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IRRITABLE BOWEL SYNDROME (IBS): DEIT AND PSYCHOLOGICAL STRESS

Virendra Yadav, Pushp Lata*, Pratap Singh, Rakesh

Vinayaka College of Pharmacy Kullu, HP, India.

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For Correspondence:

Virendra Yadav

Vinayaka College of
Pharmacy Kullu, HP, India.

E-mail:

virendra.rkgit@gmail.com

ABSTRACT

Irritable Bowel Syndrome (IBS) is a chronic condition of the digestive system. These are caused by abnormal contraction of the colon and intestine. Abdominal pain, cramp of intestine, diarrhoea and constipation are the major symptom of IBS, fibrous diet play important role in the treatment with the Anticholinergic, Antispasmodic, Antidiarrheal and Antisychotropic medicines. Herbal remedies such as ginger, peppermint oil reduces the abdominal pain, cramp and spasm.

INTRODUCTION

Irritable Bowel Syndrome (IBS) is a chronic condition of the digestive system. Its primary symptoms are abdominal pain and altered bowel habits (constipation and diarrhea) but these symptoms have no identifiable cause. IBS is the most commonly diagnosed gastrointestinal condition and is second only to the common cold as a cause of absence from work. An estimated 10 to 20 percent of people in the general population experience symptoms of IBS although only about 15 percent of affected people actually seek medical help.

Irritable Bowel Syndrome Causes

There are a number of theories about how and why irritable bowel syndrome develops. Despite intensive research the cause is not clear. One theory suggests that irritable bowel syndrome is caused by abnormal contractions of the colon and intestines (hence the term “spastic bowel” which has sometimes been used to describe irritable bowel syndrome). Vigorous contractions of the intestines can cause severe cramps providing the rationale for some of the treatments of IBS such as antispasmodics and fiber (both of which help to regulate the contractions of the colon). However abnormal contractions do not explain irritable bowel syndrome in all patients and it is unclear whether the contractions are a symptom or cause of the disorder.

People with irritable bowel syndrome who seek medical help are more likely to suffer from anxiety and stress than those who do not seek help. Stress and anxiety are known to affect the intestine thus it is likely that anxiety and stress worsen symptoms. However stress or anxiety are probably not the cause. Some studies have suggested that irritable bowel syndrome is more common in people who have a history of physical, verbal or sexual abuse.

Symptoms of Irritable Bowel Syndrome

Irritable bowel syndrome usually begins in young adulthood. Women are twice as likely as men to be diagnosed with irritable bowel syndrome in the United States and other western countries. In other countries (such as India) an equal number of men and women are diagnosed with irritable bowel syndrome. The most common symptom of irritable bowel syndrome is abdominal pain in association with changes in bowel habits (diarrhea and constipation).

Abdominal pain

Abdominal pain is typically crampy, varying in intensity and located in the lower left abdomen. Some people notice that emotional stress and eating worsen the pain and that having a bowel

movement relieves the pain. Some women with irritable bowel syndrome notice an association between pain episodes and their menstrual cycle.

Changes in bowel habits —

Altered bowel habits are a second symptom of irritable bowel syndrome. This can include diarrhea, constipation or alternating diarrhea and constipation.

(I) Diarrhea

(II) Constipation

(II) **Other symptoms** — Other symptoms of irritable bowel syndrome include bloating, gas, belching, heartburn, difficulty swallowing, an early feeling of fullness with eating and nausea.

Irritable Bowel Syndrome Diagnosis

Several intestinal disorders have symptoms that are similar to irritable bowel syndrome. Examples include malabsorption (abnormal absorption of nutrients) inflammatory bowel disease (such as ulcerative colitis and Crohn's disease) and microscopic and eosinophilic colitis (uncommon diseases associated with intestinal inflammation). Because there is no single diagnostic test for irritable bowel syndrome, many clinicians compare your symptoms to formal sets of diagnostic criteria. However these criteria are not accurate in distinguishing irritable bowel syndrome from other conditions in everyone. Thus a medical history, physical examination and select tests can help to rule out other medical conditions.

How is it diagnosed?

After taking your medical history, your health care provider will examine your abdomen and may do a rectal exam. There is no specific test for IBS. Depending on your history and exam your provider may do the following tests to look for other possible causes of your symptoms:

- Blood tests
- Tests of bowel movement samples to check for blood and infection
- X-rays
- Colonoscopy or sigmoidoscopy (procedures that allow your provider to see the inside of your colon with a thin, flexible, lighted tube)
- Barium enema (a procedure in which a special liquid is passed into the colon through the rectum before x-rays are taken) to check the colon lining.

Your health care provider may ask you to try a milk-free diet to see if lactose intolerance (trouble digesting milk) may be causing your symptoms.

Irritable Bowel Syndrome Treatment

There are a number of different treatments and therapies for irritable bowel syndrome. Treatments are often combined to reduce the pain and other symptoms of irritable bowel syndrome and it may be necessary to try more than one combination to find the one that is most helpful for you. Treatment is usually a long-term process during this process it is important to communicate with your healthcare provider about symptoms, concerns and any stressors or home/work/ family problems that develop.

Diet changes — It is reasonable to try eliminating foods that may aggravate irritable bowel syndrome although this should be done with the assistance of a healthcare provider. Eliminating foods without assistance can potentially worsen symptoms or cause new problems if important food groups are omitted.

Lactose — Many clinicians recommend temporarily eliminating milk products since lactose intolerance is common and can aggravate irritable bowel syndrome or cause symptoms similar to IBS. The greatest concentration of lactose is found in milk and ice cream although it is present in smaller quantities in yogurt, cottage and other cheeses and any prepared foods that contain these ingredients. All lactose containing products should be eliminated for two weeks. If IBS symptoms improve it is reasonable to continue avoiding lactose. If symptoms do not improve you may resume eating lactose-containing foods. People who avoid lactose should take a calcium supplement that contains at least 1000 mg of calcium and 800 IU of vitamin D.

Foods that cause gas —

Several foods are only partially digested in the small intestines. When they reach the colon (large intestine) further digestion takes place which may cause gas and cramps. Eliminating these foods temporarily is reasonable if gas or bloating is bothersome.

Legumes	Beans
Cruciferous vegetables	Cabbage, Brussels sprouts, cauliflower and broccoli
Other foods:	Onions, celery, carrots, raisins, bananas, apricots, prunes, sprouts and wheat

Foods that are easier for patients with IBS

Water, Ginger Ale, Sprite,	Soy milk or rice milk	Soy or rice based products.
Plain pasta, plain noodles, white rice. No sauces or gravies	Potato: boiled or baked. No French Fries	Breads: French, Italian, whole white, English muffins, and white rolls
Plain fish, plain chicken, plain turkey, or plain ham	Eggs: soft-boiled, poached	Cereals: Plain Cornflakes
Salads: lettuce, hard-boiled egg slices	Oil and vinegar dressing	Margarine, jams, jellies, peanut butter
Applesauce, cantaloupe, watermelon, honeydew melon	Rice Krispies, Corn/Rice Chex, Cheerios	Dry or with soymilk or rice milk

Increasing dietary fiber

Increasing dietary fiber (either by adding certain foods to the diet or using fiber supplements) can relieve symptoms in some people with IBS, particularly if you have constipation.

Occasional Medication

Pharmacologic therapy is best used in IBS patients with moderate to severe symptoms refractory (which do not respond) to sleep, exercise, counselling and diet modifications. Therapy usually focuses on the most bothersome symptom, as medications on the market don't globally treat all symptoms of IBS. Some patients require occasional use of medicines during challenging and stressful times, like test or exam cycles. Others require medicines considered preventive in addition to those just mentioned.

Anticholinergic/Antispasmodic Agents: These include Levsin (*Hyoscyamine*) Bentyl (*Dicyclomine*), and Librax (*Chlordiazepoxide / Clidinium*). These drugs relax the tone or contractile nature of the bowel therefore reducing cramps and pain. While there are several drugs few of them have studies to support their efficacy in IBS over placebo. They are commonly used with sedation, dry mouth, dizziness and constipation being possible side effects.

Antidiarrheal agents: In IBS with diarrhea drugs like Imodium (*Loperamide*) and Lomotil (*Diphenoxylate/ Atropine*) can decrease bowel movement frequency improve loose stool form and increase sphincter tone. These may help persons with diarrhea, urgency and fecal soiling. Abdominal pain is not usually helped with these drugs.

Psychotropic Medications:

The reasons for using this class of drugs in IBS may relate to several factors such as the effects these drugs have on gut motility and pain sensation as well as the prominent existence of IBS with psychological distress symptoms (depressed mood, worry, "stress", fatigue, poor concentration, etc.). Among the antidepressants the tricyclic family drugs Elavil (*Amitriptyline*) and Norpramine (*Desipramine*) have been shown in studies to be very effective in patients with IBS for treatment of abdominal pain, bowel movement frequency and stool consistency. Effective doses are usually less than that use for mood enhancement and are taken nightly as a preventive therapy. Selective Serotonin Reuptake Inhibitors like Paxil, Prozac, Zoloft and Lexapro are not used for their influences on pain and bowel regulation but more so for the psychotropic (mood enhancing) effects on the IBS patient.

Novel Serotonin Agents: The prominent role of serotonin in GI motility has led to development of novel serotonin agents such as Lotronex (*Alosetron*) and Zelnorm (*Tegaserod*) for women with IBS with diarrhea and IBS with constipation respectively. While these drugs benefited many recently they have been associated with life threatening events have been pulled from common distribution and are now only available through specialists enrolled in the restricted use program.

Gas Reducing Agents: *Simethicone* (Gas-X, Mylanta Gas, Phazyme) is a foaming agent that joins smaller gas bubbles in the stomach so they can be “belched away”. Little evidence supports its efficacy for intestinal gas. Activated charcoal caps (Charco Caps, Charcoal Plus) may provide relief of gas in the colon. There are a few studies to support these product’s claims. Beano tablets are the enzyme alpha- galactosides which breaks-down the sugar in beans and many vegetables. It has no effect of gas caused by lactose or fiber.

Herbal Remedies:

While studies are lacking there is anecdotal evidence to support the use of teas and oils/ extracts from fennel and peppermint for IBS symptoms. Fennel tea is reportedly good for prevention and treatment of symptoms of bloating and gas, purporting to “relax the gut”. Peppermint oil capsules theoretically help abdominal pain, spasm and cramps. Ginger has been a time-honored remedy for nausea in ginger extracts. Probiotics like (Culturelle) are receiving a lot of attention from homeopathic and allopathic medical (gastroenterology) specialists alike. These caps contain live (good) enteric bacteria and are recommended to IBS patients as a preventive treatment.

Psychosocial therapies —

Stress and anxiety can worsen irritable bowel syndrome in some people. The best approach for reducing stress and anxiety depends upon your situation and the severity of your symptoms. Have an open discussion with your clinician about the possible role that stress and anxiety could be having on your symptoms and together decide upon the best course of action.

CONCLUSION

IBS is a common and chronic disorder characterized by exacerbations and remissions, which presents with symptoms of abdominal pain and/or discomfort and altered bowel habits. It has a chronic relapsing course and can overlap other functional GI disorders (e.g. dyspepsia) and psychiatric disorders (e.g. depression and anxiety). The life of a college student with IBS offers

a number of challenges of controlling symptoms. Your days are filled with physical and emotional stress, dietary and social “indiscretions” and sleep deprivation. Consider the lifestyle choices you make that influence your symptoms. Medications alone are not likely to make things better if you continue a routine unfriendly to IBS.

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