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Review Article

Optimizing duration of pharmacotherapy in patients with irritable bowel syndrome: an Indian perspective

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ABSTRACT

Irritable bowel syndrome (IBS) is the most common gut-brain disorder with a rising prevalence globally, including in India. IBS places a major financial and health burden on patients, making a proper diagnosis and course of treatment crucial for enhancing quality of life. The frequent occurrence of anxiety and depression in patients with IBS requires the treatment of both gastrointestinal and psychological symptoms of the condition with antispasmodics and anxiolytics. This review discusses the epidemiological, diagnostic, and pathophysiological features of IBS and the numerous treatment regimens that are utilized, as well as the perspectives of specialists in the area addressing the difficulties and ideal management techniques. The role of combination treatments along with emphasis on associated psychological and psychiatric comorbidities in Indian patients has been evaluated. The experts reviewed the ideal duration of antispasmodic medication and various guideline recommendations on length of treatment to avoid recurrence while keeping in mind the chronic and recurring character of IBS. An appropriate diagnostic strategy and effective treatment protocol and duration can help in the long-term management of IBS.

Keywords: IBS, Gut-brain dysregulation, Anxiety, Antispasmodics

INTRODUCTION

Irritable bowel syndrome (IBS) is the most common disorder of gut-brain interaction, which is characterized by hallmark symptoms of abdominal pain associated with defecation or change in bowel habits without any structural or biochemical abnormalities. Abnormal bowel movements and frequency are used to subtype IBS into constipation-predominant IBS (IBS-C), diarrhea-predominant IBS (IBS-D), IBS with mixed bowel habits (IBS-M), and IBS with an unclassified stool pattern (IBS-U).[1,2] In addition to gastrointestinal symptoms, headache, dizziness, muscle pains, anxiety, depression, frequent urination, and chronic fatigue are other clinical presentations of IBS. These symptoms complicate the diagnosis of IBS due to overlapping symptom presentation with other disorders.[3] A study has shown that IBS symptoms are sequential, intermittent, and chronic with a wide variation in duration and severity amongst patients.[4] The chronic nature of IBS poses a significant societal and financial burden on patients and caretakers along with a negative impact on quality-of-life (QoL) because of need for recurrent medical attention and frequent tests and examinations, and impairment in work productivity and overall daily routine of patients.[5,6] Therefore, from the perspective of the patient, the caregiver, and the government, appropriate and timely diagnosis along with effective management of IBS are crucial.

Historically, IBS has been associated with Western countries with higher prevalence rates reported in America and Europe as compared to the East. However, increased exposure to Western diets and lifestyle, higher awareness, and better access to diagnostic techniques has led to an increased prevalence of IBS in developing countries such as India.[6] The prevalence rates of IBS vary considerably between studies and countries and can range

from 1.1% to 45%.These variations have been linked to methodological variations in data collection and demographics.[7] To obtain true prevalence rate of IBS globally such that differences in prevalence between countries are genuine, the Rome Foundation in 2021 conducted an epidemiological survey in 33 countries using uniform diagnostic criteria and standardized methodology involving internet-based and in-person surveys.

Using the Rome IV criteria, IBS prevalence rates of 4.1% and 1.5% were obtained using internet-based surveys and household interviews, respectively. The prevalence of IBS in India was 0.2% in the same study.[8] Several cross-sectional household surveys in India have reported IBS prevalence rates between 4% and 13% using various diagnostic criteria.[9,10] In India, IBS has been observed to be more prevalent in males and in young people, and it is specifically associated with upper abdominal symptoms.[11] The rise of IBS in India owing to urbanization has resulted in a considerable economic burden due to lower socioeconomic status of patients and limited healthcare accessibility. Thus, it is imperative to diagnose the condition without unnecessary expenditure and prescribe appropriate treatments that are safe and effective in the long-term.

The myriads of symptoms seen in patients with IBS implies a complex and multifactorial pathophysiology. Visceral hypersensitivity, gut-brain dysregulation, altered gastrointestinal motility, dietary intolerance, and dysbiosis are commonly implicated in the development of cardinal symptoms of IBS.[12,13] Evidence showing a high rate of anxiety and depression in these patients makes it necessary to utilize treatments that target psychological disturbances along with alleviation of abdominal symptoms, thereby providing a holistic approach to IBS management.[14]

Prior to optimization of a treatment regimen, appropriate diagnosis of IBS and differentiation from IBS-like conditions is critical to prevent mismanagement. Several diagnostic criteria have been developed and used over the years such as Manning, Rome, and more recently Asian consensus and Indian criteria, with the latter two being more appropriate to Eastern populations.[15-18] In order to confidently diagnose IBS, a combination of symptom-based criteria, appropriate laboratory investigations, and psychological factors should be taken into account.

Across India, 6 focused group meetings involving 68 experts in the field of Gastroenterology were conducted to discuss various aspects of diagnosis and management of IBS with a focus on the gut-brain relationship and utilization of antispasmodics and antianxiety drugs. Owing to the chronic nature of IBS, duration of treatment was also discussed from an Indian management perspective. Expert opinions from all the meetings were collated and are presented in this paper.

IBS AND PSYCHOSOCIAL FACTORS: UNDERSTANDING THE GUT-BRAIN RELATIONSHIP

The gut-brain axis is a bidirectional communication pathway involving the enteric nervous system (ENS), central nervous system (CNS), gut wall at the periphery, and the hypothalamus-pituitary-adrenal axis (HPA). It influences intestinal motility and secretions, epithelial permeability, immune function, and gut microbial composition which are dysregulated in IBS. The biopsychological model proposes that psychological factors affect physiological processes such as motor functions, sensory thresholds, and stress reactivity (top-down model) while abdominal symptoms such as disruption in gut microbiota influence stress, mood, anxiety, and behavior (bottom-up model).[19,20] Sociological factors such as illness behavior, cultural beliefs, adverse life events, chronic life stress, and parenteral abuse along with psychological factors such as anxiety, depression, anger, cognitive-affective processes, and coping mechanisms lead to the development and exacerbation of IBS symptoms due to the gut-brain link.[21]

Several studies conducted to determine the incidence of anxiety and depression in patients with IBS have yielded conflicting results. A meta-analysis by Fond et al showed significantly higher anxiety and depression levels in patients with IBS compared to controls.[14] Other psychiatric disorders such as generalized anxiety disorder, schizophrenia, post-traumatic stress disorder, and panic disorder have also been observed in patients with IBS.[22] Genetic factors, alteration in pro-inflammatory cytokine levels, chronic intestinal inflammation, and dysfunction of the autonomic nervous system are causative factors in psychiatric disorders associated with IBS. A study conducted in India showed that prevalence of anxiety and depression in patients with IBS was 37.1% and 31.4%, respectively.[23] Another study showed significantly higher incidence of IBS in patients with depression compared to those without any psychiatric illness, adding credence to the gut-brain dysregulation theory.[24] Lower socioeconomic and educational status, and single marital status were also associated with IBS. Additionally, a meta-analysis showed that although patients with IBS showed a higher level of depression scores than controls using various depression scales, there was no significant difference between IBS subtypes and depression levels. Among the IBS subtypes, IBS-M was most strongly correlated with anxiety and depression.[25]

These psychological and psychiatric comorbidities add to the burden of the disease by negatively impacting QoL and increasing disability and healthcare costs. Therefore, IBS treatment should include pharmacological agents that help manage psychological symptoms along with evaluations and screening protocols that help in the development of individualized treatments. Antidepressants and anxiolytic agents form an important

component of the pharmacological management of IBS by reducing visceral pain both centrally and peripherally.[26]

Expert opinion

The experts discussed IBS-related psychiatric comorbidities from the perspective of Indian clinical settings. In India, psychiatric comorbidities were shown to be less severe than in the West and were effectively treated with antidepressants and antipsychotic drugs, and fewer consultations were needed in India. Training gastroenterologists on psychiatric issues and physician education on the safe prescription of psychiatric drugs were recommended to manage patients who are hesitant to visit psychiatrists. The importance of proper counselling and referral to psychologists was emphasized to properly manage depression or psychiatric disorders. Experts supported the use of relaxation and stress management strategies, sleep aids, antidepressants, and benzodiazepine anxiolytic agents such as chlordiazepoxide, alprazolam, and escitalopram to improve QoL. The significance of counselling patients on drug compliance was emphasized to observe long-term benefits despite the presence of early adverse effects.

CHALLENGES IN DIAGNOSIS AND MANAGEMENT OF IBS

The lack of specific biomarkers, laboratory, or imaging tests for IBS makes it difficult to diagnose the condition appropriately and in a timely manner. Extensive and repeated investigations and consultations, patient and physician frustration, and delayed treatment lead to poor outcomes. A certain and accurate diagnosis would enable better IBS management. An ideal diagnostic process involves making a diagnosis based on positive criteria, differential diagnoses, and targeted investigations to ensure accurate diagnosis, which should be followed by prompt patient communication.[27] Positive diagnosis using symptom-based criteria and differential diagnoses are important to rule out conditions which have similar symptomology as IBS such as inflammatory bowel disease (IBD), diverticular disease, gastrointestinal infections, ischemic colitis, celiac disease, bile acid diarrhea, and carbohydrate malabsorption.[28]

The diagnostic algorithm for IBS begins with the use of symptom-based diagnostic criteria. Presence of abdominal pain at any location in the abdomen, which is associated with defecation is necessary to make a diagnosis of IBS.[2,15,16,29] The most used criteria are the Rome III and IV that focus on the chronic nature of IBS allowing for differentiation of IBS subtypes. Once the patient has met the symptom-based criteria, it is necessary to conduct an evaluation for alarm features such as unintended weight loss, blood in stools, age >50 years, family history of colon cancer, IBD, or celiac disease, nocturnal symptoms, fever, iron-deficiency anemia, and -palpable abdominal mass or lymphadenopathy as these can signal the need for further investigations (colonoscopy, colon biopsy) for other conditions. Absence of alarm features requires that laboratory investigations (complete blood count, C-reactive protein, fecal calprotectin, and celiac serology) be conducted to confirm IBS. Physical examinations such as digital rectal examinations and perianal inspections can be done to rule out organic causes that can support IBS diagnosis.[30] Although, the practice of differential diagnosis is used by clinicians, American college of gastroenterology (ACG) and national institute for health and care excellence (NICE) guidelines recommend the use of positive diagnosis strategy followed by limited laboratory investigations to rule out other conditions and confirm IBS.[28,31]

Because most diagnostic criteria were developed using data on symptoms from the West, it is vital to adapt them for patients from Eastern countries where terminologies and symptomologies differ. This prompted the development of the Asian consensus and Indian consensus statements that include diagnosis based on bloating and not abdominal pain alone, emphasis on the importance of stool form compared to frequency for subtyping, inclusion of meal-related symptoms, and colonoscopy in patients >50 years.[17] The Indian consensus statement also points out increased sensitivity and applicability of the Rome III criteria compared to Rome IV for diagnosis and reclassifies the bristol stool form scale (BSFS) for categorization of patients into IBS-C and IBS-D subtypes.[18]

In addition to difficulties in diagnosis, management of IBS is also challenging. It is estimated that only about 50% of patients with IBS seek medical care based on symptom severity, particularly pain.[32] An integrated approach should be used for IBS management that includes effective patient-provider relationships, education, reassurance, dietary alterations, and pharmacotherapy. Prescription for psychological treatments and implementation of evidence-based medicine practices are expected to improve treatment outcomes and QoL in patients. Thus, treatments that tackle the physiological and psychological aspects of IBS are expected to be most effective. Choosing a suitable regimen should be coupled with determining an optimal treatment duration.

Expert opinion

The experts concluded that there should be a switch from a diagnosis of exclusion to one employing positive symptom-based criteria after discussing diagnostic assessment and laboratory investigations from an Indian setting. Additionally, they agreed on reducing the quantity of laboratory tests and only performing them when illnesses other than IBS are indicated. They emphasized the importance of taking into consideration the patient's family history when making a diagnosis. This information would help guide the right investigations,

including upper rectal exams and colonoscopies to rule out cancer, which also has a beneficial psychological impact on patients. Serology testing should be carried out on patients in northern India where the prevalence of celiac disease is high and fecal calprotectin testing should be done to differentiate between IBS and IBD. Experts also concurred on the higher sensitivity of Rome III than Rome IV criteria in reaching a positive diagnosis in Indian patients.

EXISTING TREATMENTS AND RECENT ADVANCES IN IBS MANAGEMENT

The management of IBS involves use of a multifactorial approach targeted towards relieving the most distressing symptoms, preventing complications, improving QoL, and reducing healthcare costs. Complementary and non-pharmacological management such as acupuncture, hypnotherapy, cognitive behavioral therapy (CBT), psychotherapy, relaxation, stress management, and neurostimulation have been used can be used to counter the effects of stress, to control anxiety and in turn to reduce chronic abdominal pain. These treatments are believed to act at the pathophysiological level by inducing molecular and psychological changes and are of value particularly in IBS with psychological comorbidities such as anxiety, depression, and somatisation.[33] Dietary modification is used as the first-line approach for the management of IBS after detailed dietary history taking to understand any offending foods that can trigger symptoms. Restricted diets low in fermentable oligo-, di-, and monosaccharides (FODMAPs), lactose, and gluten are commonly recommended as these foods can cause allergic responses. Identification of food intolerance is done by systematic diet modification with exclusion of food groups. Increased fiber intake by consumption of cereal bran is particularly important for the treatment of IBS-C.[32]

Pharmacological management of IBS focuses on symptomatic relief of visceral pain and abnormal bowel habits. The main classes of drugs used for IBS treatment are shown in Table 1.

Table 1: Pharmacological treatments for IBS.

Pharmacological class	Examples	IBS sub-type
Antispasmodics	Otolinium bromide, clidinium bromide, mebeverine, pinaverium bromide, alverine citrate, hyoscine, dicyclomine, peppermint oil	IBS-C and IBS-D
Laxatives and motility accelerants	Psyllium, ispaghula husk, lactulose, polyethylene glycol, cereal bran, linaclotide, lubiprostone	IBS-C
Antidiarrheals	Loperamide, eluxadoline, ondansetron, alosetron	IBS-D
Antidepressants (tricyclic antidepressants)	Amitriptyline, imipramine, desipramine, trimipramine	IBS-D
Antidepressants (selective serotonin reuptake inhibitors)	Paroxetine, citalopram, fluoxetine, venlafaxine	IBS-C
Anxiolytics	Chlordiazepoxide, clonazepam	IBS-D
Antibiotics	Rifaximin, neomycin	IBS-D
Probiotics	Lactobacilli bifidobacteria	IBS-C and IBS-D
Prokinetics	Tegaserod	IBS-C

Antispasmodics

This class includes drugs that act by various mechanisms such as antagonism of the neurotransmitter acetylcholine from binding to muscarinic receptors, blockade of calcium channels on gastrointestinal smooth muscles, and blockade of sodium channels, which leads to relaxation of smooth muscles, modification of intestinal and colonic transit and thus normalization of stool consistency and frequency and reduction of abdominal pain.[34,35] Although these drugs are relatively safe to use, antimuscarinic agents reduce fluid secretions and are recommended only in patients with IBS-D. Newer agents such as alverine citrate, mebeverine, otilonium bromide, and pinaverium bromide act selectively on calcium channels in the gastrointestinal tract and have poor systemic absorption making them devoid of cardiovascular side effects and thus safe for long-term use.

Laxatives and motility accelerants

Fiber supplements, osmotic and bulk laxatives such as psyllium, ispaghula husk, and bran are used to increase stool bulk and frequency by increasing luminal water uptake. Polyethylene glycol (PEG) has also been shown to improve stool frequency without any effects on abdominal pain in adolescents and adults. Guanylate cyclase agonists such as linaclotide have a dual effect of analgesia and laxation and are used when laxatives are ineffective.[34,36]

Antidiarrheals

This group includes μ-opioid agonists such as loperamide and mixed μ-agonists and δ-antagonists such as eluxadoline that regulate peristalsis, reduce contractility and secretion, and prolong intestinal transit, thereby

improving stool consistency. In addition, serotonergic agents (5-HT3 antagonists) including ondansetron and alosetron also reduce stool urgency and frequency via inhibition of ascending excitatory component of the peristaltic reflex. However, these agents are associated with adverse effects such as constipation and ischemic colitis making them useful only in cases of severe IBS-D.[32]

Probiotics

Dysbiosis in the development of IBS has led to the use of probiotics for IBS treatment. However, the benefits of probiotics in patients with IBS-D are not confirmed and hence should be prescribed after careful evaluation of risk benefit profiles.[36,37]

Antidepressants and anxiolytics

Tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs) have shown efficacy in the management of IBS with associated anxiety and depression. Antidepressants are believed to act via alteration of norepinephrine and cholinergic transmission, endogenous endorphin release, and central modulation of ascending visceral afferents and transmission. These effects reduce visceral hypersensitivity and reduce abdominal pain. A meta-analysis showed that antidepressants improved IBS symptoms compared to placebo, with TCAs showing a higher efficacy than SSRIs.[38,39] Although TCAs are more efficacious than SSRIs, they are associated with greater side effects such as constipation, dry mouth, drowsiness, fatigue, and urination difficulties, making them appropriate for use in IBS-D patients. It is recommended that antidepressant use be started at as a low dose at bedtime followed by dose titration depending upon response.

Benzodiazepines are useful for the treatment of IBS-associated with anxiety as they can alleviate symptoms both centrally and peripherally. Studies have shown lorazepam to be effective in the treatment of gastrointestinal diseases with anxiety components. Long-acting benzodiazepines are believed to relieve anxiety and abdominal symptoms via decreased gastric secretions and relaxation of smooth muscles.[26]

Novel treatments

Newer agents for IBS target various systems to treat underlying pathophysiological disturbances. They include drugs that act on serotoninergic receptor system (prucalopride, alosetron, and palonosetron), cholinergic system (zamifenacin and darifenacin), α-adrenergic system (clonidine), opioid system (alvimopan and methylnaltreoxone), antidepressants such as venlafaxine, benzodiazepines, cholecystokinin (CCK) antagonists (loxiglumide and dexloxiglumide), neurokinin antagonists (ezlopitant and nepadutant), chloride channel activators (lubiprostone), guanylate cyclase-c agonists (linaclotide), antibiotics (neomycin and rifaximin), and probiotics.[40]

Tegaserod, a partial 5-HT4 receptor agonist, is an effective treatment for IBS-C. It facilitates gastrointestinal motility, intestinal secretions, and reduces visceral sensitivity. Clinical studies have shown a significant increase in the number of responders (patients who reported relief from symptoms such as abdominal discomfort, pain, and abnormal bowel habits) on tegaserod than on placebo within 1-3 months of treatment. The efficacy of tegaserod was observed only in female patients, which restricts its use in females with IBS-C or IBS-M. However, cardiovascular side effects limit its use in emergency situations and for short-term treatment.[36,40]

Lubiprostone is a chloride channel-2 activator that increases intestinal water secretions, thereby stimulating intestinal motility and improving stool frequency, straining and abdominal pain. It is recommended for IBS-C treatment in female patients for long-term use because of its relatively mild side effect profile of nausea and diarrhea.[36]

Rifaximin is a non-absorbable antibiotic that has shown improvement in global IBS symptoms versus placebo in a meta-analysis of five trials with improvement in bloating. The greatest benefit of rifaximin is observed in the first few weeks of treatment, with increased efficacy up to 12 weeks of treatment. The drug also has a favorable adverse event profile comparable with placebo, thereby making it a preferred drug for patients with IBS-D, although studies on long-term efficacy and safety are lacking.[36,37]

Combination treatments

The combination of chlordiazepoxide (psychotropic agent) and clidinium bromide (anticholinergic) is approved for the treatment of IBS in India. This combination has dual mode of action of restoring secretions and motility and relieving emotional tension. Chlordiazepoxide is a long-acting benzodiazepine that helps relieve anxiety and tension and is useful in IBS with psychological comorbidities by acting on the dysregulated gut-brain axis. Clidinium bromide is a synthetic anticholinergic agent that has antispasmodic and antisecretory effects on the gastrointestinal tract and pancreas as it inhibits the action of acetylcholine on muscarinic receptors, which helps relieve abdominal spasms, secretions, diarrhea, and discomfort.[41,42] Chlordiazepoxide/clidinium combination was found to be superior compared with placebo in reducing abdominal pain, diarrhea, nausea, and flatulence in patients with various functional diseases. In a study with patients with functional gastrointestinal disorders and organic disorders with symptoms of anxiety and depression, this combination was found to have a high patient-reported rating. Side effects were related to anticholinergic effects

of the medication and included dry mouth, constipation, blurred vision, headaches, and drowsiness.[43]

Expert opinion

Experts concluded that patients with IBS and associated comorbidities require to be treated in a sensitive manner by avoiding stigmatizing topics such as anxiety and depression. They suggested an approach focusing on dietary management, exercise, yoga, and treatment compliance. They emphasized on the function of probiotics in IBS and concluded that despite guidelines of the World Gastroenterology Organization recommending their usage for patients with IBS-D, probiotics should be administered in combination with or after antibiotic therapy and may have limited availability in India. They emphasized the importance of dietary modifications and maintenance of food diaries for patients with IBS-D along with recommendations on food that can be eaten. Dairy, gluten, and glucose should be avoided in patients with IBS-D, especially those who do not respond to treatments. Mebeverine, dicyclomine, pinaverium, and chlordiazepoxide-clidinium combination treatment are suitable for pain relief in patients with IBS-D and were recommended for use. Clinicians should be aware of the safety profile of combination treatments especially in elderly males due to side effects such as urinary retention and dry mouth. Peppermint oil was not recommended despite its ability to decrease pain because of potential for development of dyspepsia. Colonoscopy and biopsy for microscopic colitis in patients with IBS-D, followed by budesonide treatment for the same was suggested; otherwise, steroids are not recommended for treatment. According to the experts, general treatment pathway for patients with IBS-D included antibiotics, probiotics, and rifaximin.

Experts advised evaluating dietary fiber intake in patients with IBS-C before recommending supplements because they may make bloating and pain worse. PEG was discussed to be better than ispaghula fiber for constipation as the latter can lead to fecal infections and exacerbate bloating. In all cases, the experts recommended trying treatment for 2-4 weeks before switching to an alternative treatment as certain drugs can take some time to show efficacy. The general treatment pathway for patients with IBS-C includes osmotic or stimulant laxatives followed by fiber supplements and antispasmodics for 2-3 weeks.

OPTIMAL DURATION OF PHARMACOTHERAPY FOR IBS

IBS management involves the use of both non-pharmacological and pharmacological treatments that are directed towards predominant symptoms or symptom combinations. Given that IBS is a chronic, cyclical, and recurring disorder, choosing an optimal treatment period is just as crucial as picking the appropriate pharmacotherapy. Studies have shown that IBS patients remain symptomatic even after 10 years with symptoms that wax and wane within days to weeks.[44] A survey conducted in Sweden showed that >50% of patients with IBS remained symptomatic after 7 years.[45] Currently, the initial therapeutic approach involves short courses of treatment for 3 months followed by treatment discontinuation. However, relapse rates of about 40% have been observed following stoppage of treatment after 3 months although the relapse may not be immediate as the effect of some drugs extends for a few weeks after treatment as seen in a clinical trial for the antispasmodic otilonium bromide.[46] Additionally, some drugs take a while to show therapeutic gains thus early stoppage can prevent realization of the true benefits of these drugs. Therefore, choice of adequate length of treatment that aligns with the natural history of the disease will help to prevent relapses and is suitable for drugs that may not show positive effects instantly.

Global recommendation guidelines for optimal duration of pharmacotherapy include the NICE, United States food and drug administration (US FDA), and European medicines agency (EMA) guidelines that focus on developing treatment regimens in conjunction with the long-term and cyclical nature of IBS. NICE guidelines suggest a treatment duration for antispasmodics of at least 6 months from diagnosis of IBS. This treatment period includes periodic evaluations to assess the response to treatment after 4 weeks and 6 months. Favorable responses are followed by treatment continuation for an additional 6 months. Physician judgement is required for evaluation of response at all stages.[47]

The FDA guidance for clinical evaluation of drugs for treatment of IBS recommends a treatment period of at least 8 weeks for drugs intended to be used on a chronic and continuous basis.[48] The EMA regulatory guidelines on the clinical development of medicinal products for treatment of IBS recommend treatment courses of 4 weeks for short-term intermittent use in repeated cycles. The duration of treatment cycles is decided based on the pharmacology of the drug. Safety assessment is important for IBS such that at least 6-month duration is recommended for products intended for intermittent use and at least 12 months for drugs for long-term continuous use.[49] Both FDA and EMA guidelines also recommend the conduct of studies to assess withdrawal or rebound effects and the need for maintenance therapy after the intended treatment duration. Thus, the treatment duration should be carefully chosen to prevent symptom recurrence.

Larger dose packs of tablets ensure patient compliance and convenience along with being cost-effective and are ideal for long-term IBS management. These packs have been recently launched in India and are expected to prevent relapses and recurrences that are associated with premature treatment discontinuation or dose skipping by making a sufficient quantity of the medication available.

Expert opinion

Experts discussed the chronic nature of IBS and relapse rates of around 50% necessitating the choice of an appropriate length of treatment for best results, which should be based on symptoms. NICE and USFDA guidelines were discussed, and it was concluded that India had no specific guideline for duration of drug treatment. The general practice followed by physicians is to continue a particular treatment until symptoms improve, followed by a 'drug holiday' during which no treatment is given. Treatment is started again if symptoms reappear. The experts suggested offering larger packs of tablets with a monthly supply to improve therapeutic outcomes and ensure adherence. Furthermore, they suggested treatment of at least 8 weeks to prevent relapses.

CONCLUSION

The rising prevalence of IBS and psychiatric comorbidities and poor quality of life associated with it make it important to correctly diagnose and treat the condition. Lack of specific biomarkers and overlapping symptoms with other gastrointestinal disorders make diagnosis difficult and reliant on symptom-based criteria. In India, Rome III criteria are preferred over other diagnostic criteria for positive diagnosis of IBS. Lifestyle and dietary modifications, pharmacological treatments for symptomatic relief, and psychotropic medications are all part of a comprehensive IBS management program. Combination treatments of chlordiazepoxide and clidinium bromide that have a dual action of relieving anxiety and improving abdominal pain are effective in IBS treatment. Along with a suitable treatment regimen, a sufficient treatment duration of at least 8 weeks is important to prevent relapses and achieve beneficial therapeutic outcomes. Thus, a positive symptom-based diagnosis, medications that target abdominal and psychological factors in IBS, and an appropriate length of treatment are all crucial aspects of IBS management.

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