IRRITABLE BOWEL SYNDROME: A COMPREHENSIVE REVIEW OF PATHOPHYSIOLOGY, DIAGNOSIS, AND MULTIDISCIPLINARY MANAGEMENT

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ABSTARCT

Irritable bowel syndrome (IBS) is a complex and highly prevalent disorder of gut-brain interaction (DGBI), characterized by recurrent abdominal pain and altered bowel habits, including constipation, diarrhea, or a combination of both. Despite its chronic impact on quality of life and healthcare costs, IBS remains underdiagnosed. This activity reviews the epidemiology, pathophysiology, diagnostic criteria, and interprofessional management strategies for IBS. The role of visceral hypersensitivity, dysmotility, microbiota alterations, psychosocial influences, and gut-brain axis dysfunction in IBS pathogenesis is also discussed.

This activity explores accurate diagnosis using the Rome IV criteria, appropriate evaluation strategies to exclude organic pathology, and evidence-based treatments tailored to the various subtypes of IBS, including lifestyle and dietary modifications, pharmacologic interventions, and the utility of gut-directed psychotherapies. Special attention is given to fostering a strong therapeutic alliance and shared decision-making to improve outcomes. This activity for healthcare professionals is designed to enhance the learner's competence in identifying IBS, performing the recommended clinical evaluation, and implementing an appropriate interprofessional approach when managing this condition, thereby reducing unnecessary diagnostic testing and providing personalized, patient-centered care.

OBJECTIVES

Identify key clinical features of irritable bowel syndrome, applying Rome IV criteria for diagnosis.
Assess for alarm symptoms in patients with irritable bowel syndrome using a limited diagnostic evaluation.
Develop an appropriate management approach for irritable bowel syndrome that incorporates lifestyle, dietary, pharmacological, and psychological interventions.

Collaborate with interprofessional healthcare practitioners, including dietitians, gastroenterologists, and psychologists, to provide holistic, patient-centered care for irritable bowel syndrome.
Access free multiple choice questions on this topic.

INTRODUCTION

Irritable bowel syndrome (IBS) is a common, chronic disorder of gut-brain interaction characterized by recurrent abdominal pain and altered bowel habits, including constipation, diarrhea, or both. Despite its high prevalence and significant impact on quality of life, IBS often remains underdiagnosed or mismanaged, leading to excessive diagnostic testing, unnecessary specialty referrals, and increased healthcare costs.[1] The pathophysiology of IBS is multifactorial, involving disruptions in the gut-brain axis, visceral hypersensitivity, gastrointestinal dysmotility, alterations in gut microbiota, food intolerances, and psychosocial factors.

Accurate diagnosis using the Rome IV criteria and a targeted evaluation strategy is essential for identifying IBS and ruling out conditions with overlapping symptoms. Abdominal pain in IBS is often related to defecation and can vary in location, character, and severity. Disordered defecation in IBS can present as constipation, diarrhea, or alternating bowel habits. Bloating is a commonly associated symptom, but is not required for the diagnosis of IBS.[2] A positive diagnostic approach, rather than a diagnosis of exclusion, allows for earlier intervention and improved patient outcomes.

Management of IBS involves lifestyle and dietary modifications, pharmacologic treatment options tailored to IBS subtypes, and the integration of psychological interventions when indicated. Additionally, a strong patient-clinician relationship is crucial in fostering trust, enhancing symptom management, and promoting adherence to treatment plans to deliver timely, cost-effective, and patient-centered care to individuals living with IBS.

ETIOLOGY

The exact cause of IBS remains unknown; however, the following factors have been identified as contributing to its pathophysiology:

Disordered gut-brain axis: Disorders of gut-brain interaction (DGBIs) primarily involve disruption of the gut-brain axis, which relies on complex signaling between the central (CNS) and enteric nervous systems (ENS) via neuronal, endocrine, immune, and metabolic pathways and is influenced by several factors, eg, genetics, diet, stress, and social factors.[3][4]
Visceral hypersensitivity: Patients with IBS often exhibit heightened visceral sensitivity due to increased signaling from intestinal receptors to the central nervous system (CNS) in response to stimuli, eg, gas distension.[5][6]
Gastrointestinal dysmotility: Patients with IBS may exhibit irregular contractions or transit delays, as seen in IBS with predominant constipation (IBS-C), or exaggerated motility, as seen in IBS with predominant diarrhea (IBS-D).
Gut microbiota dysbiosis: Distinct alterations in microbiota have been linked to IBS subtypes.[7][8]
Food intolerances: Food intolerances have been reported in 20% to 65% of patients with IBS; however, objective evidence to suggest causation is often lacking, and various other factors may contribute.[9]
Postinfectious: Symptoms of IBS may begin within several months of a gastrointestinal infection, including but not necessarily limited to Salmonella, Campylobacter jejuni, Cryptosporidium spp., Giardia lamblia, Giardia duodenalis, and the Norwalk strain of Norovirus infections.[10]
Low-grade mucosal inflammation: Lymphocyte infiltration and eosinophilia may be observed on histological examination, particularly in post-infectious and diarrhea-predominant cases.[11][12]
Altered intestinal permeability: Increased intestinal permeability, particularly in IBS-D, has been linked to diet, microbiome shifts, and mediators such as serotonin and proteases.[13]
Psychosocial factors: Psychological factors, eg, stress, can impact intestinal sensitivity, motility, and microbiota, worsening IBS symptoms.[14]

EPIDEMIOLOGY

In the United States, the prevalence of IBS ranges from 7% to 16%.[15] An international meta-analysis estimated a pooled global prevalence of 11%, though significant variation exists depending on geographic region.[16] Socioeconomic status does not consistently correlate with the occurrence of IBS, although familial aggregation has been observed, indicating potential contributions from both genetic predisposition and sociocultural factors. IBS tends to be diagnosed more frequently in women within Western populations.[17] The condition occurs more commonly in younger adults, with a noticeable decline in prevalence after the age of 50.[18]

HISTORY AND PHYSICAL

A thorough history remains essential for identifying patients who meet the Rome IV criteria for IBS. Detailed history-taking helps determine the specific IBS subtype, differentiate IBS from other conditions with overlapping symptoms, and assess for alarm features that may indicate underlying organic disease. Physical examination is typically normal in patients with IBS; however, some patients may experience tenderness upon palpation.

ROME IV DIAGNOSTIC CRITERIA

A diagnosis of IBS requires the following:

Recurrent abdominal pain occurring, on average, at least 1 day per week over the past 3 months
This pain must be associated with at least 2 of the following:
Defecation
A change in stool pattern or frequency
A change in stool form or appearance
Criteria must have been fulfilled within 3 months of the diagnosis, with symptom onset occurring at least 6 months before diagnosis, which supports a timely and accurate diagnosis, allowing for appropriate management and minimizing unnecessary investigations [19]

DIAGNOSTIC CRITERIA FOR IRRITABLE BOWEL SYNDROME SUBTYPES

The following IBS subtypes are classified by predominant bowel habits based on stool form on days with at least 1 abnormal bowel movement:

IBS with predominant constipation (IBS-C): More than 25% of bowel movements with Bristol Stool Form Scale (BSFS) types 1 or 2 (see Image. Bristol Stool Chart) and less than 25% with BSFS types 6 or 7
IBS with predominant diarrhea (IBS-D): More than 25% of bowel movements with BSFS types 6 or 7 and less than 25% with BSFS types 1 or 2

IBS with mixed bowel habits (IBS-M): Greater than 25% of bowel movements with BSFS types 1 or 2 and greater than 25% with BSFS types 6 or 7

IBS unclassified (IBS-U): An unclassified subcategory that meets the criteria for IBS, but bowel movements cannot accurately be categorized into 1 of the 3 subgroups

Differentiating IBS from other gastrointestinal conditions that mimic IBS symptoms, eg, inflammatory bowel disease (IBD) and celiac disease, is essential in patients with diarrhea-predominant IBS. Similarly, in patients with constipation-predominant IBS, a history of straining during stool passage and the need for manual disimpaction could suggest a rectal evacuation disorder. In patients with abdominal pain and diarrhea, other gastrointestinal disorders with overlapping symptoms should be excluded, eg, IBD and celiac disease. Likewise, in those with abdominal pain and constipation, symptoms like excessive straining or the need for manual disimpaction to pass stool may point towards pelvic floor dysfunction.

RED FLAG CLINICAL FEATURES

The presence of red flags or alarm symptoms in the patient's history should raise suspicion of an underlying organic disorder, rather than solely IBS, that warrants further diagnostic evaluation, including:

New symptom onset at the age of 50 or older
Blood in the stools (red blood or black, tarry stool)
Fever, shaking chills, or night sweats
Nocturnal diarrhea
Unintentional weight loss
Change in the patient's typical IBS symptoms (eg, new and different pain)
Recent use of antibiotics
Laboratory abnormalities (eg, iron deficiency anemia, elevated C-reactive protein, or elevated fecal calprotectin)
Family history of other gastrointestinal diseases, eg, cancer, IBD, or celiac disease

EVALUATION

Current guidelines recommend a limited diagnostic evaluation to rule out other disorders that present with symptoms similar to those of IBS. This approach helps avoid unnecessary testing and supports the timely initiation of appropriate therapy.[20]

Alarm issues in the clinical history of a patient who has not had a recent colonoscopy should prompt the procedure, including random biopsies of the left and right colon, to rule out or diagnose microscopic (collagenous or lymphocytic) colitis in suspected IBS-D. Alarm issues include:

Overt gastrointestinal bleeding or occult blood in the stool
Iron-deficiency anemia
Unintentional weight loss
Change in bowel habit within 3 months
A family history of colorectal cancer, premalignant polyps, IBD, or celiac disease
Food Sensitivity Evaluation

Testing for food sensitivities or allergies should be limited to those patients with symptoms highly suggestive of these diagnoses. Colorectal cancer screening should be done, if appropriate for age, in all patients with symptoms of IBS.

IRRITABLE BOWEL SYNDROME SUBTYPE-SPECIFIC EVALUATION

For patients with IBS-D, recommended testing includes celiac serologies, total IgA, C-reactive protein (CRP), and fecal calprotectin or lactoferrin to exclude IBD. A colonoscopy with biopsies of the left and right colon should be performed to rule out or diagnose microscopic colitis (lymphocytic or collagenous).[21] Additional testing for bile acid diarrhea may be appropriate when clinically suspected. In regions where Giardia is endemic, a Giardia stool antigen test is also advised. Routine testing for food allergies or sensitivities, general stool analyses, or hydrogen breath testing for small intestinal bacterial overgrowth (SIBO) should be reserved for cases where clinical suspicion specifically supports those diagnoses.

In patients with IBS-C, recommended evaluations include a plain abdominal x-ray and blood testing for CRP, calcium, and TSH. Anorectal physiology testing, including anorectal manometry, balloon expulsion testing, and evaluation of colonic transit, should be performed if symptoms are refractory to medical therapy or particularly severe to assess for pelvic floor dysfunction. In the absence of alarm symptoms, routine colonoscopy is not recommended for patients younger than 45 years. However, a digital rectal examination should be performed to evaluate the rectal wall for stricturing, a mass, fecal impaction, and to assess the anal sphincter.

Patients with IBS-M (mixed) should have their CRP and fecal calprotectin or lactoferrin levels checked, as well as their celiac antibodies and total IgA levels. A stool diary is also helpful in the initial assessment. Adopting a positive diagnostic strategy, focused on confirming IBS rather than excluding other conditions, enhances cost-effectiveness and enables prompt initiation of targeted treatment.[20] This method reinforces the importance of clinical criteria in guiding both diagnosis and management.

TREATMENT / MANAGEMENT

The treatment involves a multifaceted approach that integrates dietary changes, lifestyle modifications, pharmacological therapy, and psychological interventions. Each component targets different aspects of the disorder's pathophysiology and symptomatology, with individualized treatment plans tailored to the IBS subtype and patient preferences.

Patient-Clinician Alliance

A strong patient-clinician relationship and shared decision-making form the foundation of effective care for individuals with IBS. This therapeutic alliance enhances motivation, interpersonal support, and the patient's expectation of symptom improvement.[22] Trust, mutual goal setting, patient education, reassurance, and the consideration of psychological factors all contribute to a successful partnership. Establishing this connection encourages patients to engage in their care actively and consistently adhere to treatment recommendations.

Lifestyle Modifications

Lifestyle modifications can improve overall IBS symptom control. Regular physical activity and improved sleep hygiene [23] have been shown to have benefits in some studies, particularly in reducing global symptoms, eg, abdominal pain, cramping, and bloating. These strategies often serve as first-line interventions and support long-term well-being.[24][25]

Dietary Modifications

Dietary interventions play a central role in IBS management, as many patients report symptom exacerbation following the ingestion of certain foods. Referral to a registered dietitian is beneficial for patients who are willing to modify their diet.

A low-FODMAP (fermentable oligo-, di-, and monosaccharides and polyols) diet has been identified by the American Gastroenterological Association (AGA) as the most evidence-based dietary intervention for IBS. Due to its complexity, having the low FODMAP diet guided by a dietitian familiar with this process is recommended (Table. Low and High FODMAP Foods and Drinks). This approach consists of the following 3 phases:

A 4- to 6-week period of restriction from all high-FODMAP foods
Reintroduction of FODMAP foods
Maintenance phase with personalization based on symptom response [26][27]
Fiber intake

The AGA and American College of Gastroenterology (ACG) also strongly support using soluble (but not insoluble) fiber to improve global IBS symptoms.[20][26][28] Experts generally recommend 25 to 35 g per day of all forms of fiber.[29] Soluble fiber includes beans, oat bran, psyllium, and barley. Sources of insoluble fiber are diverse and include whole grains, wheat bran, nuts, seeds, fruits, eg, raspberries, apricots, and apples, as well as vegetables like carrots and cruciferous vegetables, and other foods.

Gluten-free diet

A gluten-free diet has shown promise in observational studies; however, randomized controlled trials have not confirmed its efficacy. Long-term restrictive diets that lack clinical benefit should not be continued long-term due to the potential for nutritional deficiencies.[26] If dietary and lifestyle modifications fail to control symptoms adequately, pharmacologic therapy should be added based on IBS subtype and symptom severity.

Table Icon
Table
Table 1. Low and High FODMAP Foods and Drinks.

Constipation-Predominant Irritable Bowel Syndrome Management

First-line therapy

Polyethylene glycol (PEG), an osmotic laxative, often serves as a first-line option for managing IBS-C. However, neither the AGA nor the ACG recommends PEG for this indication, as it does not adequately address global IBS symptoms.[30] A randomized controlled study demonstrated that consuming 2 green kiwis per day provided significant benefits for both IBS-C and chronic idiopathic constipation, including increased complete spontaneous bowel movements and improved gastrointestinal comfort.[31] If daily kiwi consumption or PEG at a dosage of 17 g once or twice daily proves effective, therapy can be continued.

Second-line therapies

Second-line treatments are indicated when PEG or kiwis fail to achieve sufficient symptom relief. Lubiprostone, a chloride-channel-activating prostaglandin E1 analogue, enhances peristalsis and intestinal secretion locally and is approved for adult women at 8 µg twice daily. Linaclotide, at 290 µg daily, and plecanitide, at 3 mg daily, function as guanylate cyclase-C agonists and act as secretagogues to promote intestinal fluid secretion. Tenapanor, a sodium/hydrogen exchanger 2 inhibitor administered at 50 mg twice daily, reduces sodium and water absorption while increasing intestinal secretion and motility, which softens stools and enhances bowel frequency.

Additional treatments

When these approaches fail or provide inadequate relief, therapy should focus on global symptom management, and incorporation of psychological interventions may be appropriate to address the multifaceted nature of IBS-C.

Diarrhea-Predominant Irritable Bowel Syndrome Management

First-line intervention for IBS-D involves a trial of a low FODMAP diet followed by antidiarrheal therapies. Antidiarrheal medications (eg, loperamide), administered at 2 mg orally 3 times daily before meals, with a maximum daily dosage of 16 mg, effectively reduce diarrhea. Loperamide may or may not relieve bloating or abdominal pain. If effective, therapy can continue alongside diet and lifestyle modifications.

When loperamide fails to provide sufficient relief, second-line medications can be considered. Rifaximin, a nonabsorbable antibiotic, is recommended by both the AGA and the ACG for short courses in patients with moderate to severe IBS-D. Rifaximin may be repeated for symptom relapse at a dosage of 550 mg orally 3 times daily for 14 days, with similar courses repeated every 3 to 4 months if effective.[32]

Eluxadoline, a mixed µ- and kappa-opioid receptor agonist, demonstrates efficacy but carries a risk of pancreatitis, particularly in patients with predisposing factors. Eluxadoline is contraindicated in patients following cholecystectomy, with a history of pancreatitis, suspected or confirmed Sphincter of Oddi dysfunction, alcohol abuse, or consumption of more than 3 alcohol-containing drinks daily. The standard dose of 100 mg daily is reduced to 75 mg daily in patients with mild-to-moderate liver dysfunction.

Alosetron, a 5-HT3 receptor antagonist, may serve as a third-line option in women with severe IBS-D. This agent carries a black box warning for ischemic colitis. The starting dosage is 0.5 mg daily, which can be increased by 0.5 mg/day up to a maximum of 2 mg daily, divided twice daily.

Bile acid sequestrants, including cholestyramine (2 to 4 g daily or divided twice daily), colestipol (2 g pill daily or twice daily, 5 g granules daily or twice daily, with maximum daily doses of 16 g as pills or 30 g as granules), and colesevelam powder (3750 mg daily or divided twice daily), may benefit patients with bile acid malabsorption, a condition affecting up to 50% of those with IBS-D.[33] When these interventions prove ineffective or insufficient, management should focus on global symptom control, and incorporation of psychological interventions may be considered to address the multifaceted nature of IBS-D.

Treatment of Global Irritable Bowel Syndrome Symptoms

Management of global IBS symptoms, including abdominal pain, cramping, and bloating, often begins with anticholinergic antispasmodics. Dicyclomine, administered at 20 to 40 mg, 4 times daily, and hyoscyamine, given at 0.125 to 0.25 mg orally or sublingually every 4 hours as needed or as an extended-release tablet of 0.375 mg orally every 8 to 12 hours, are commonly used in clinical practice.[34][35] Data documenting their efficacy remains limited. Adverse effects, including constipation, xerostomia, tachycardia, urinary retention, visual blurring, and psychiatric symptoms, often restrict their usefulness. These agents reduce smooth muscle contraction and may alleviate visceral hypersensitivity.[36] Although not recommended for long-term therapy, antispasmodics can provide relief for intermittent symptoms.[30]

When antispasmodics fail, peppermint oil, particularly a sustained-release enteric-coated formulation at 0.2 to 0.4 mL or 180 to 360 mg, 3 times daily, demonstrates effective smooth muscle relaxation through calcium channel blockade by L-menthol.[37] Peppermint oil is generally well-tolerated and often provides meaningful symptom relief.

Neuromodulators, specifically tricyclic antidepressants (TCAs), provide another option. Amitriptyline (10–30 mg/day), nortriptyline (25–75 mg/day), imipramine (50–100 mg/day), and desipramine (25–100 mg/day) act by blocking presynaptic reuptake of serotonin, norepinephrine, and dopamine, along with anticholinergic properties and slowed gastric transit, which may particularly benefit patients with IBS-D.[38] For abdominal pain, TCAs should be started at low doses and titrated over several months as needed. Switching to an alternative TCA remains an option if one proves ineffective. Adverse effects may limit tolerance for some patients.

If antispasmodics, peppermint oil, and TCAs fail to provide adequate relief, rifaximin at 550 mg orally 3 times daily, for 14 days, can be prescribed. Courses may be repeated every 3 to 4 months if symptom relief proves effective.

Gut-Directed Psychotherapy

Gut-directed psychotherapy offers another valuable treatment option, particularly for patients with IBS linked to psychological stress or mood disorders. Cognitive behavioral therapy (CBT) and gut-directed hypnotherapy have demonstrated effectiveness in reducing the frequency and severity of symptoms, primarily in patients with mood-directed IBS symptoms. These interventions address the disrupted gut-brain axis believed to underlie IBS. Current guidelines do not recommend selective serotonin reuptake inhibitors (SSRIs) or fecal microbiota transplants for IBS management, given insufficient evidence supporting their use in this context.[39][40][41]

DIFFERENTIAL DIAGNOSIS

The differential diagnosis of IBS is broad. A limited diagnostic evaluation is recommended if the patient meets the criteria for diagnosis of IBS. Depending on the predominant symptoms, several differential diagnoses should be considered, including:

IBS-D
Celiac disease
IBD
Microscopic colitis (collagenous or lymphocytic colitis)
Bile acid diarrhea
Small intestinal bacterial overgrowth (SIBO)
Exocrine pancreatic insufficiency
Chronic infections (eg, giardiasis)
Food intolerance (lactose, fructose)
Medications
IBS-C
Slow colonic transit
Dyssynergic defecation
Endocrine abnormalities (hypothyroidism, hypercalcemia)
Medications
Bowel obstruction

PROGNOSIS

IBS is a chronic condition characterized by recurrent symptoms of varying severity. However, life expectancy in individuals with IBS is comparable to that of the general population. The diagnosis typically remains stable during follow-up. The use of ambulatory health services by IBS patients can be reduced when a positive relationship and strong rapport are established between the patient and clinician.[42]

COMPLICATIONS

IBS generally remains a manageable condition, with complications occurring infrequently. However, certain patients may experience adverse effects related to the condition and its management. Physical complications, eg, hemorrhoids, anal fissures, and fecal impaction may develop, particularly in those with constipation-predominant IBS. Additionally, patients who follow overly restrictive diets in an attempt to control their symptoms face an increased risk of nutritional deficiencies due to inadequate intake of essential nutrients.

Chronic symptoms and lifestyle disruptions associated with IBS often contribute to the development or worsening of mental health issues, including depression, anxiety, and mood disorders. These psychological effects may stem from the persistent discomfort and unpredictability of symptoms. Additionally, IBS can also significantly impair quality of life. Frequent abdominal pain, altered bowel habits, and bloating may interfere with work performance, academic responsibilities, social engagements, and personal relationships. Many patients report sleep disturbances as well, further compounding physical and emotional stress.

CONSULTATIONS

Patients with IBS benefit from an interprofessional approach involving various clinicians to address the diverse manifestations of the disorder. Primary care clinicians and gastroenterologists typically lead the diagnostic evaluation, applying the Rome IV criteria and determining the appropriate evaluation to rule out other conditions. Referral to a registered dietitian can support patients in implementing and personalizing dietary interventions, eg, the low-FODMAP diet, while minimizing the risk of nutritional deficiencies.

Mental health professionals, including psychologists or therapists trained in gut-directed psychotherapy or cognitive behavioral therapy, may be consulted when psychological factors like anxiety or depression contribute to symptom severity. In cases of pelvic floor dysfunction or severe constipation, specialists in colorectal or pelvic floor disorders may conduct anorectal physiology testing and guide treatment.[43] Patients with dyssynergic defecation, many of whom have IBS-C, tend to respond well to biofeedback therapy.[44] Specialized physical therapists can also play a role in mitigating symptoms of pelvic floor disorders and bowel dysmotility with Kegel exercises, squats, and other exercises to improve muscle tone,

with effectiveness monitored. This collaborative care model enhances symptom management, patient education, and long-term outcomes.

DETERRENCE AND PATIENT EDUCATION

Deterrence in IBS focuses on minimizing symptom severity, preventing complications, and avoiding unnecessary diagnostic procedures through early recognition, accurate diagnosis, and evidence-based management. Clinicians can reduce patient reliance on extensive testing and specialty referrals by applying the Rome IV criteria and using a positive diagnostic approach. Educating patients about the chronic but non-life-threatening nature of IBS helps alleviate fears of more serious underlying conditions and fosters a collaborative approach to care. Emphasizing that IBS does not lead to structural damage or cancer also supports patient reassurance and encourages active participation in long-term symptom management.

Effective patient education remains crucial to enhancing outcomes and improving quality of life. Patients should receive clear information about the multifactorial nature of IBS, including the role of diet, stress, gut-brain interactions, and lifestyle factors. Guidance on implementing a low-FODMAP diet, increasing physical activity, and improving sleep hygiene can empower patients to take control of their symptoms and manage them more effectively. Clinicians should also emphasize the importance of psychological well-being and the availability of treatments, eg, gut-directed psychotherapy, when needed. By promoting realistic expectations and offering individualized, evidence-based strategies, education helps patients manage their condition more confidently and reduces the risk of complications related to restrictive diets, unmanaged symptoms, or comorbid mental health concerns.

ENHANCING HEALTHCARE TEAM OUTCOMES

Providing optimal care for patients with IBS requires a coordinated, interprofessional approach that leverages the unique skills and responsibilities of each healthcare team member. Physicians and advanced practitioners serve as the primary point of contact for diagnosis, applying the Rome IV criteria and performing targeted evaluations to rule out organic conditions. Their responsibility extends to initiating treatment plans, educating patients about the chronic and functional nature of IBS, and fostering trust through shared decision-making. Advanced practitioners, including nurse practitioners and physician assistants, also contribute significantly to ongoing symptom monitoring, reinforcing lifestyle modifications, and adjusting therapeutic interventions based on patient response. Effective interprofessional communication between these clinicians ensures consistent messaging and timely adjustments in care, improving patient safety and outcomes.

Dietitians play a pivotal role in managing IBS symptoms by guiding patients through evidence-based dietary strategies, particularly the low-FODMAP diet, while preventing nutritional deficiencies. Pharmacists contribute their expertise by reviewing medication regimens, managing adverse effects, and ensuring the safe use of agents across IBS subtypes. Behavioral health professionals trained in gut-directed psychotherapy or cognitive behavioral therapy address the psychological components of IBS, helping patients manage stress and emotional triggers that exacerbate symptoms. Patients with pelvic floor dysfunction and severe constipation or diarrhea may benefit from referral to pelvic floor physical therapists who can provide exercises to manage these symptoms. Nurses support the team by facilitating communication, triaging concerns, and reinforcing education during follow-up. When team members collaborate effectively and communicate clearly, patients receive consistent, coordinated care that prioritizes safety, enhances symptom control, and empowers them to actively participate in their treatment journey. This interprofessional strategy fosters a patient-centered model that improves long-term outcomes and overall quality of care.

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