
DIVERTICULOSIS AND DIVERTICULITIS

To understand diverticulosis, it is helpful to know about the anatomy and function of the intestine. The small intestine is the long, thin segment of bowel that begins at the stomach and ends at the large intestine, or colon. The colon starts in the right lower abdomen and forms a large question mark across the entire abdomen, ending in the rectum. Just above the rectum is the sigmoid (S-shaped) part of the colon. Liquid stool enters the right colon and, as it moves through the colon, is dehydrated so that a formed stool eventually enters the rectum.

The Sigmoid Colon

The sigmoid colon has the specialized job of contracting vigorously to maintain a high pressure. This action regulates the movement of stool into the rectum. And since the sigmoid is a high-pressure part of the colon, it is here that most diverticula occur.

Diverticulosis

Diverticulosis means that there are pockets of projections extending out from the colon. These occur very gradually over a long period of time. They occur along the natural weak points in the bowel wall. The pockets develop because of the pressure exerted within by the contracting colon. As noted earlier, since the sigmoid colon has the highest pressure in the colon, it is here that most diverticula occur. Because of these balloon-like projections, the sigmoid colon often becomes thickened and narrowed. When this happens, significant changes in the bowel function can occur, such as discomfort, diarrhea and/or constipation.

Who Gets Diverticulosis?

Since it takes so long to develop, diverticulosis usually appears later in life. However, it is not uncommon to see this occur in people who are in their 30's. Eventually the colon, especially the sigmoid colon, becomes studded with these pockets. The disorder is mostly one of Western society. It is uncommon in rural Africa and India. The diet in these areas consists of unprocessed foods and grains with a very high fiber content. So, increased fiber ingestion may have great benefit.

Symptoms of Diverticulosis

As diverticula form, few symptoms are noticeable, except perhaps for intermittent spastic discomfort in the left lower abdomen. Usually, there are no symptoms at all. When diverticulosis is far advanced, the lower colon may become very fixed, distorted, and even narrowed. When this occurs, there may be thin or pellet-shaped stools, constipation, and an occasional rush of diarrhea. The problem then becomes a mechanical or structural one, and treatment is more difficult.

Complications of Diverticulosis

It is, perhaps, remarkable that so few people have complications of diverticulosis when compared with the number of people who have the condition. Still, complications do occur, and they can be serious. Diverticulitis is the most common.

-Diverticulitis

Like a balloon, as a diverticulum expands, it develops a thin wall compared with the rest of the colon. The colon is home to many beneficial bacteria---helpful as long as they stay in the colon. However, these bacteria can seep through the thin wall of diverticula and cause infection. This infection around diverticula is called diverticulitis. It can be mild with only slight discomfort in the left lower abdomen, or it can be quite extreme with severe tenderness and fever. Treatment is usually needed for diverticulitis. It requires antibiotics and resting of the bowel by avoiding food or, at times, even liquids. For severe cases, the patient must be hospitalized.

-Bleeding

At times, bleeding can occur from a ruptured blood vessel in diverticula. This may produce a gush of blood from the rectum or, occasionally, darker, mahogany-colored stools when the bleeding is from a diverticulum in the right colon.

-Perforation

This complication is the most uncommon but the most serious. Bacteria escape into the abdomen where peritonitis, or an abscess, can develop. Abdominal surgery usually is required to correct this problem.

Diagnosis of Diverticulitis

The medical history is the physician's most important tool in diagnosing diverticulitis. The physical exam may find tenderness present in the left lower abdomen. A barium enema x-ray usually is required to determine the extent of the disorder. Flexible sigmoidoscopy and colonoscopy are exams performed through the rectum with a lighted, flexible endoscope. These exams view the colon from inside and provide additional information about the problem.

Treatment of Diverticulosis

Diverticulosis may be preventable. As noted, fiber, bran, and roughage should be an important part of the diet. Certain types of fiber, such as wheat bran, retain large quantities of water. This, in turn, provides a bulkier stool. This type of large, soft stool may help decrease the pressure in the bowel over time. Bulking agents are available in drugstores and can be effective. The generic names for some of these products are psyllium and methylcellulose.

Bran and fiber can be found in very palatable forms in many cereals, breads, and other foods. Generally, a daily intake of 20 to 30 grams is recommended, beginning at a young age.

It is known that emotional stress can increase spasms of the colon and, perhaps, result in the formation of diverticula. Stress should be controlled and treated if necessary. Also, medications can be used to decrease spasm in the colon.

Surgery may be needed to remove the diseased portion of the colon when diverticulitis occurs at an early age or when there are recurrent episodes. When surgery is done in a non-emergency situation, a colostomy is usually not needed.

Summary

Diverticulosis is a disorder that may be preventable if treated early in life. At any stage, there is usually effective therapy available. Diverticulitis, a complication of diverticulosis, can be readily diagnosed by the physician, and effective therapy is available. Working with the physician, prevention and treatment programs can be structured to obtain the best results for the patient.

This information is not intended as medical advice and should not be used for diagnosis. The information in these brochures should not be considered a replacement for consultation with a health-care professional. If you have questions or concerns about the information found in these brochures, please contact your health-care provider. We encourage you to use the information and questions in these brochures with your health-care provider(s) as a way of creating a dialogue and partnership about your condition and your treatment.