



What is Irritable Bowel Syndrome (IBS)? IBS is a functional disorder of the digestive system; that is, it is an abnormality in the way the gut normally functions, but does not have a known specific structural or biochemical alteration. It is sometimes referred to as spastic colon, mucous colitis, spastic colitis, nervous stomach, or irritable colon. Approximately 10-15% of Americans suffer with this disorder, and it is the most common diagnosis made by gastroenterologists. Patients experience a variety of symptoms, particularly abdominal discomfort and a modification of bowel habits. Some people experience constipation, others experience diarrhea, still others experience alternating constipation and diarrhea. Other symptoms include abdominal pain or cramping, a bloated feeling, gas (flatulence), and mucus in the stool.

Causes and triggers? The exact causes of IBS are not known. The walls of the intestines are lined with layers of muscle that contract and relax as they move food from one's stomach through the intestinal tract to the rectum. However, people with IBS appear to have a disturbance in the interaction between the brain, the autonomic nervous system, and the musculature of the gut, resulting in too much or too little motility.

IBS triggers are:

Stress - Appears to be worsened in patients under stress.

Foods - People with a high fat intake or those who eat greasy foods often have more problems with IBS. Spicy foods can also trigger IBS in some people.

Beverages - Alcohol and caffeine can worsen symptoms.

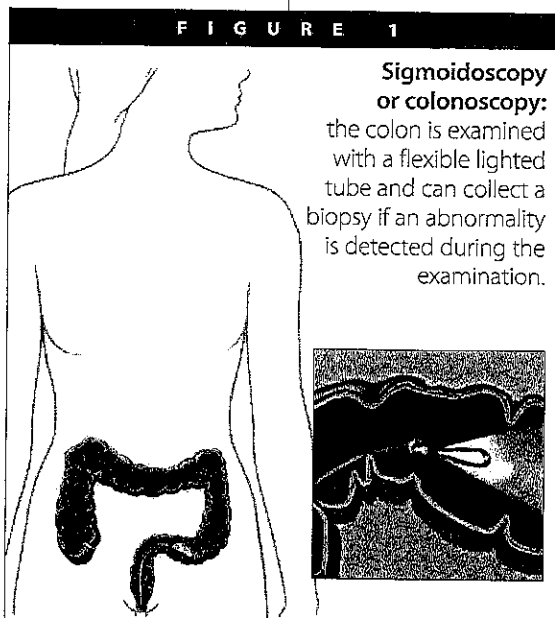
How is IBS diagnosed? A diagnosis of IBS is typically determined by excluding other conditions first. Physicians look for certain signs such as blood in the stool, evidence of infection, weight loss, or anemia. Your physician will obtain a medical history and conduct a physical exam and may recommend several tests to help determine the cause of discomfort.

These tests are sometimes used to determine a diagnosis:

Blood tests - These tests can help exclude certain disorders, such as celiac disease (sprue) which is a sensitivity to wheat protein that may cause symptoms like those of IBS.

Lactose intolerance tests - Lactase is an enzyme that helps digest the sugar in dairy foods (lactose). Patients who lack this enzyme have problems similar to those involved in IBS.

FIGURE 1



Sigmoidoscopy or colonoscopy: the colon is examined with a flexible lighted tube and can collect a biopsy if an abnormality is detected during the examination.



Sigmoidoscope

Flexible sigmoidoscopy or colonoscopy - These tests examine the colon with a flexible lighted tube (Figure 1). A biopsy may be taken to exclude disorders that can be detected microscopically by a surgical pathologist, preferably one with subspecialty training in gastrointestinal pathology.

How can IBS be treated? The goal of treatment is elimination of symptoms. For patients complaining of constipation, their symptoms get better if they try a fiber supplement that helps move their bowels more regularly. Interestingly, if the problem is diarrhea, the addition of fiber soaks up extra fluid in the intestines and slows down

SEE REVERSE SIDE



the movements. Anti-spasmodic medication is helpful for patients enduring lots of abdominal cramping. If symptoms include pain and depression, concurrent therapy using Selective Serotonin Reuptake Inhibitors (SSRI) help relieve both emotional and intestinal symptoms.

Over-the-counter medications that help control diarrhea may be beneficial. Significant bloating and gas may be improved by eliminating high gas-causing foods such as carbonated beverages and raw fruits and vegetables. Healthy practices like eating at regular times and drinking plenty of liquids can help.

In addition to improving diet and possibly using medications, implementing stress reduction techniques like regular exercise, massage, and other techniques can help you cope.

Managing IBS? The critical element in living with IBS is to realize there will be alternating periods of increased and decreased symptoms. There is no known cure for the condition. Patients must try to manage the symptoms and will have some days that are better than others. On days when patients are under more stress, they may have more trouble with their IBS.

Keeping a diary of symptoms, daily diet, and your stress level will provide a pattern for recognizing the types of foods and stressful events that affect you.

 ADDITIONAL RESOURCES:

About IBS:

www.aboutibs.org

National Institute of Diabetes and Digestive and Kidney Diseases:

www.digestive.niddk.nih.gov/ddiseases/pubs/ibs/index.htm

Web MD:

www.webmd.com/hw/irritable_bowel_syndrome/hw117853.aspational

Cancer Institute:

1.800.4.CANCER / www.cancer.gov

American College of Gastroenterology:

703.820.7400 / www.acg.gi.org/patients



CARIS Dx™

This material is intended for patient education and information only. It does not constitute advice, nor should it be taken to suggest or replace professional medical care from your physician. Your treatment options may vary, depending upon medical history and current condition. Only your physician and you can determine your best option. Provided to you as a service by Caris Diagnostics. ©2008 Caris Diagnostics, Inc. All rights reserved. (09.08 20M)

Caris Diagnostics (Caris Dx) is a leading provider of the highest quality diagnostic, translational development and pharmaceutical services encompassing anatomic pathology and molecular testing. Caris Dx provides world-class pathology services to physicians who treat patients in the community setting. The company provides academic-caliber medical consults through its industry-leading team of subspecialty fellowship and expert-trained pathologists in gastrointestinal and liver pathology, dermatopathology and hematopathology. Caris Dx provides the highest levels of service to its customers and their patients through its state-of-the-art laboratories; proprietary, advanced clinical and technology solutions; and rigorous quality assurance programs. Through the molecular testing expertise of the Caris Molecular Profiling Institute (Caris MPI) at Caris Dx, the company also offers advanced molecular analyses of patient samples through prognostic testing services and genomic and proteomic profiling to provide critical information to physicians treating cancer and other complex diseases. More than 2,000 physicians nationally use Caris Dx. Formed in 1996, the company is headquartered in Irving, Texas and operates four laboratories: Irving, Texas; Phoenix, Arizona (2 sites); Newton, Massachusetts. Additional information is available at www.carisdx.com.