyroid function tests

7.2 Imaging

- Ultrasonography of abdomen
- CT abdomen (in selected cases)

7.3 Endoscopy

- Colonoscopy is indicated when alarm features are present
- 7.4 Alarm Features
- Unexplained weight loss
- Rectal bleeding
- Family history of colorectal cancer
- Anemia
- Nocturnal diarrhea

VIII. CONVENTIONAL MANAGEMENT

8.1 Dietary Management

A Low-FODMAP (Fermentable Oligosaccharides, Disaccharides, Monosaccharides and Polyols) diet has demonstrated significant symptom improvement in IBS-D patients and is currently a first-line dietary recommendation in major gastroenterology guidelines.

8.2 Pharmacological Treatment

- Loperamide – anti-diarrheal agent
- Rifaximin – non-absorbable antibiotic targeting gut dysbiosis
- Eluxadoline – mixed mu/kappa opioid agonist and delta antagonist
- Antispasmodics (e.g., hyoscine, mebeverine)

- Probiotics – for microbiome modulation

8.3 Psychological Therapy

- Cognitive behavioural therapy (CBT)
- Stress management techniques
- Gut-directed hypnotherapy

IX. HOMOEOPATHIC PERSPECTIVE

Homoeopathy, founded on the principle of 'Similia Similibus Curantur' (Like cures like), emphasizes individualization and treats the patient according to the totality of symptoms – mental, physical, and general. In the context of IBS-D, homoeopathy addresses not only the gastrointestinal symptoms but also the underlying constitutional and psychological predispositions.

9.1 Miasmatic Consideration

From the homoeopathic miasmatic standpoint:

- Psora: Represents the primary functional disturbances, hypersensitivity of the gut, and tendency toward recurrent digestive complaints.
- Sycolosis: Associated with chronic recurrent gastrointestinal complaints with excess mucus secretion, overgrowth tendencies, and altered microbial milieu.
- Syphilitic: Relevant in severe, destructive pathology, deep-seated anxiety, and complications arising from long-standing disease.

X. IMPORTANT HOMOEOPATHIC REMEDIES

Table 1 presents the key homoeopathic remedies commonly employed in the individualized management of IBS-D along with their characteristic symptom pictures.

Remedy	Characteristic Indications
Aloe socotrina	Sudden urgency to stool; involuntary stool escape; rectal weakness; stool passes with flatus; uncertainty of sphincter control; worse in morning.
Podophyllum peltatum	Profuse, watery, gushing stool; marked morning aggravation (5–10 AM); weakness and exhaustion after stool; gurgling, rumbling before stool.
Argentum nitricum	Anticipatory anxiety inducing diarrhea; flatulence with loud explosive

Remedy	Characteristic Indications
	belching; craving sweets which aggravate; impulsive, hurried patient.
Nux vomica	Sedentary lifestyle; irritability and hypersensitivity; frequent ineffectual urging to stool; incomplete unsatisfying stool; worse early morning.
Lycopodium clavatum	Marked abdominal bloating and distension; excessive flatulence; symptoms worse 4–8 PM; right-sided predominance; craving sweets and warm drinks.
Sulphur	Early morning diarrhea driving patient out of bed (5 AM); marked heat aggravation; skin manifestations; chronic recurrent cases with suppressed eruptions.

Table 1: Key Homoeopathic Remedies in IBS-D Management

XI. REVIEW OF RECENT LITERATURE

Recent scientific literature has increasingly focused on the role of gut microbiome alterations and neuroimmune interactions in the pathogenesis of IBS-D. Dysbiosis-driven immune activation, mast-cell degranulation, and alterations in serotonin metabolism have been identified as key mechanistic contributors. Studies employing metagenomic sequencing have characterized distinct microbial signatures in IBS-D patients.

From a homoeopathic standpoint, several observational studies and case series have reported symptomatic improvement in IBS patients following individualized constitutional treatment. A systematic review of homoeopathy in functional gastrointestinal disorders noted trends toward improved symptom scores and quality of life. However, the heterogeneity in study design, remedy selection criteria, and outcome measures limits definitive conclusions. Larger, well-designed randomized controlled trials (RCTs) are required to establish efficacy conclusively and to facilitate integration of homoeopathy within evidence-based management frameworks.

XII. DISCUSSION

IBS-D is a multifactorial disorder involving complex interactions between gastrointestinal physiology, gut microbiota, immune mechanisms, motility disturbances, and psychological factors. The absence of a single unifying pathophysiological mechanism presents a challenge to conventional pharmacological approaches, which predominantly focus on symptom relief through targeted receptor modulation or microbial manipulation.

Homoeopathy, by contrast, seeks restoration of overall systemic balance through individualized prescriptions that address the totality of presenting symptoms at the mental, physical, and general levels. The holistic framework of homoeopathy is particularly pertinent in IBS-D, wherein psychosomatic interactions, constitutional predispositions, and individual symptom expressions vary considerably from patient to patient.

The miasmatic analysis further deepens the individualization process, enabling the homoeopathic physician to anticipate disease tendencies, prognosis, and susceptibility patterns. The integration of dietary guidance, psychological support, lifestyle modifications, and individualized homoeopathic treatment offers a comprehensive, patient-centred model of care that may complement conventional medical management.

XIII. CONCLUSION

IBS-D remains a challenging chronic functional gastrointestinal disorder with significant effects on quality of life, social functioning, and psychological well-being. A comprehensive approach involving dietary regulation (Low-FODMAP), psychological support, lifestyle modification, and individualized homoeopathic treatment has the potential to improve patient outcomes holistically. The current body of evidence, while promising, necessitates larger, well-designed clinical studies to strengthen the evidence base for homoeopathic management of IBS-D. Collaborative research integrating conventional gastroenterology and homoeopathic medicine may pave the way for a truly integrative therapeutic paradigm.

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