

## **Colorectal Diseases and Treatments**

### Colorectal Diseases

Colon and rectal diseases comprise a broad range of conditions and ailments, the severity of which can vary from mildly irritating to life threatening. Research has demonstrated that early screening and treatment of colon and rectal diseases can significantly improve treatment outcomes and survival rates, yet many patients delay or don't seek treatment because of lack of knowledge about their disease and its symptoms or the benefits of early treatment, or are too embarrassed to seek help.

Because the symptoms of different colon and rectal disease can closely resemble those of other such diseases, there is the potential for misdiagnosis and mistreatment. This is a crucial reason why these diseases should be treated by colon and rectal surgeons, experts in the surgical and nonsurgical treatment of colon and rectal problems.

In addition, studies have shown that patients treated by colon and rectal surgeons are more likely to survive colorectal cancer and will pay less for surgical care because of colon and rectal surgeons' advanced training and the high volume of colon and rectal disease surgeries they perform.

Following is an overview of the major colon and rectal diseases and how they are treated:

### Colorectal Cancer

- Colorectal cancer annually strikes about 140,000 people and causes 60,000 deaths, but is potentially curable if detected in its early stages. More than 90 percent of patients are over 40, at which point the risk of contracting the disease doubles every ten years.
- High-risk factors include personal or family history of colorectal cancer, polyps (benign growths that may become cancerous), ulcerative colitis, or cancer of other organs.
- Detection methods include a digital rectal exam (an exam of the rectum by a physician with his or her finger) and a chemical test of the stool for blood. Colorectal cancer can be prevented if polyps are detected and removed through an outpatient colonoscopy (examination of the entire colon), or an endoscopy flexible sigmoidoscopy (examination of the lower large intestine).
- If symptoms such as rectal bleeding and changes in bowel habits appear, a colon and rectal surgeon should be immediately consulted to determine if the patient has colon cancer or another bowel disease, and the patient should be promptly treated as appropriate.
- Surgery is required in nearly all cases of colorectal cancer for a complete cure, which is sometimes accompanied by radiation and chemotherapy. Between 80-90 percent of colorectal cancer patients are restored to normal health if the cancer is detected and treated in the early stages, but the cure rate drops to 50 percent if treatment does not begin until later disease stages.

### Ulcerative Colitis

- Ulcerative colitis is an inflammatory disease of the large intestine (the colon) that affects about 500,000 people, predominantly under 30, and can eventually increase the risk of developing large bowel cancer.
- Certain symptoms may signal that a person has ulcerative colitis. They can include bleeding with bowel movements, abdominal pain or bloating, constipation, diarrhea, or a combination. To confirm the diagnosis, testing is done, which may include a

sigmoidoscopic exam, using a flexible instrument to visualize the rectum and lower colon; a total colonoscopy, allowing visualization of the entire colon; or a biopsy of the colon lining.

- Although no medical cure exists for ulcerative colitis, a physician can prescribe medicine to relieve symptoms. Surgery may be recommended for chronic cases or when medical therapy fails. One of these surgeries is a proctocolectomy, which removes the entire colon, rectum and anus, with creation of a Brooke ileostomy (bringing the end of the bowel through the abdomen wall, where an appliance is constantly used to collect waste).
- The newest surgery for ulcerative colitis, the ileoanal procedure, removes the colon and rectum, which is replaced by a small bowel pouch to collect waste, and preserves the anal canal. This procedure almost eliminates the risk of recurrent ulcerative colitis and allows a normal route of evacuation, but in a small percentage of patients, the pouch fails to function properly and a permanent ileostomy (connecting the last part of the small intestine to an opening in the abdominal wall) is needed.

### Crohn's Disease

- Crohn's disease is a chronic inflammatory condition primarily involving the intestinal tract that predominantly affects young adults between 16 and 40 living in northern, industrialized areas, such as the United States and northern Europe. About 20 percent of the estimated 500,000 people with Crohn's have a family member with the disease.
- Crohn's is diagnosed through a physical examination, review of symptoms and family history. In addition, testing may include barium x-rays of the upper and lower intestinal tract, a sigmoidoscopy or colonoscopy, which allow a direct examination of the colon with a lighted tube inserted through the anus, and intestinal biopsies. The cause and how to prevent Crohn's is unknown.
- Medical treatment with anti-inflammatory or immunosuppressive medication to control symptoms is the preferred initial form of therapy. However, surgery to remove the diseased segment of the bowel and join the healthy bowel ends together, called resection and anastomosis, is recommended in more advanced or complicated cases.
- Surgery is eventually required in up to three-fourths of all Crohn's patients and is best conducted by a colon and rectal surgeon, who is skilled and experienced in Crohn's disease management. Surgery often provides long-term relief from symptoms and limits or eliminates the need for medication.

### Irritable Bowel Syndrome (IBS)

- Irritable bowel syndrome is a common intestinal muscle functioning disorder involving constipation, diarrhea, or a combination, accompanied by pain, bloating and cramps, that affects up to 30 percent of Americans at some point during their lives.
- To diagnose, a flexible sigmoidoscopic examination or colonoscopy (allowing visualization of the colon and intestine), a hemmocult test to detect hidden blood in the stool, an x-ray of the lower intestines and/or a psychological evaluation are used to rule out other diseases or conditions, such as cancer, diverticulitis, inflammation of the intestines, or depression.
- Because the symptoms of IBS so closely resemble those of other, sometimes life-threatening diseases, such as colon cancer, Crohn's disease or ulcerative colitis, it is imperative to seek medical attention so that these disorders may be ruled out.
- In some IBS patients, mental health counseling and stress reduction can help relieve symptoms. In others, increasing the amount of liquids and bulk-forming foods in the diet to soften stools may provide relief. If dietary change isn't sufficient, the physician may prescribe medications that help intestinal muscle contractions return to normal.

## Diverticular Disease

- Diverticulosis, which afflicts about 50 percent of Americans by age 60 and nearly all by age 80, is the presence of pockets (called diverticula) in the colon wall. Diverticulitis is inflammation or infection of these pockets.
- With routine colon and rectal examinations, diverticula can be detected and diverticular disease may be prevented. A colon and rectal surgeon can best differentiate the disease from other bowel diseases and determine an individual's treatment plan.
- Diverticulosis and diverticular disease are usually treated with a high-fiber, low-fat diet and occasionally by medications to control pain, cramps and changes in bowel habits. Diverticulitis treatment requires antibiotics, dietary restrictions and possibly stool softeners. Some patients need to be hospitalized to adequately treat acute diverticulitis.
- Surgery to remove part of the colon is used only with recurrent episodes, complications or severe attacks with little response to medication. Complete recovery from surgery can be expected, with normal bowel function resuming soon after surgery.

## Hemorrhoids

- Hemorrhoids are one of the most common colorectal ailments, with millions of Americans currently suffering from them. More than half the population will develop symptomatic hemorrhoids, usually after age 30.
- External hemorrhoids, which develop near the anus, are distinguished as a hard, sensitive lump, which will painfully swell if a blood clot develops. Internal hemorrhoids, which develop within the anus beneath the lining, are distinguished by painless bleeding and protrusion during bowel movements.
- Factors that may contribute to and be considered in the prevention of hemorrhoids are: faulty bowel function due to overuse of laxatives or enemas, straining during bowel movements, spending long periods of time on the toilet, chronic constipation or diarrhea, pregnancy and heredity.
- Mild symptoms are usually controlled by increasing the amount of fiber and liquids in the diet to eliminate difficult bowel movements and straining. For severe cases, a physician may remove the hemorrhoid by ligation, ('cutting it off' with a rubber band); injection and coagulation, which cause it to shrivel up; or a hemorrhoidectomy to surgically remove it.

## Anal Fissure

- An anal fissure is a small tear in the lining of the anus caused by a hard, dry bowel movement, diarrhea or inflammation of the anorectal area. It's a common problem that affects a majority of the population at some point and is normally diagnosed upon examination following pain, bleeding and/or itching of the outer anus area.
- Up to 90% of all fissures heal by themselves with non-operative treatment, using stool softeners, avoidance of constipation and/or soaking in warm water (sitz bath).
- If a fissure doesn't heal due to scarring or muscle spasm of the internal anal sphincter muscle, surgery to reduce the pressure in the anal canal may be needed. In the case of surgery, pain often disappears after a few days and complete healing takes a few weeks, with more than 90 percent of patients never experiencing the problem again.

## Bowel Incontinence

- Bowel incontinence is the impaired ability to control gas or stool release due to a severed or weakened anal muscle caused by childbirth, old age or other nerve or muscle injury.
- Diagnosis of the extent of impairment is done through examination of the affected area, frequently followed by a test to record pressure as a patient tightens the anal muscles (manometry), and an ultrasound probe to visualize muscle injury.
- Mild incontinence can be addressed by dietary changes, the use of constipation medicine and simple home exercises to strengthen muscles. In other cases, biofeedback may be used to help patients sense when stool is ready to be evacuated and to strengthen weak muscles, or anal muscles may be repaired with surgery. Finally, there are also new treatment options which include injection of a bulking agent in the anus or placement of a nerve stimulator to help control bowel movements.