

Toronto Anorectal Program- Information for Patients

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ANORECTAL CONDITIONS

We treat a variety of anorectal conditions, including hemorrhoids, anal fistula, anal fissure, as well as other anorectal problems.

Hemorrhoids

What are hemorrhoids?

Hemorrhoids (also known as "piles") are caused by enlarged blood vessels that cause small swellings, either inside or outside your rectum. The blood vessels become enlarged when subjected to pressure, for example, when straining to pass stools when constipated or during childbirth.

Who suffers from hemorrhoids?

Hemorrhoids are particularly common among pregnant women, because the pressure of the baby, as well as hormonal changes, can cause the blood vessels to enlarge. Hemorrhoids are also more likely to occur if you are overweight, constipated or elderly. Hemorrhoids are usually a minor and temporary inconvenience. However, if symptoms are persistent your doctor should be able to offer advice and medication to help.

What are the symptoms of hemorrhoids?

The main symptoms of hemorrhoids are swelling and irritation, in or around your rectum. Hemorrhoids are painful and sometimes there is bleeding when you pass a stool. Internal hemorrhoids usually cause less severe symptoms. Ordinarily they cannot be seen or touched, but they can cause pain and bleeding during a bowel movement. Fresh, bright red blood on the toilet paper is a sign of an internal hemorrhoid. External hemorrhoids tend to be more uncomfortable and are more troublesome. These too can bleed, usually when rubbed by toilet paper or tight-fitting underwear. Sometimes a blood clot can form into a hemorrhoid (thrombosed piles). This will feel like a painful lump, about the size of a grape, sticking out through your rectum.

Should I see a doctor?

In most cases, hemorrhoids are nothing more than a temporary problem. If they are uncomfortable you may want to ask your pharmacist for a hemorrhoid cream, ointment or suppository (tablets that you push gently into your rectum). You can also take steps to reduce the chance of a recurrence (see Self-Help below). If you notice dark blood mixed with your stools, experience pain or suffer excessive irritation or mucus leakage, you should make an appointment with your doctor. Your doctor will examine you and may want to examine inside your rectum. Although this may seem embarrassing, it is very important to exclude any serious illnesses such as cancer.

How are hemorrhoids treated?

Most hemorrhoids get better within a few days without any specific treatment. Simple measures such as bathing in warm water, applying ice packs, or using a hemorrhoid cream, ointment or suppository (Preparation H) can relieve some of the discomfort. For serious or prolonged irritation, it may be necessary for your doctor to prescribe a treatment. Prescribed topical medications are highly effective and often contain a combination of a local anesthetic and a steroid to treat pain, inflammation and itching. You should use your treatment as directed by your doctor and make another appointment if your symptoms last for more than seven days. Surgical removal might be warranted in the case of recurring or very bothersome hemorrhoids.

Self-help measures

- Try to avoid becoming constipated by eating plenty of fiber, including fresh fruit, vegetables, whole wheat bread and cereals.
- Drink plenty of fluids to prevent constipation. Drink more during hot weather or if you are exercising.
- Try to exercise regularly. This will also help to prevent constipation and ease the pressure on the hemorrhoids.
- Avoid using hard toilet paper, use soft paper or medicated wipes instead.
- Reduce discomfort by washing gently with warm water or sitting in a tub of warm water for 10 minutes several times a day. Using an ice pack can also help reduce the pain and swelling.
- Do not scratch the area as this will make it more painful and uncomfortable.
- Wear loose fitting underwear made from natural materials such as cotton.
- If you are overweight, try to lose weight.
- Do not hold back bowel movements and take your time when you do go.

Anal fistula

WHAT IS AN ANAL FISTULA?

An anal fistula (also commonly called fistula-in-ano) is frequently the result of a previous or current anal abscess. This occurs in up to 50% of patients with abscesses. Normal anatomy includes small glands just inside the anus. The fistula is the tunnel that forms under the skin and connects the clogged infected glands to an abscess. A fistula can be present with or without an abscess and may connect just to the skin of the buttocks near the anal opening.

CLASSIFICATION

Anal fistulas are classified by their relationship to parts of the anal sphincter complex (the muscles that allow us to control our stool). They are classified as intersphincteric, transsphincteric, suprasphincteric and extrasphincteric. The intersphincteric is the most common and the extrasphincteric is the least common. These classifications are important in helping the surgeon make treatment decisions.

SYMPTOMS

Patients with fistulas commonly have history of a previously drained anal abscess. Anorectal pain, drainage from the perianal skin, irritation of the perianal skin, and sometimes rectal bleeding, can be presenting symptoms of a fistula-in-ano.

TREATMENT OF ANAL FISTULA

Currently, there is no medical treatment available for this problem and surgery is almost always necessary to cure an anal fistula. If the fistula is straightforward (involving minimal sphincter muscle), a fistulotomy may be performed. This procedure involves unroofing the tract, thereby connecting the internal opening within the anal canal to the external opening and creating a groove that will heal from the inside out.

The surgery may be performed at the same time as drainage of an abscess, although sometimes the fistula doesn't appear until weeks or years after the initial drainage. Fistulotomy is a long-standing treatment with a high success rate (92-97%). This high success rate must be balanced, however, with the potential changes to a patient's continence (ability to control stool), as the anal sphincter muscle is divided in a fistulotomy, the greater the risk of changes in continence. Therefore, the surgeon must assess whether a fistulotomy is appropriate for a given patient.

In addition to fistulotomy, there are a number of other surgical treatment options for anal fistula which do not involve division of the sphincter muscles. Fibrin glue injection is one such option, in which fibrin glue is injected into the fistula tract to obliterate the tract with the intention of becoming incorporated in the surrounding tissue. It has the advantage of avoiding dividing any sphincter muscle, thereby preserving continence. While there is a relatively high failure rate with this approach, it does not "burn any bridges" (risk affecting continence) and may be repeated.

An anal fistula plug is an elongated piece of material that is placed throughout the length of the fistula tract to fill the tract space and incorporate itself into the tissue around it. The plug also has the advantage of not requiring division of the sphincter muscle. However, like the fibrin glue, it has a relatively low success rate, with the majority of studies reporting success less than 50%.

An endoanal advancement flap is a procedure usually reserved for complex fistulas or for patients with an increased potential risk for suffering incontinence from a traditional fistulotomy. In this procedure, the internal opening of the fistula is covered over by healthy, native tissue in an attempt to close the point of origin of the fistula. Recurrence rates have been reported to be up to 50% of cases. Certain conditions, such as Crohn's disease, malignancy, radiated tissue and previous attempts at repair, and smoking, increase the likelihood of failure. Although the sphincter muscle is not divided in this procedure, mild to moderate incontinence has still been reported.

Yet another non-sphincter dividing treatment for anal fistula is the LIFT (ligation of the intersphincteric fistula tract) procedure. This procedure involves division of the fistula tract in the space between the internal and external sphincter muscles. This procedure avoids division of the sphincter muscle but has not been performed long enough to adequately assess its success or the most appropriate cases to attempt it on.

WHAT IS A SETON?

As mentioned above, if a significant amount of sphincter musculature is involved in the fistula tract, a fistulotomy may not be recommended as the initial procedure. Your surgeon may recommend the initial placement of a draining seton. This is often a thin piece of rubber or suture which is placed through the entire fistula tract and the ends of the seton (or drain) are brought together and secured, thereby forming a ring around the anus involving the fistula tract. The seton may be left in place for 8-12 weeks (or indefinitely in selected cases), with the purpose of providing controlled drainage, thereby allowing all the inflammation to subside and form a solid tract of scar along the fistula tract. This is associated with minimal pain and you can still have normal bowel function with a seton in place. Once all the inflammation has resolved, and a mature tract has formed, one may consider all the various surgical options detailed above as staged procedures.

WHAT IS THE RECOVERY LIKE FROM SURGERY?

Pain after surgery is controlled with pain pills, fiber and bulk laxatives. Patients should plan for time at home using sitz baths and avoiding the constipation that can be associated with prescription pain medication.

Discuss with your surgeon the specific care and time away from work prior to surgery to prepare yourself for post-operative care.

Anal fissure

WHAT IS AN ANAL FISSURE?

An anal fissure (fissure-in-ano) is a small, oval shaped tear in skin that lines the opening of the anus. Fissures typically cause severe pain and bleeding with bowel movements. Fissures are quite common in the general population, but are often confused with other causes of pain and bleeding, such as hemorrhoids.

Anal fissures can occur at any age and have equal gender distribution. Most (85-90%) fissures occur in the posterior (back) midline of the anus with about 10-15% occurring in the anterior (front) midline. A small number of patients may actually have fissures in both the front and the back locations. Fissures located elsewhere (off to the side) should raise suspicion for other diseases (see below) and will need to be examined further.

WHAT ARE THE SYMPTOMS OF AN ANAL FISSURE?

The typical symptoms of an anal fissure include pain and bleeding with bowel movements. Patients note severe pain during, and especially after a bowel movement, lasting from several minutes to a few hours. Patients often notice bright red blood from the anus that can be seen on the toilet paper or on the stool. Between bowel movements, patients with anal fissures are often relatively symptom-free. Many patients are fearful of having a bowel movement and may try to avoid defecation secondary to the pain.

WHAT CAUSES AN ANAL FISSURE?

Fissures are usually caused by trauma to the inner lining of the anus. A hard, dry bowel movement is typically responsible, but loose stools and diarrhea can also be the cause. The inciting trauma to the anus produces severe anal pain, resulting in anal sphincter spasm and a subsequent increase in anal sphincter muscle pressure. The increase in anal sphincter muscle pressure results in a decrease in blood flow to the site of the injury, thus impairing healing of the wound. Ensuing bowel movements result in more pain, more anal spasm, diminished blood flow to the area, and the cycle is propagated. Treatment strategies are aimed at interrupting this cycle to promote healing of the fissure.

Anal fissures may be acute (recent onset) or chronic (typically lasting more than 8-12 weeks). Acute fissures may have the appearance of a simple tear in the anus, whereas chronic fissures may have swelling and scar tissue present. Chronic fissures may be more difficult to treat and may also have an external lump associated with the tear, called a sentinel pile or skin tag, as well as extra tissue just inside the anal canal, referred to as a hypertrophied papilla.

Quite commonly, anal fissures are misdiagnosed as hemorrhoids by the patient or the primary care physician due to some similar symptoms between the two. This delay in diagnosis may lead to an acute fissure becoming a chronic one and, thus, more difficult to treat. Misdiagnosis of an anal fissure may also allow other conditions to go undetected and untreated, such as serious infections or even cancer. These less common causes of fissures include inflammatory conditions and certain anal infections or tumors, such as

Crohn's disease, ulcerative colitis, syphilis, tuberculosis, leukemia, HIV/AIDS, or anal cancer. These diseases cause atypical fissures that are located off the midline, are multiple, painless, or non-healing after proper treatment.

WHAT IS THE TREATMENT OF ANAL FISSURES?

The majority of anal fissures do not require surgery. The most common treatment for an acute anal fissure consists of making one's stool more formed and bulky with a diet high in fiber as well as utilizing over-the-counter fiber supplementation (totaling 25-35 grams of fiber/day). Stool softeners and increasing water intake may be necessary to promote soft bowel movements and aid in the healing process. Topical anesthetics, such as lidocaine, can be used for anal pain and warm tub baths (sitz baths) for 10-20 minutes several times a day (especially after bowel movements) are soothing and promote relaxation of the anal muscles, helping the healing process. Narcotic pain medications are not recommended for anal fissures, as they promote constipation. These non-operative measures will help achieve resolution of pain and bleeding and, potentially, heal greater than half of acute fissures with virtually no side effects.

Other medications may be prescribed, when a patient has a more chronic-type fissure, that promote relaxation of the anal sphincter muscles. Your surgeon will go over benefits and side-effects of each of these with you. Chronic fissures are generally more difficult to treat, and your surgeon may advise surgical treatment either as an initial treatment or following attempts at medical management.

MEDICATIONS THAT MAY BE PRESCRIBED TO TREAT ANAL FISSURES:

Nitroglycerin Ointment

Nitroglycerin is a commonly prescribed medication that is compounded with petroleum ointment to help treat both acute and chronic anal fissures. Nitroglycerin works by chemically relaxing the internal anal sphincter muscle, which decreases sphincter pressure and subsequently increases blood flow to the injury site, resulting in healing of the fissure. Healing occurs in at least 50% of chronic fissures and the ointment can be used with the above mentioned non-operative measures, such as increasing fiber and water intake. The major side effect of nitroglycerin is headaches, which is reported in at least 20-30% of patients. Patients must also be cautioned that a drop in their blood pressure may occur, especially if other anti-hypertensive medications are being taken. Nitroglycerin can be used for variable lengths of time and can be utilized again if sustained healing is not achieved. Recurrence rates are higher with nitroglycerin than with surgery, but side effects are fewer.

Calcium Channel Blockers

These medications include diltiazam and nifedipine. Both work in a fashion similar to nitroglycerin ointment and have been associated with healing of chronic anal fissures in 65% to 95% of patients. Side effects are similar to nitroglycerin in regards to dropping of one's blood pressure, but headaches are reported to be less, with up to 25% of patients affected. Oral forms of calcium channel blockers are also available, but these generally result in less fissure healing and more side effects than topical treatment.

WILL THE PROBLEM RETURN?

Fissures can recur easily, and it is quite common for a fully healed fissure to recur after a hard bowel movement or other trauma. Even when the pain and bleeding have subsided, it is very important to continue good bowel habits and a diet high in fiber as a lifestyle change. If the problem returns without an obvious cause, further assessment may be warranted.

WHAT CAN BE DONE IF THE FISSURE DOES NOT HEAL?

A fissure that fails to respond to conservative measures should be re-examined. Persistent hard or loose bowel movements, scarring, or spasm of the internal anal muscle all contribute to delayed healing. Other medical problems such as inflammatory bowel disease (Crohn's disease), infections, or anal tumors can cause symptoms similar to anal fissures. Patients suffering from persistent anal pain should be examined to exclude these diseases. This may include a colonoscopy and an exam in the operating room under anesthesia with biopsies and tissue cultures.

WHAT DOES SURGERY FOR ANAL FISSURE INVOLVE?

Surgical options for treating anal fissure include Botulinum toxin (Botox®) injection into the anal sphincter and surgical division of a portion of the internal anal sphincter (lateral internal sphincterotomy). Both of these are performed typically as outpatient procedures. The goal of these surgical options is to promote relaxation of the anal sphincter, thereby decreasing anal pain and spasm, allowing the fissure to heal. If a sentinel pile is present, it may be removed to promote healing of the fissure.

All surgical procedures carry some risk and both Botox® injection and sphincterotomy can rarely interfere with one's ability to control gas and stool. Your colon and rectal surgeon will discuss these risks with you to determine the appropriate treatment for your particular situation.

Special consideration is given to patients with established anal incontinence, known anal sphincter muscle injury (such as after obstetric injury) or diarrheal conditions (i.e., Crohn's disease). In these select patients, surgical sphincterotomy must be considered carefully. A thorough discussion with your surgeon will identify any of these risk factors so the most appropriate treatment can be provided. Some patients may benefit from an alternative surgery called an anal advancement flap (anoplasty). Your surgeon will discuss this with you if this option is indicated.

BOTULINUM TOXIN (BOTOX®) INJECTION

Botulinum toxin is injected directly into the internal anal sphincter muscle to promote anal sphincter relaxation and subsequent healing. This injection results in full healing in approximately 50-80% of patients. Injections are performed as an outpatient, same-day surgery procedure and, occasionally, can be performed in the office setting. Recurrences may occur in up to 40% of patients, but patients may be re-injected with good rates of fissure healing. Patients in whom Botulinum toxin injection fails are often recommended for traditional surgical sphincterotomy.

LATERAL INTERNAL SPHINCTEROTOMY

Precise and controlled division of the internal anal sphincter muscle is a highly effective and commonly used method to treat chronic and refractory anal fissures, with success rates reported to be over 90%. Recurrence rates after sphincterotomy are exceedingly low when properly performed by a surgeon. The surgery is performed as an outpatient, same-day procedure. The main risks of internal sphincterotomy are variable degrees of stool or gas incontinence. If any incontinence is present after surgery, it may resolve over a short time period. Patients undergoing sphincterotomy have much improved quality of life as compared to patients with persistent anal fissures. Your colon and rectal surgeon will go over each of the potential risks and benefits of sphincterotomy and will decide if this procedure is right for you.

HOW LONG IS THE RECOVERY AFTER SURGERY?

It is important to note that complete healing with both medical and surgical treatments can take up to approximately 6-10 weeks. However, acute pain after surgery often disappears after a few days. Most patients will be able to return to work and resume daily activities in a few short days after the surgery.

Note

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