**Diverticulosis & 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 at 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 or 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 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 30s. 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 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, at times, even liquids. For severe
cased, 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 color 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
drug stores and can be effective. The generic names for some of these products are
psyllium and methycellulose.
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.