

Proctitis

National Digestive Diseases Information Clearinghouse



U.S. Department
of Health and
Human Services

NATIONAL
INSTITUTES
OF HEALTH

NIDDK
NATIONAL INSTITUTE OF
DIABETES AND DIGESTIVE
AND KIDNEY DISEASES

PgH Palmetto Gastro
& Hepatology
Specialized Digestive Care

PALMETTO
GASTROENTEROLOGY
& HEPATOLOGY

What is proctitis?

Proctitis is inflammation of the lining of the rectum, the lower end of the large intestine leading to the anus. The large intestine and anus are part of the gastrointestinal (GI) tract. The GI tract is a series of hollow organs joined in a long, twisting tube from the mouth to the anus. The movement of muscles in the GI tract, along with the release of hormones and enzymes, allows for the digestion of food. With proctitis, inflammation of the rectal lining—called the rectal mucosa—is uncomfortable and sometimes painful. The condition may lead to bleeding or mucous discharge from the rectum, among other symptoms.

What causes proctitis?

Proctitis has many causes, including acute, or sudden and short-term, and chronic, or long-lasting, conditions. Among the causes are the following:

- **Sexually transmitted diseases (STDs).** STDs that can be passed when a person is receiving anal sex are a common cause of proctitis. Common STD infections that can cause proctitis include gonorrhea, chlamydia, syphilis, and herpes. Herpes-induced proctitis may be particularly severe in people who are also infected with the HIV virus.
- **Non-STD infections.** Infections that are not sexually transmitted also can cause proctitis. *Salmonella* and *Shigella* are examples of foodborne bacteria that can cause proctitis. Streptococcal proctitis sometimes occurs in children who have strep throat.
- **Anorectal trauma.** Proctitis can be caused by trauma to the anorectal area—which includes the rectum and anus—from anal sex or the insertion of objects or harmful substances into the rectum, including the chemicals in some enemas.
- **Ulcerative colitis and Crohn's disease.** Two forms of inflammatory bowel disease (IBD)—ulcerative colitis and Crohn's disease—can cause proctitis. Ulcerative colitis causes irritation and ulcers, also called sores, in the inner lining of the colon—part of the large intestine—and rectum. Crohn's disease usually causes irritation in the lower small intestine—also called the ileum—or the colon, but it can affect any part of the GI tract.

- **Radiation therapy.** People who have had radiation therapy that targets the pelvic area also may develop proctitis. Examples of those at risk are people with rectal, ovarian, or prostate cancer who have received radiation treatment directed to those areas. Symptoms of radiation proctitis, most commonly rectal bleeding, will typically occur within 6 weeks after beginning radiation therapy or more than 9 months after its completion.
- **Antibiotics.** Use of antibiotics may be associated with proctitis in some people. While meant to kill infection-causing bacteria, antibiotics can also kill nonharmful, or commensal, bacteria in the GI tract. The loss of commensal bacteria can then allow other harmful bacteria known as *Clostridium difficile* to cause an infection in the colon and rectum.

What are the symptoms of proctitis?

Tenesmus—an uncomfortable and frequent urge to have a bowel movement—is one of the most common symptoms of proctitis. Other symptoms may include

- bloody bowel movements
- rectal bleeding
- a feeling of rectal fullness
- anal or rectal pain
- crampy abdominal pain
- rectal discharge of mucus or pus
- diarrhea or frequent passage of loose or liquid stools

How is proctitis diagnosed?

To diagnose proctitis, a health care provider will take a complete medical history and do a physical exam. The health care provider will ask the patient about symptoms, current and past medical conditions, family history, and sexual behavior that increases the risk of STD-induced proctitis. The physical exam will include an assessment of the patient's vital signs, an abdominal exam, and a rectal exam.

Based on the patient's physical exam, symptoms, and other medical information, the doctor will decide which lab tests and diagnostic tests are needed. Lab tests may include blood tests such as a complete blood count to evaluate for blood loss or infection, stool tests to isolate and identify bacteria that may cause disease, and an STD screening. The doctor also may use one of the following diagnostic tests:

- **Rectal culture.** A cotton swab is inserted into the rectum to obtain a sample that can be used in tests that isolate and identify organisms that may cause disease.
- **Anoscopy.** This test allows examination of the anal canal and lower rectum by opening the anus using a special instrument called an anoscope.
- **Flexible sigmoidoscopy and colonoscopy.** These tests are used to help diagnose Crohn's disease. The tests are similar, but colonoscopy is used to view the entire colon and rectum, while flexible sigmoidoscopy is used to view just the lower colon and rectum. For both tests, a health care provider will provide written bowel prep instructions to follow at home before the test. The person

may be asked to follow a clear liquid diet for 1 to 3 days before the test. A laxative may be required the night before the test. One or more enemas may be required the night before and about 2 hours before the test.

For either test, the person will lie on a table while the doctor inserts a flexible tube into the anus. A small camera on the tube sends a video image of the intestinal lining to a computer screen. The doctor can see inflammation, bleeding, or ulcers on the colon wall. The doctor may also perform a biopsy by snipping a bit of tissue from the intestinal lining. The person will not feel the biopsy. The doctor will look at the tissue with a microscope to confirm the diagnosis. In most cases, a light sedative, and possibly pain medication, helps people relax during a colonoscopy.

Cramping or bloating may occur during the first hour after the test. Driving is not permitted for 24 hours after a colonoscopy to allow the sedative time to wear off. Before the appointment, a person should make plans for a ride home. Full recovery is expected by the next day.

The above diagnostic tests may be performed at a hospital or outpatient center by a gastroenterologist—a doctor who specializes in digestive diseases.

How is proctitis treated?

Treatment of proctitis depends on its cause. The goal of treatment is to reduce inflammation, control symptoms, and eliminate infection, if it is present. Only a doctor can determine the cause of proctitis and the best course of treatment. With proper medical attention, proctitis can be successfully treated.

Proctitis from Infection

If lab tests confirm that an STD or non-STD infection is present, medication is prescribed based on the type of infection found. Antibiotics are prescribed to kill bacteria; antiviral medications are prescribed to treat viruses. Although some STD viruses cannot be eliminated, antivirals can control their symptoms.

Proctitis from Other Causes

If antibiotic use triggered proctitis, the doctor may prescribe a different antibiotic designed to destroy the harmful bacteria that have developed in the intestines.

If proctitis is caused by anorectal trauma, the activity causing the inflammation should be stopped. Healing usually occurs in 4 to 6 weeks. The doctor may recommend over-the-counter medications such as antidiarrheals and those used for pain relief, such as aspirin and ibuprofen.

Treatment of radiation proctitis is based on symptoms. Radiation proctitis causing only mild symptoms such as occasional bleeding or tenesmus may heal without treatment. For people with persistent or severe bleeding, thermal therapy may be used to stop

bleeding and inflammation. Thermal therapy is done during flexible sigmoidoscopy or colonoscopy and targets the rectal lining with a heat probe, electric current, or laser. Argon plasma coagulation is the most common thermal therapy used to control bleeding in radiation proctitis. In many cases, several treatments are required. Obstruction that results from a stricture—a narrowing of the rectum—caused by radiation proctitis may be treated with stool softeners in mild cases. In people with narrower strictures, dilation to enlarge the narrow area may be required. Sucralfate, 5-aminosalicylic acid—known as 5-ASA—or corticosteroid enemas can also be used to ease pain and reduce inflammation from radiation proctitis, although their effectiveness is limited.

When a chronic IBD such as ulcerative colitis or Crohn's disease causes proctitis, treatment aims to reduce inflammation, control symptoms, and induce and maintain remission—a period when the person is symptom-free. Treatment depends on the extent and severity of the disease.

Anti-inflammation medications. Mild proctitis can often be effectively treated with topical mesalamine, either suppositories or enemas.

Some people with IBD and proctitis cannot tolerate—or may have an incomplete response to—rectal therapy with 5-ASA suppositories or enemas. For these people, the doctor may prescribe oral medications alone or in combination with rectal therapy. Oral medications commonly used for proctitis contain salicylate. These include sulfasalazine- or mesalamine-containing medications, such as Asacol, Dipentum, or Pentasa. Possible side effects of oral administration of sulfasalazine- or mesalamine-containing medications include nausea, vomiting, heartburn, diarrhea, and headache.

Improvement in symptoms, including a decrease in bleeding, can occur within a few days, although complete healing requires 4 to 6 weeks of therapy.

Cortisone or steroids. These medications, also called corticosteroids, are effective at reducing inflammation. Prednisone and budesonide are generic names of two medications in this group. Corticosteroids for proctitis may be taken in pill, suppository, or enema form. When symptoms are at their worst, corticosteroids are usually prescribed in a large dose. The dosage is then gradually lowered once symptoms are controlled. Corticosteroids can cause serious side effects, including greater susceptibility to infection and osteoporosis, or weakening of the bones.

Immune system suppressors. Medications that suppress the immune system—called immunosuppressive medications—are also used to treat proctitis. The most commonly prescribed medication is 6-mercaptopurine or a related medication, azathioprine. Immunosuppressive medications work by blocking the immune reaction that contributes to inflammation. These medications may cause side effects such as nausea, vomiting, and diarrhea and may lower a person's resistance to infection. Some patients are treated with a combination of corticosteroids and immunosuppressive medications. Some studies suggest that immunosuppressive medications may enhance the effectiveness of corticosteroids.

Infliximab (Remicade). Researchers have found that high levels of a protein produced by the immune system, called tumor necrosis factor (TNF), are present in people with Crohn's disease. Infliximab is the first of a group of medications that bind to TNF substances to block the body's inflammation

response. The U.S. Food and Drug Administration approved the medication for the treatment of moderate to severe Crohn's disease that does not respond to standard therapies—mesalamine substances, corticosteroids, immunosuppressive medications—and for the treatment of open, draining fistulas. The medication is also given to people who have Crohn's disease with proctitis. Some studies suggest that infliximab may enhance the effectiveness of immunosuppressive medications.

Bacterial infection can occur with flare-ups of ulcerative colitis or Crohn's disease. Antibiotics may also be used to treat flare-ups in people with IBD and proctitis.

For more information about the treatment of IBD, see the National Digestive Diseases Information Clearinghouse (NDDIC) fact sheets *Ulcerative Colitis* and *Crohn's Disease*, available at www.digestive.niddk.nih.gov.

Eating, Diet, and Nutrition

Drinking plenty of fluids is important when diarrhea or frequent passage of loose or liquid stools occurs.

Avoiding caffeine and foods that are greasy, high in fiber, or sweet may lessen diarrhea symptoms. Some people also have problems digesting lactose—the sugar found in milk and milk products—during or after a bout of diarrhea. Yogurt, which has less lactose than milk, is often better tolerated. Yogurt with active, live bacterial cultures may even help people recover from diarrhea more quickly.

If diarrhea symptoms improve, soft, bland foods can be added to the diet, including bananas, plain rice, boiled potatoes, toast, crackers, cooked carrots, and baked chicken without the skin or fat. If the diarrhea stops, a normal diet may be resumed if tolerated.

What if proctitis is not treated?

Proctitis that is not treated or does not respond to treatment may lead to complications, including

- severe bleeding and anemia—a condition in which red blood cells are fewer or smaller than normal, which means less oxygen is carried to the body's cells
- abscesses—painful, swollen, pus-filled areas caused by infection
- ulcers on the intestinal lining
- fistulas—abnormal connections between two parts inside the body

People with proctitis symptoms need medical attention. If diagnosed with proctitis, patients should take all medications as prescribed and see their doctor for a follow-up appointment to be sure the cause of the inflammation has been treated successfully.

Can proctitis be prevented?

People who receive anal sex can avoid getting STD-related proctitis by having their partner use a condom. If anorectal trauma caused proctitis, stopping the activity that triggered inflammation often will stop the inflammation and prevent recurrence.

Other causes of proctitis cannot always be prevented. However, their symptoms can be treated by a doctor.

Points to Remember

- Proctitis is inflammation of the lining of the rectum, the lower end of the large intestine leading to the anus.
- Common causes of proctitis are sexually transmitted diseases (STDs), non-STD infections, anorectal trauma, ulcerative colitis and Crohn's disease, radiation therapy, and antibiotic use.
- Treatment of proctitis depends on its cause; the goal of treatment is to reduce inflammation, control symptoms, and eliminate infection, if present.
- With proper medical attention, proctitis can be successfully treated.
- If infection is present with proctitis, antibiotics can be used to kill bacteria and antiviral medications can treat viral infections.
- People who receive anal sex can avoid getting STD-related proctitis by having their partner use a condom.
- If anorectal trauma caused proctitis, stopping the activity that triggered inflammation often will stop the inflammation and prevent recurrence.
- Some causes of proctitis cannot always be prevented, but their symptoms can be treated by a doctor.

Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports research into many kinds of digestive disorders, including proctitis and two of its causes—ulcerative colitis and Crohn's disease. The focus of research is as diverse as the array of health conditions that cause proctitis.

For example, some research targets proctitis resulting from STDs. One study examined the association between proctitis caused by lymphogranuloma venereum—a form of chlamydia—and enemas and high-risk sex.

Other research is exploring treatment of radiation-induced proctitis through

- enema therapy with rebamipide, a medication that may protect the rectal lining
- hyperbaric oxygen therapy, which increases the number of blood vessels and stimulates formation of collagen—the main protein in connective tissue

Participants in clinical trials can play a more active role in their own health care, gain access to new research treatments before they are widely available, and help others by contributing to medical research. For information about current studies, visit www.ClinicalTrials.gov.

For More Information

American Society of Colon and Rectal Surgeons

85 West Algonquin Road, Suite 550
Arlington Heights, IL 60005
Phone: 847-290-9184
Fax: 847-290-9203
Email: ascrs@fascrs.org
Internet: www.fascrs.org

Centers for Disease Control and Prevention

1600 Clifton Road
Atlanta, GA 30333
Phone: 1-800-CDC-INFO
(1-800-232-4636)
Fax: 404-371-5488
Email: cdcinfo@cdc.gov
Internet: www.cdc.gov/std

Crohn's & Colitis Foundation of America

386 Park Avenue South, 17th Floor
New York, NY 10016
Phone: 1-800-932-2423
Email: info@ccfa.org
Internet: www.ccfa.org

Acknowledgments

Publications produced by the Clearinghouse are carefully reviewed by both NIDDK scientists and outside experts. This fact sheet was reviewed by Brooks Cash, M.D., and Lindsay Jones, M.D., National Naval Medical Center, Bethesda, MD.

You may also find additional information about this topic by visiting MedlinePlus at www.medlineplus.gov.

This publication may contain information about medications. When prepared, this publication included the most current information available. For updates or for questions about any medications, contact the U.S. Food and Drug Administration toll-free at 1-888-INFO-FDA (1-888-463-6332) or visit www.fda.gov. Consult your health care provider for more information.

The U.S. Government does not endorse or favor any specific commercial product or company. Trade, proprietary, or company names appearing in this document are used only because they are considered necessary in the context of the information provided. If a product is not mentioned, the omission does not mean or imply that the product is unsatisfactory.

National Digestive Diseases Information Clearinghouse

2 Information Way
Bethesda, MD 20892-3570
Phone: 1-800-891-5389
TTY: 1-866-569-1162
Fax: 703-738-4929
Email: nddic@info.niddk.nih.gov
Internet: www.digestive.niddk.nih.gov

The National Digestive Diseases Information Clearinghouse (NDDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health of the U.S. Department of Health and Human Services. Established in 1980, the Clearinghouse provides information about digestive diseases to people with digestive disorders and to their families, health care professionals, and the public. The NDDIC answers inquiries, develops and distributes publications, and works closely with professional and patient organizations and Government agencies to coordinate resources about digestive diseases.

This publication is not copyrighted. The Clearinghouse encourages users of this publication to duplicate and distribute as many copies as desired.

This publication is available at
www.digestive.niddk.nih.gov.



U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES
National Institutes of Health

NIH Publication No. 11-4627
July 2011

