

اپروچ به خانم ۳۲ ساله مبتلا به درد شکم و اسهال در درمانگاه پزشکی خانواده

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ارائه دهنده: محمدجواد بروجردی، اینترن پزشکی خانواده

Patient's ID

خانم

32 ساله

خانه دار

2 فرزند

تبعه افغانستان که از دو ماه قبل به ایران آمده اند

تحصیلات: بیسواد

منبع شرح حال: خود بیمار

Chief complaint

درد شکم

Present illness

بیمار خانم ۳۲ ساله با شکایت از درد شکم از حدود دو ماه پیش مراجعه کرده است. درد بیمار به صورت جنرالیزه با ارجحیت هایپوگاستر می باشد و ماهیت درد را به شکل کرامپی و احساس گرفتگی شدید و گاهی اوقات درد های تیز بیان می کند و radiation ندارد. درد بیمار همیشگی نیست و به صورت دوره های متناوب حدودا هر دو سه روز یکبار و هر بار حدودا به مدت ۱۰ دقیقه می باشد. با تغییر پوزیشن و غذا خوردن شدت درد تغییری نمی کند. احساس نفخ همراه با درد شکم دارد. مصرف ماده غذایی خاص به عنوان شروع کننده علائم را ذکر نمی کنند. سابقه درد های مشابه با شدت و فرکانس کمتر را از سال ها قبل نیز می دهند.

بیمار شرح حالی از تغییر قوام مدفوع به حالت شل به صورت متناوب از مدت ها قبل می دهد. اسهال بیمار حجیم نیست و تعداد دفعات defecation در حد دو الی سه بار در روز است. بیمار ذکر میکند که در بیشتر مواقع اسهال و درد شکم بیمار همزمان می باشند و معمولا درد شکم بیمار با دفع اسهال کاهش می یابد. دفع خون و موکوس از مدفوع ندارد.

بیمار ذکر میکند که بعد از مهاجرت به ایران به صورت متعدد دچار مجادله با همسر خود می شوند و بیشتر روزها دچار اضطراب و نگرانی هستند. همچنین بعضی مواقع شروع درد شکم بیمار بعد از مجادله با همسر یا احساس اضطراب و نگرانی است.

حالت تهوع و استفراغ ندارد. درد مقعد در هنگام دفع مدفوع را ذکر نمیکند. شرح حالی از اختلالات ادراری را نمی دهد.

History

PMH: بیمار سابقه ای از بیماری زمینه ای را ذکر نمی کند.

PSH: C/S دو نوبت

DH: قرص خواب (سر خود مصرف میکند و نام و دوز دارو را نمی داند)

HH: بیمار سابقه ای از مصرف الکل، سیگار، قلیان و مخدر را ذکر نمیکند.

FH: بیمار سابقه ای از مشکلات گوارشی و بدخیمی ها و یا بیماری خاصی را در خانواده ذکر نمی کند.

AH: بیمار سابقه ای از حساسیت به دارو یا ماده غذایی را ذکر نمی کند.

General appearance and vital signs

بیمار هوشیار و اورینته به مکان و زمان و شخص

III و toxic نیست

T = 36.3 SpO2 = 97 PR = 81

Review of system

General: Weight change: - / Night sweating: - / Fever: - / Fatigue & weakness: -

Skin: Rash & lesion: - / Itching: - / Change of skin color, changes in nails and hair: -

Respiratory: Coughing, sputum, shortness of breath: -

Cardiovascular: Chest Pain, palpitation, orthopnea: -

Musculoskeletal: Muscle pain, joint pain: -

Psychologic: **Anxiety & depression: +, sleep disorder:+** , suicidal thoughts: -

GI: Dysphagia, Odynophagia, heartburn, Loss of appetite: - / **diarrhea, bloating and abdominal pain: +**

Urinary: lower urinary tract symptoms -

Physical examination

سمع قلب S1 و S2 نرمال سمع شد

سمع ریه clear سمع شد

اسکلرا ایکتریک نیست

ملتحمه pale نیست

لنفادنوپاتی در سر و گردن لمس نشد

نبض هر دو اندام فوقانی پر و قرینه است

در نگاه به شکم شواهد اسکار در ناحیه تحتانی شکم به دنبال سزارین مشهود است. شکم دیستنت نیست. در سمع صدا های روده ای کاهش نداشتند. در معاینه، شکم نرم و بدون تندرns، ریباند تندرns و گاردینگ می باشد.

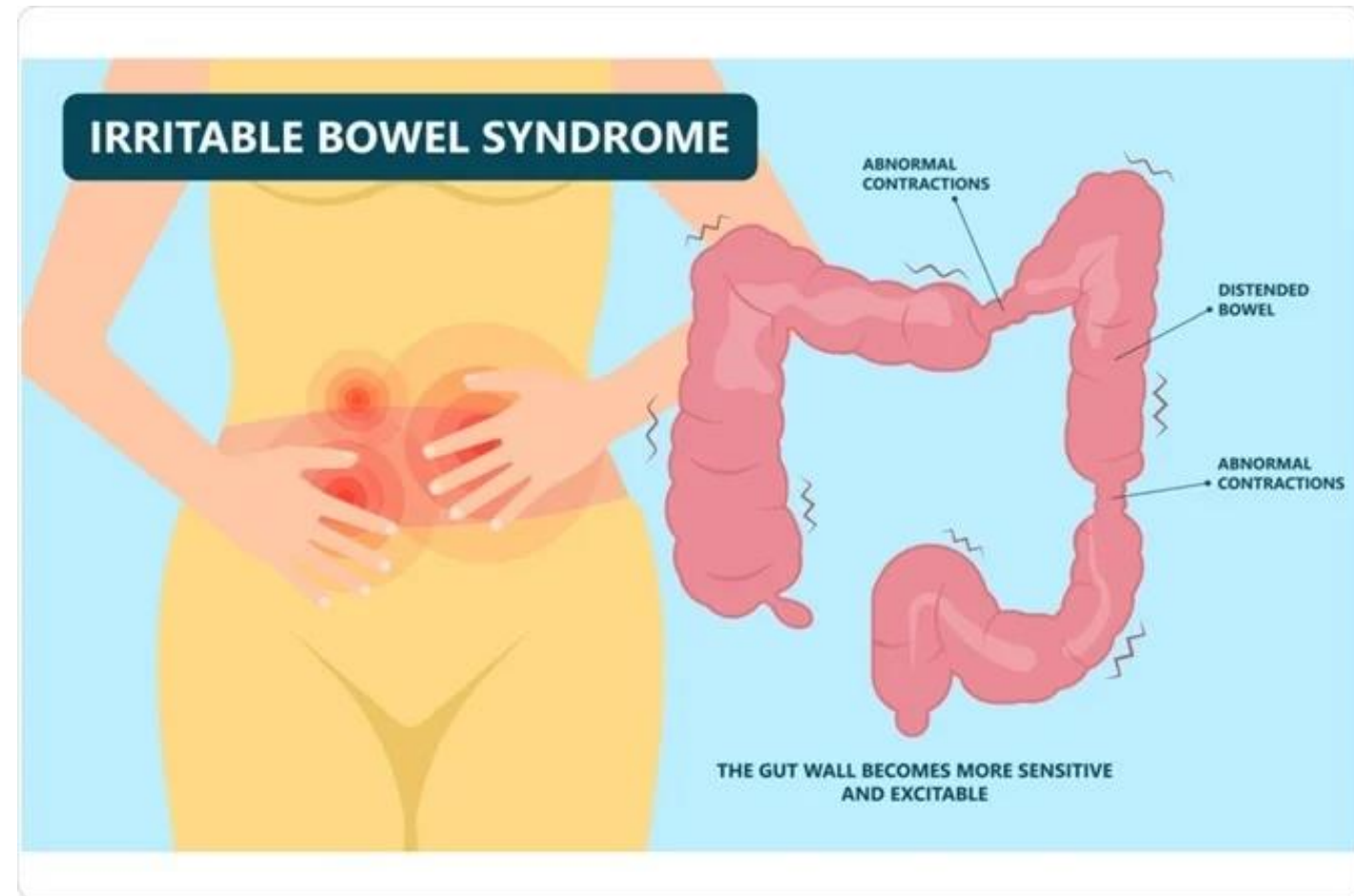
Problem list

خانم 32 ساله مراجعه با درد هایپوگاستر و احساس نفخ و اسهال و تشدید علائم به دنبال استرسور های روانی

DDX

1. IBS
2. IBD
3. Celiac
4. Lactose intolerance
5. Parasite infection

Irritable Bowel Syndrome (IBS)



INTRODUCTION

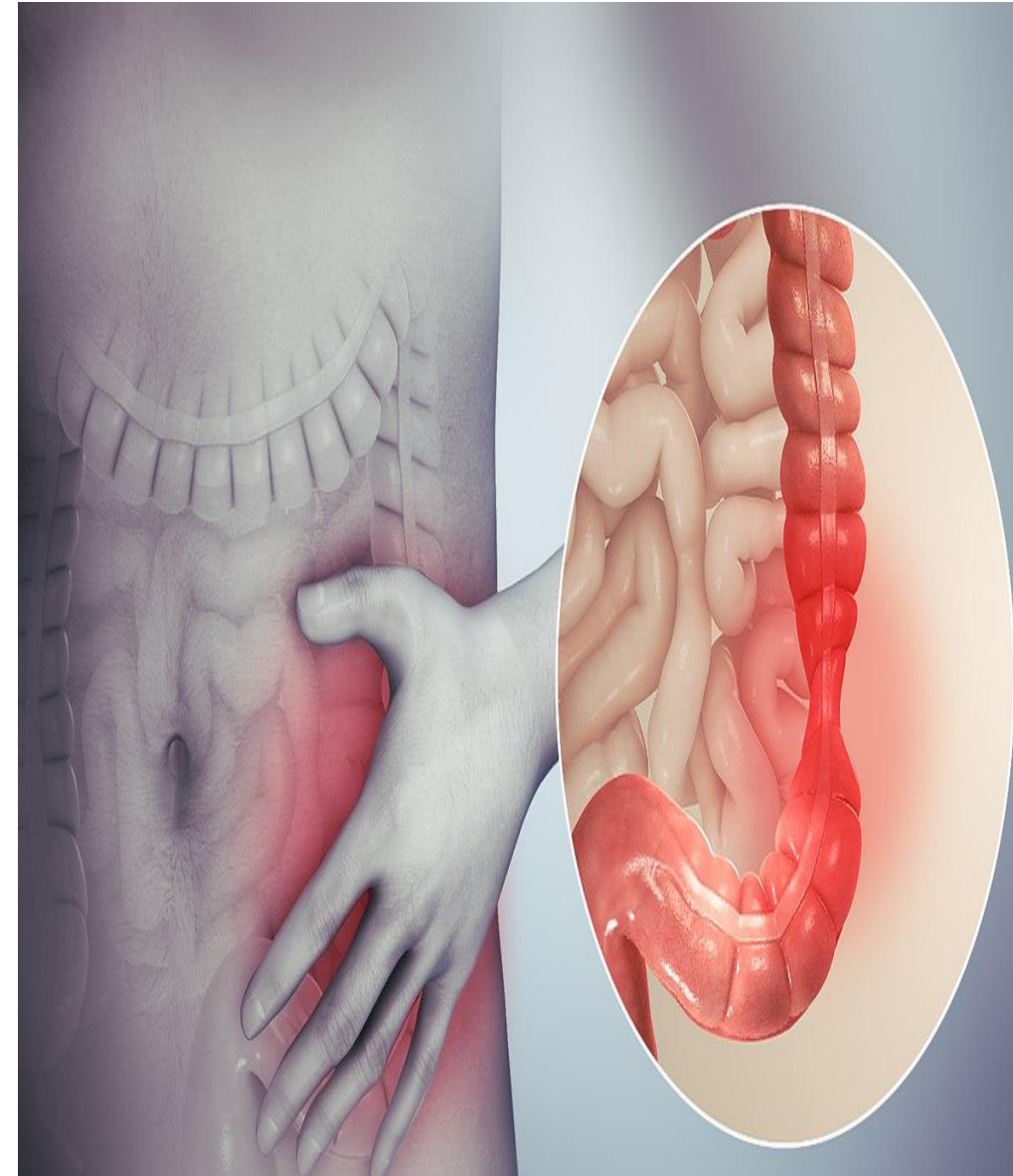
Irritable bowel syndrome (IBS) is a functional disorder of the gastrointestinal tract characterized by chronic abdominal pain and altered bowel habits

The pathophysiology of IBS remains uncertain although there have been some hypothesis

In the United States, IBS accounts for 25 to 50 percent of all referrals to gastroenterologists

Approximately 40 percent of individuals who meet diagnostic criteria for IBS do not have a formal diagnosis

IBS is associated with other conditions including fibromyalgia, chronic fatigue syndrome (also known as systemic exertion intolerance disease), gastroesophageal reflux disease, functional dyspepsia, non-cardiac chest pain, and psychiatric disorders including major depression, anxiety, and somatization



CLINICAL MANIFESTATIONS

Irritable bowel syndrome (IBS) is characterized by **chronic abdominal pain** and **altered bowel habits**

Chronic abdominal pain

Abdominal pain in IBS is usually described as a cramping sensation with variable intensity and periodic exacerbations. The location and character of the pain can vary widely. The severity of the pain may range from mild to severe. The pain is frequently related to defecation. While in some patients abdominal pain is relieved with defecation, some patients report worsening of pain with defecation. Emotional stress and meals may exacerbate the pain. Patients with IBS also frequently report abdominal bloating and increased gas production in the form of flatulence or belching.

Altered bowel habits

Symptoms of IBS include diarrhea, constipation, alternating diarrhea and constipation, or normal bowel habits alternating with either diarrhea and/or constipation.

Diarrhea

Diarrhea is usually characterized as frequent loose stools of small to moderate volume. Bowel movements generally occur during waking hours, most often in the morning or after meals. Most bowel movements are preceded by lower abdominal cramping pain, urgency, and a sensation of incomplete evacuation or tenesmus. Approximately one-half of all patients with IBS complain of mucus discharge with stools. **Large volume diarrhea, bloody stools, nocturnal diarrhea, and greasy stools** are not associated with IBS.

Constipation

Stools are often hard and may be described as pellet-shaped. Patients may also experience tenesmus even when the rectum is empty.

DIAGNOSIS

Irritable bowel syndrome (IBS) should be suspected in patients with chronic abdominal pain and altered bowel habits (constipation and/or diarrhea). A clinical diagnosis of IBS requires the fulfillment of symptom-based diagnostic criteria and a limited evaluation to exclude underlying organic disease.

In the absence of a biologic disease marker, several symptom-based criteria have been proposed to standardize the diagnosis of IBS. The most widely used among them are the Rome IV criteria.

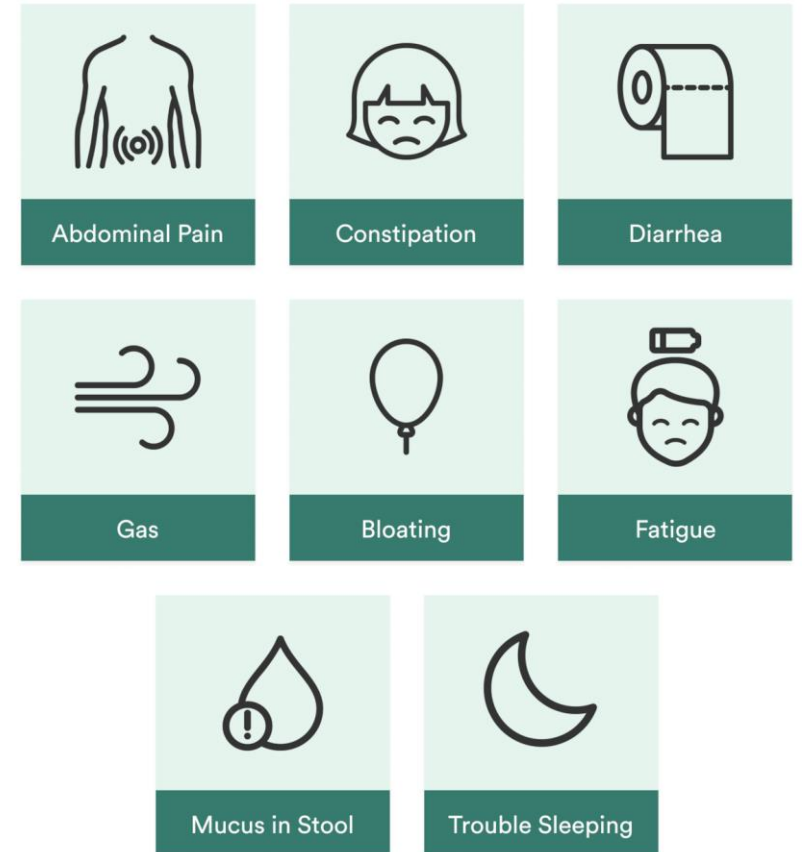
Rome IV criteria for IBS: According to the Rome IV criteria, IBS is defined as recurrent abdominal pain, on average, **at least one day per week in the last three months**, associated with **two or more of the following criteria**:

1. Related to defecation
2. Associated with a change in stool frequency
3. Associated with a change in stool form (appearance)

IBS Symptoms

Common signs of irritable bowel syndrome








Always check with your doctor first. Your symptoms might be caused by another underlying health concern.



IBS subtypes

Subtypes of IBS are recognized based on the patient's reported predominant bowel habit on days with abnormal bowel movements. The Bristol stool form scale (BSFS) should be used to record stool consistency. Subtypes can only confidently be established when the patient is evaluated off medications used to treat bowel habit abnormalities. IBS subtypes are defined for clinical practice as follows:

- 1. IBS with predominant constipation:** Patient reports that abnormal bowel movements are usually constipation (type 1 and 2 in the BSFS)
- 2. IBS with predominant diarrhea:** Patient reports that abnormal bowel movements are usually diarrhea (type 6 and 7 in the BSFS)
- 3. IBS with mixed bowel habits:** Patient reports that abnormal bowel movements are usually both constipation and diarrhea (more than one-fourth of all the abnormal bowel movements were constipation and more than one-fourth were diarrhea)
- 4. IBS unclassified:** Patients who meet diagnostic criteria for IBS but cannot be accurately categorized into one of the other three subtypes.

TYPE 1		Separate hard lumps (hard to pass).
TYPE 2		Lumpy, hard, sausage-shaped.
TYPE 3		Sausage-shaped with cracks on the surface.
TYPE 4		Sausage-shaped or snake-like; smooth and soft.
TYPE 5		Soft blobs with clear-cut edges (easy to pass).
TYPE 6		Fluffy pieces with ragged edges; mushy.
TYPE 7		Entirely liquid, watery, no solid pieces.

Initial evaluation

History and physical examination

The medical history serves to identify clinical manifestations of IBS as well as identify other possible causes of similar symptoms. The BSFS should be used to record stool consistency. We perform a thorough history with **particular attention to the symptoms that are concerning for organic disease**. The history should include exposure to a variety of **medications** that can cause similar symptoms. A subgroup of patients report an **acute viral or bacterial gastroenteritis** prior to the onset of IBS symptoms. **Family history assessment** should include the presence of inflammatory bowel disease, colorectal cancer, and celiac disease. The physical examination is usually normal in patients with IBS. However, patients may have mild abdominal tenderness to palpation. In patients with constipation a rectal examination may be useful in identifying dyssynergic defecation.



Laboratory testing

There is no definitive diagnostic laboratory test for IBS. The purpose of laboratory testing is primarily to exclude an alternative diagnosis.

In all patients with suspected IBS, we perform a complete blood count.

In patients with diarrhea, we perform the following:

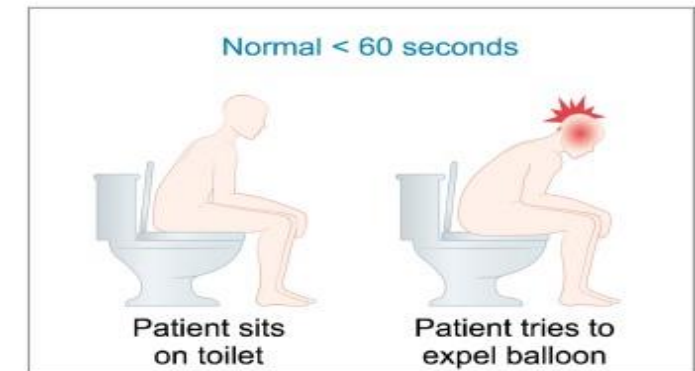
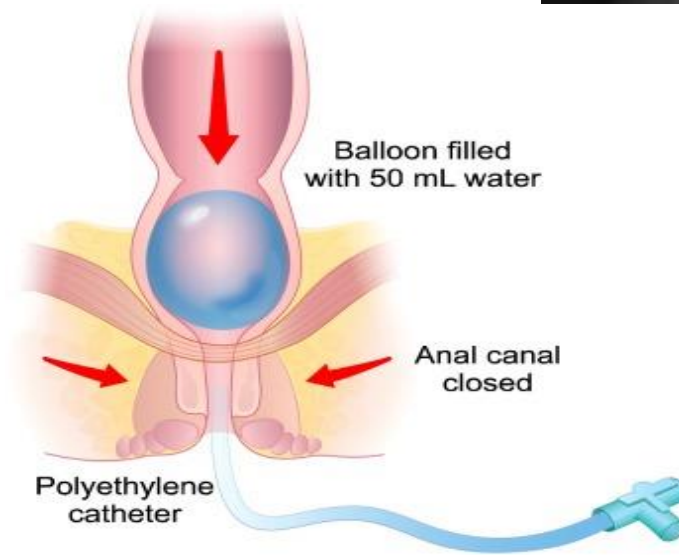
1. Fecal calprotectin or fecal lactoferrin
2. C-reactive protein levels, only if fecal calprotectin and fecal lactoferrin cannot be performed
3. Stool testing for giardia (antigen detection or nucleic acid amplification assay)
4. Serologic testing for celiac disease



Other tests

In addition, we perform a limited number of studies guided by the clinical presentation. These include the following:

1. Age-appropriate colorectal cancer screening in all patients.
2. In IBS patients with constipation, abdominal radiograph to assess for stool accumulation and determine the severity.
3. We perform physiologic testing (anorectal manometry and balloon expulsion testing) to rule out dyssynergic defecation in patients with severe constipation that is refractory to management with dietary changes and osmotic laxative therapy.



3-way stopcock → to pressure transducers

Additional evaluation based on the presence of alarm features

The extent of additional testing depends on the presence of alarm features. Although the presence of concerning features may identify patients more likely to have an organic disease, most patients will ultimately have a negative evaluation

Alarm features and indications for referral:

- Age of onset after age 50 years
- Rectal bleeding or melena
- Nocturnal diarrhea
- Progressive abdominal pain
- Unexplained weight loss
- Laboratory abnormalities (iron deficiency anemia, elevated C-reactive protein or fecal calprotectin/lactoferrin)
- Family history of IBD or colorectal cancer

Patients without alarm features: In patients who meet diagnostic criteria for IBS and have no alarm features, we do not routinely perform any additional testing beyond the initial evaluation.

Patients with alarm features: In patients with alarm features, we perform additional evaluation to exclude other causes of similar symptoms. The diagnostic evaluation is based on the clinical presentation and usually includes endoscopic evaluation in all patients and imaging in selected cases. In patients with diarrhea, we perform colonoscopy to evaluate for the presence of IBD and perform biopsies to exclude microscopic colitis. We reserve colonic imaging (eg, abdominal computed tomography scan) if there is a clinical suspicion for a structural lesion.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis of irritable bowel syndrome (IBS) is broad. In patients with diarrhea-predominant symptoms, other important causes of chronic diarrhea include celiac disease, microscopic colitis, small intestinal bacterial overgrowth, and inflammatory bowel disease. Constipation may be secondary to organic disease, dyssynergic defecation, or slow colonic transit. While some of these alternative diagnoses are excluded during the course of evaluation in patients with suspected IBS, other diagnoses require additional diagnostic testing and need only be performed in selected patients with alarm features.

Treatment

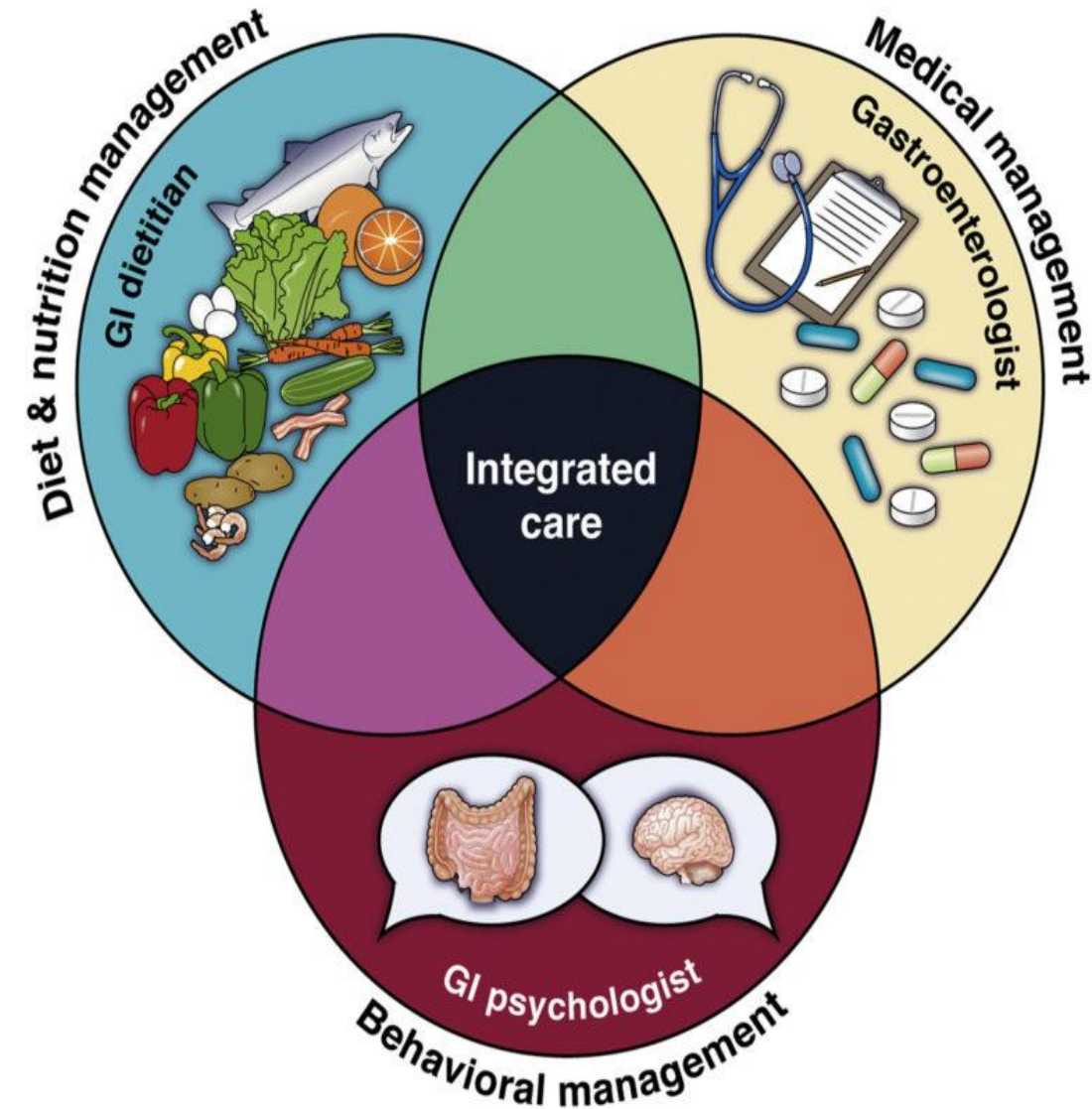
INITIAL THERAPY

Establishment of a clinician-patient relationship and continuity of care are critical to the management of all patients with irritable bowel syndrome (IBS). In patients with mild and intermittent symptoms that do not impair quality of life, we initially recommend lifestyle and dietary modification alone rather than specific pharmacologic agents.

In patients with mild to moderate symptoms who fail to respond to initial management and in patients with moderate to severe symptoms that affect quality of life, we suggest pharmacologic therapy as adjunctive treatment.

Education and reassurance

It is important to establish a therapeutic clinician-patient relationship to validate the patient's symptoms. Patients should also be counseled that although IBS does not increase their risk of malignancy, it is a chronic disorder. The clinician should establish realistic expectations with consistent limits and involve the patient in treatment decisions













Dietary modification

A careful dietary history may reveal patterns of symptoms related to specific foods. Patients with IBS may benefit from exclusion of gas-producing foods; a diet low in **fermentable oligo-, di-, and monosaccharides and polyols (FODMAPs)**; and in select cases, lactose avoidance



LOW FODMAP DIET

ENJOY	AVOID
VEGETABLES	
 <p>CARROT, BELL PEPPER, LETTUCE, CUCUMBER & MORE</p>	 <p>GARLIC, ONIONS, CABBAGE, PEAS & MORE</p>
FRUITS	
 <p>GRAPES, ORANGES, CANTALOUPE, BANANA & MORE</p>	 <p>PLUMS, WATERMELON, APPLES, PEACHES & MORE</p>
PROTEINS	
 <p>BEEF, PORK, CHICKEN, FISH, EGGS & MORE</p>	 <p>BATTERED AND BREADED FISH AND MEATS & MORE</p>
FATS & DAIRY	
 <p>BUTTER, OILS, PEANUTS, LACTOSE FREE DAIRY & MORE</p>	 <p>ALMONDS, PISTACHIOS, ICE CREAM, LACTOSE & MORE</p>
STARCHES, CEREALS & GRAINS	
 <p>POTATOES, OATS, RICE BRAN, CORN FLOUR & MORE</p>	 <p>CEREALS, PASTA, PIZZA, BREAD & MORE</p>

Exclusion of gas-producing foods

Patients with IBS should be advised to exclude foods that increase flatulence (eg, beans, onions, celery, carrots, raisins, bananas, apricots, prunes, Brussels sprouts, wheat germ, pretzels, and bagels), alcohol, and caffeine. Underlying visceral hypersensitivity may explain the exaggerated discomfort experienced by patients with IBS with the consumption of gas-producing foods

Lactose avoidance

Patients with known lactose intolerance should be placed on a lactose-restricted diet. We also suggest an empiric trial of a lactose-free diet in patients who complain of persistent abdominal bloating despite exclusion of gas-producing foods. As improvement of symptoms does not necessarily imply lactose maldigestion, the diagnosis of lactose intolerance can be confirmed with breath testing in patients who do not want to be on a lactose-restricted diet in the long term without clear evidence of maldigestion

Low FODMAP diet

We suggest a diet low in fermentable oligo-, di-, and monosaccharides and polyols (FODMAPs) in patients with IBS with abdominal bloating or pain despite exclusion of gas-producing foods. These short-chain carbohydrates are poorly absorbed and are osmotically active in the intestinal lumen where they are rapidly fermented, resulting in symptoms of abdominal bloating and pain. A low FODMAP diet involves elimination of a larger number of high FODMAP foods that would not be excluded in a diet that only required avoidance of gas-producing foods (eg, foods that contain fructose, including honey, high fructose corn syrup, apples, pears, mangoes, cherries, or oligosaccharides, including wheat). Low FODMAP dietary education should be provided by a trained dietician to avoid unnecessary dietary over-restriction and a nutritionally replete diet. Low FODMAP education consists of initially eliminating FODMAPs from the diet for six to eight weeks and then, following symptom resolution, gradual reintroduction of foods high in fermentable carbohydrates to determine individual tolerance to specific fermentable carbohydrates

TABLE 327-2 Some Common Food Sources of FODMAPs

FOOD TYPE	FREE FRUCTOSE	LACTOSE	FRUCTANS	GALACTO-OLIGOSACCHARIDES	POLYOLS
Fruits	Apple, cherry, mango, pear, watermelon		Peach, persimmon, watermelon		Apple, apricot, pear, avocado, blackberries, cherry, nectarine, plum, prune
Vegetables	Asparagus, artichokes, sugar snap peas		Artichokes, beetroot, Brussels sprout, chicory, fennel, garlic, leek, onion, peas		Cauliflower, mushroom, snow peas
Grains and cereals			Wheat, rye, barley		
Nuts and seeds			Pistachios		
Milk and milk products		Milk, yogurt, ice cream, custard, soft cheeses			
Legumes			Legumes, lentils, chickpeas	Legumes, chickpeas, lentils	
Other	Honey, high-fructose corn syrup		Chicory drinks		
Food additives			Inulin, FOS		Sorbitol, mannitol, maltitol, xylitol, isomalt

Abbreviations: FODMAPs, fermentable oligosaccharides, disaccharides, monosaccharides, and polyols; FOS, fructo-oligosaccharides.
 Source: Reproduced with permission from PR Gibson et al: Food choice as a key management strategy for functional gastrointestinal symptoms. Am J Gastroenterol 107:657, 2012.

رژیم غذایی کم فودمپ

مواد خوراکی	غذاهای مجاز	غذاهای غیرمجاز
سبزیجات	 <p>کاهو، هویج و خیار</p>	 <p>سیر، نخود سبز، پیاز</p>
میوه ها	 <p>توت فرنگی، آناناس، انگور</p>	 <p>توت سیاه، هندوانه، هلو</p>
پروتئین	 <p>مرغ، تخم مرغ، توفو</p>	 <p>سوسیس، ماهی سرخ شده، گوشت سوخاری</p>
چربی	 <p>روغن ها، کره، بادام زمینی</p>	 <p>بادام، آواکادو، پسته</p>
نشاسته و غلات، دانه ها	 <p>سیب زمینی، تورتیلا، پاپکورن</p>	 <p>لوبیا، نان گلوتن دار، مافین</p>

Gluten avoidance

Gluten has been demonstrated to alter bowel barrier functions in patients with IBS-D. Nonceliac gluten sensitivity (NCGS) has been hypothesized as an underlying mechanism for symptom generation in patients with IBS but evidence to support gluten avoidance in patients with IBS has been conflicting.

It is feasible that symptomatic improvement associated with a gluten-free diet may not be caused by removal of the gluten protein, but rather the reduction of fructans.

Fiber

Soluble fiber should be offered to patients with IBS. The use of insoluble fiber should be avoided (eg, bran) as it is not significantly better than placebo in improving symptoms of IBS and can cause bloating. Studies suggests that soluble (eg, ispaghula husk/psyllium) but not insoluble (eg, wheat bran) fiber has a significant effect for the treatment of IBS symptoms

Physical activity

Physical activity should be advised in patients with IBS given a potential benefit with regard to IBS symptoms and the general health benefits of exercise.

Soluble fiber can be found in foods such as oatbran, barley, nuts, seeds, beans, lentils, fruits (citrus, apples), strawberries and many vegetables



Insoluble fiber is found in foods such as whole wheat and whole grain products, vegetables, and wheat bran



ADJUNCTIVE PHARMACOLOGIC THERAPY

We treat patients with moderate to severe symptoms of irritable bowel syndrome (IBS) that impair quality of life with pharmacologic agents. Since IBS generally presents as a complex of symptoms, treatment should be based on the predominant symptom and subtype. We make incremental changes in therapy.



Constipation

In patients with IBS with constipation (IBS-C) who have failed a trial of soluble fiber (eg, psyllium/ispaghula), we suggest polyethylene glycol (PEG). We treat patients with persistent constipation despite treatment with PEG with lubiprostone, linaclotide, or plecanatide. We use tenapanor in patients who fail other therapies for constipation.

Osmotic laxatives

PEG is inexpensive, widely available, and has fewer side effects as compared with other osmotic laxatives (eg, lactulose, milk of magnesia). We initially start with 17 g of powder dissolved in 8 ounces of water once daily and titrate up or down (to a maximum of 34 g daily) to effect. However, side effects of bloating and abdominal discomfort limit the use of PEG. Treatment with PEG improves constipation but not abdominal pain

Lubiprostone

We use lubiprostone in patients with IBS with persistent constipation despite PEG. We discontinue lubiprostone in patients who fail to respond to a 12-week trial.

Guanylate cyclase agonists

Linaclotide and plecanatide stimulate intestinal fluid secretion and transit. As the long-term risks are unknown, their role in the treatment of IBS-C is limited to patients with persistent constipation despite treatment with PEG.

Linaclotide is used for treatment of IBS-C at a dose of 290 micrograms daily. In patients with side effects to linaclotide, the dose may be reduced if the patient develops diarrhea (typically occurs within two weeks). However, smaller doses may not mitigate this side effect. We discontinue linaclotide in patients who fail to respond in 8 to 12 weeks

Sodium/hydrogen exchanger 3 (NHE3) inhibitor

Tenapanor reduces the absorption of sodium and phosphate and enhances intestinal fluid volume and transit. We use tenapanor in patients who fail other therapies for constipation. Improvement may be seen within seven days; we discontinue tenapanor in patients who fail to respond to a four-week trial

5-hydroxytryptamine (serotonin) 4 receptor agonists

Agonists of the 5-hydroxytryptamine-4 (5-HT₄) receptor stimulate the release of neurotransmitters and increase colonic motility. Tegaserod has been withdrawn from the market but has been demonstrated to reduce abdominal pain in IBS and improve constipation. A history of ischemic colitis, intestinal ischemia, bowel obstruction or adhesions, symptomatic gallbladder disease, and suspected sphincter of Oddi dysfunction are some of the contraindications to the use of tegaserod. Prucalopride has not been evaluated in patients with IBS.

Diarrhea

In diarrhea-prone patients with IBS, the stools are characteristically loose and frequent but of normal total daily volume. In patients with diarrhea predominant symptoms, we use antidiarrheals (eg, loperamide) as initial treatment and use bile acid sequestrants as second-line therapy

Antidiarrheal agents

In patients with IBS-diarrhea (IBS-D), we suggest loperamide 2 mg 45 minutes before a meal on regularly scheduled doses. However, loperamide should not be used in patients with IBS-C and should be used in limited doses, on an as-needed basis, in patients with alternating diarrhea and constipation (maximum daily dose 16 mg/day).

Bile acid sequestrants

In patients with persistent diarrhea despite antidiarrheals, we use bile acid sequestrants (eg, cholestyramine, colestipol, colesevelam). However, their use is controversial and is limited by associated gastrointestinal side effects including bloating, flatulence, abdominal discomfort, and constipation.

The rationale for the use of bile acid sequestrants in patients with IBS-D is that up to 50 percent of patients with functional diarrhea and IBS-D have bile acid malabsorption. Bile acids cause diarrhea by stimulating colonic secretion and motility.

5-hydroxytryptamine (serotonin) 3 receptor antagonists

Alosetron, a 5-hydroxytryptamine-3 receptor (5HT-3) antagonist, is approved for the treatment of severe diarrhea-predominant IBS in female patients whose symptoms have lasted for six months and who have failed to respond to all other conventional treatment.

Side effects of ischemic colitis and complications of severe constipation led to the withdrawal of alosetron from the market in the United States. However, following evaluation of postmarketing data, alosetron is now available in the United States.

Eluxadoline

Eluxadoline only has modest efficacy in reducing diarrhea in patients with IBS. Eluxadoline should only be used in **selected** patients with **severe** IBS-D that is refractory to **all other agents as it is associated with a high incidence of severe acute pancreatitis. Eluxadoline should be discontinued in patients who do not respond to a 12-week trial.** A history of biliary disorders, pancreatitis, severe liver impairment (Child-Pugh Class C), and heavy alcohol use are contraindications to its use. Eluxadoline is contraindicated in patients who do not have a gallbladder due to a high incidence of severe acute pancreatitis noted in postmarketing surveillance

Abdominal pain and bloating

In patients with abdominal pain due to IBS, we use antispasmodics on an as-needed basis. In patients with IBS with constipation, we initiate antispasmodics only if the abdominal pain persists despite treatment of constipation. In patients with persistent abdominal pain despite antispasmodics, we recommend a trial of certain antidepressants. In patients with moderate to severe IBS without constipation, particularly those with bloating, who have failed to respond to other therapies, we suggest a two-week trial of rifaximin.



Antispasmodic agents

Antispasmodics should be administered on an as-needed basis and/or in anticipation of stressors with known exacerbating effects. Antispasmodics provide short-term relief in symptoms of abdominal pain in patients with IBS, but their long-term efficacy has not been established.

Antispasmodics include those that directly affect intestinal smooth muscle relaxation (eg, mebeverine and pinaverine), and those that act via their anticholinergic or antimuscarinic properties (eg, dicyclomine and hyoscyamine). The selective inhibition of gastrointestinal smooth muscle by antispasmodics and peppermint oil reduce stimulated colonic motor activity and may be beneficial in patients with postprandial abdominal pain, gas, bloating, and fecal urgency

Typical doses include:

1. Dicyclomine 20 mg orally four times daily as needed
2. Hyoscyamine 0.125 to 0.25 mg orally or sublingually three to four times daily as needed
3. Sustained release hyoscyamine 0.375 mg orally every 8 to 12 hours or 0.75 mg orally every 12 hours

Antidepressants

Certain classes of antidepressants have analgesic properties independent of their mood-improving effects. Tricyclic antidepressants (TCAs), via their anticholinergic properties, also slow intestinal transit time, which may provide benefit in diarrhea-predominant IBS. Given their effect on intestinal transit, TCAs should be used cautiously in patients with constipation.

For the treatment of abdominal pain in IBS, antidepressants should be started at low doses. The initial dose should be adjusted based upon tolerance and response. Due to the delayed onset of action of antidepressants, three to four weeks of therapy should be attempted before increasing the dose. Amitriptyline, nortriptyline, desipramine, and imipramine can be started at a dose of 10 to 25 mg at bedtime. If the patient is intolerant of one TCA, another may be tried.

As compared with TCAs, there is less published experience with other antidepressants such as selective serotonin reuptake inhibitors (SSRIs) or serotonin norepinephrine reuptake inhibitors (SNRIs). For patients with IBS in whom depression is a cofactor, SSRIs/SNRIs can also be used.

Antibiotics

While antibiotics should not be routinely recommended in all patients with IBS, in patients with moderate to severe IBS without constipation, particularly those with bloating, who have failed to respond to other therapies (eg, a diet low in fermentable oligo-, di-, and monosaccharides and polyols [FODMAPs], antispasmodics, and TCAs), we suggest a two-week trial of rifaximin. Patients with a response to rifaximin, who develop recurrent symptoms, can be retreated with rifaximin.

Probiotics

Probiotics are not routinely recommended in patients with IBS. Although they have been associated with an improvement in symptoms, the magnitude of benefit and the most effective species and strain are uncertain

REFRACTORY SYMPTOMS

A small subset of patients with irritable bowel syndrome (IBS) has refractory symptoms. Patients with continued symptoms despite adjunctive pharmacologic therapy should be carefully reassessed, paying specific attention to the type of ongoing symptoms, the degree to which symptoms have changed, compliance with medications, and the presence of alarm features that should prompt further evaluation.

Behavior modification

Patients with unrelenting symptoms that are associated with psychiatric impairment may benefit from behavioral modification in conjunction with antidepressants

Anxiolytics

The use of anxiolytic agents in patients with IBS should be **limited** to short-term (less than two weeks) reduction of acute situational anxiety that may be contributing to symptoms. Side effects of anxiolytics include the risk of habituation, rebound withdrawal, and drug interactions.

Other therapies

Other therapies have been evaluated in patients with IBS (eg, herbs, acupuncture, enzyme supplementation, fecal microbiota transplantation, and mast cell stabilizers) but their role in the treatment of IBS remains uncertain

سطوح پیشگیری

Primordial Prevention

Primary Prevention

Secondary Prevention

Tertiary Prevention

Quaternary Prevention

primordial & primary prevention

Primordial prevention in the context of Irritable Bowel Syndrome (IBS) focuses on preventing the onset of the disorder by addressing risk factors and promoting healthy lifestyle choices before the disease develops. Primary prevention of Irritable Bowel Syndrome (IBS) involves strategies aimed at reducing the risk of developing the condition through lifestyle modifications and health-promoting behaviors.

Stress Management

Reducing stress and anxiety is crucial for primordial prevention of IBS, as stress is a major trigger for symptoms. Effective stress management techniques include:

1. Early treatment of depression, panic disorders, and pain disorders like fibromyalgia
2. Counseling for victims of physical/sexual abuse or adverse life events
3. Regular exercise like yoga
4. Adequate, quality sleep

Dietary Changes

Avoiding certain foods that commonly trigger IBS symptoms is important for primordial prevention:

1. Gluten-containing foods
2. Fatty foods
3. Carbonated drinks
4. Sorbitol and other sugar alcohols
5. Alcohol, especially in those with known food sensitivities

Lifestyle Factors

Adopting an overall healthy lifestyle is associated with a significantly lower risk of developing IBS:

1. Regular vigorous physical activity reduces risk by 17%
2. Never smoking reduces risk by 14%
3. Moderate alcohol consumption, when combined with other healthy behaviors, provides greater protection than abstaining

The more healthy lifestyle behaviors adopted, the lower the risk of IBS. Individuals who followed 3-5 healthy behaviors had up to a 42% lower risk of developing IBS compared to those with no healthy behaviors

Secondary prevention

Secondary prevention of Irritable Bowel Syndrome (IBS) focuses on early detection and intervention to prevent the progression of the disease and reduce the severity of symptoms.

- 1. Symptom Monitoring:** Individuals should be educated to recognize early symptoms of IBS, such as abdominal pain, bloating, and changes in bowel habits. Early reporting of these symptoms to healthcare providers can facilitate timely diagnosis.
- 2. Diagnostic Assessments:** Healthcare providers should conduct thorough assessments, including medical history, physical examinations, and possibly diagnostic tests (e.g., blood tests, stool tests, or imaging) to confirm the diagnosis of IBS and rule out other conditions.
- 3. Dietary Guidance:** Once diagnosed, patients should receive guidance on dietary modifications, such as adopting a low-FODMAP diet, which has been shown to reduce symptoms in many individuals with IBS.

Tertiary prevention

Tertiary prevention in the context of Irritable Bowel Syndrome (IBS) focuses on managing and mitigating the impact of the disease in individuals who already have the condition.

- 1. Integrated Care Teams:** Establishing a team that includes gastroenterologists, dietitians, mental health professionals, and physical therapists can provide comprehensive care tailored to individual patient needs. This collaborative approach ensures that all aspects of the patient's health are addressed.
- 2. Personalized Treatment Plans:** Developing individualized management plans that consider the specific symptoms, triggers, and health status of the patient can enhance treatment efficacy. This may include medication management, dietary adjustments, and lifestyle modifications.
- 3. Screening for Comorbidities:** Individuals with IBS often experience other health issues, such as anxiety, depression, and chronic pain syndromes. Regular screening and management of these comorbid conditions can improve overall health outcomes.

Quaternary prevention

Quaternary prevention in the context of Irritable Bowel Syndrome (IBS) focuses on protecting patients from unnecessary medical interventions and the potential harms associated with excessive medicalization.

- 1. Recognizing Overmedicalization:** Quaternary prevention involves identifying patients who may be at risk of excessive medicalization due to their IBS diagnosis. This includes being vigilant about the potential for unnecessary tests, procedures, or treatments that may not provide significant benefits and could lead to iatrogenic harm.
- 2. Focus on Non-Pharmacological Interventions:** Encouraging lifestyle modifications, dietary changes, and psychological support as first-line treatments can help manage IBS symptoms effectively without resorting to unnecessary medications.
- 3. Monitoring for Iatrogenic Effects:** Healthcare providers should be aware of and monitor for any adverse effects resulting from treatments, ensuring that any intervention does not lead to more significant health issues.

"THANK YOU
FOR YOUR
ATTENTION"

