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## What is an Anal Fissure?

An anal fissure is a small crack or tear in the lining of the anal canal which is thought to be caused by an overactive internal sphincter muscle.

Although an anal fissure can cause pain and bleeding, bleeding can be caused by other conditions associated with the colon and rectum, including cancer. If your colorectal specialist does not feel the bleeding is associated with a fissure, then further evaluation of the colon and rectum may be recommended.



### **AT THE TIME OF YOUR VISIT**

When you are seen by the colorectal specialist, you will be asked several questions with respect to your history. An examination of the anal region will be performed. If you are having a lot of discomfort, spreading the buttocks and an inspection may be all that is necessary. Examination with a well-lubricated gloved finger and a small, lighted scope may be performed only if it does not cause significant discomfort.

### **TREATMENT OPTIONS**

#### **1) Fiber supplements, stool softeners, warm tub baths:**

You may be asked to take a fiber supplement, which is usually first-line therapy for anal fissures. These include Metamucil, Citrucel, Fibercon, and Benefiber. Fiber supplements should be taken with a full glass of water with meals in order to have the desired effect. They are bulk laxatives, which is a bit of a misnomer. These agents may resolve constipation, but are also given to some patients with diarrhea to bulk up the stools. Many patients are under the false impression that they are going to have more frequent bowel movements when taking bulk laxatives. Fiber supplements may result in bulky bowel movements that are easy to pass and require less straining. Bulking agents may be beneficial even in patients who have no problems with their bowel movements. In addition, you may be asked to do warm tub or sitz baths for comfort. Warm water works well and no additives are necessary. If you pass hard stools even with fiber supplements and adequate water intake then a stool softener, like docusate sodium or docusate calcium, may be recommended.

#### **2) Topical cream**

You may be offered a prescription for topical nitroglycerin cream or nifedipine ointment. A small pin-head size amount should be placed on the finger and applied to the anal opening. It is not necessary to insert it up into the anal canal and rectum. The medication is absorbed by the skin. It is very similar to the nitroglycerin taken by cardiac patients to relieve chest pain. It dilates smooth muscle and can relieve pain caused by fissures and in some cases, results in healing of the fissure. When first

starting to take this medication, you should apply it in the lying position. Like nitroglycerin taken under the tongue, this medication can cause blood pressure to drop and/or headaches. For other side effects related to the medication, please refer to a Physicians Desk Reference or call your pharmacist.

### 3) Botulinum Toxin (Botox)

Botulinum toxin may be injected into the internal sphincter muscle resulting in paralysis of the sphincter muscle. This potentially improves the blood supply to the fissure, allowing it to heal. It is reported to be result in fissure healing 60-80% of the time. There is not yet consensus regarding the recommended dosage, exact site of injection, number of injections, or healing rates. Potential side effects include temporary leakage of gas (10%) and stool (5%). Recurrence is common but may be treated with repeat injections.

### 4) Surgery

The most common surgical procedure for anal fissure is called lateral internal sphincterotomy. Lateral internal sphincterotomy involves partial division of the internal sphincter muscle, which contributes to the resting tone of the anal canal. Dividing this internal sphincter muscle reduces muscle spasm and improves blood supply to the fissure. The larger external sphincter muscle is that muscle which a person can consciously squeeze and is not divided. Cutting the internal sphincter muscle requires a small incision at the level of the anal opening. This operation is usually performed in the outpatient setting, allowing you to go home the same day.

Another surgical option, in selected patients, includes making a flap composed of skin outside of the anal canal and rotating it into the anal canal to resurface the fissure. Yet another option is to divide the skin bridge under the fissure without dividing any internal or external sphincter muscle. This procedure is called a fissurotomy. It widens the anal canal and can potentially heal the fissure. There is not as much literature supporting this procedure as there is for the lateral internal sphincterotomy. Those who fail to heal their fissure after a fissurotomy may still be candidates for a lateral internal sphincterotomy.



### ***WHAT TO EXPECT WITH SURGERY***

You may be asked to take two Fleets enemas (green/white box) either the night before or the morning prior to your surgery. If your fissure is too painful, then you may omit this preparation. Upon arrival, you will be greeted by a receptionist and surgical staff including nurses and anesthesiologists. The anesthesiologist will discuss anesthetic options with you which include general, spinal, or local anesthetic. At some point you will be greeted by your colorectal surgeon who will answer any remaining questions that you may have. After being taken to the operating suite and given an anesthetic, the operation takes perhaps five to ten minutes. After the operation you will be transferred to the recovery room where you will spend up to two hours. You will then be discharged and should receive a set of discharge instructions. **If you do not receive such instructions, please tell the recovery room nurse prior to being discharged.**

### ***RISKS AND COMPLICATIONS OF SURGERY***

It is possible to leak gas, stool, or both as a result of the surgery, though the risk is usually small (less than 2% for stool, and less than 20% for gas).

Other risks include bleeding, infection, abscess, with or without need for operative drainage (less than 5%), poor wound healing (rare), persistent pain (rare), heart and lung problems associated with surgery (rare in those without heart or lung history), recurrence (less than 5%) and death (extremely rare). The recurrence rate may be higher after fissurotomy than after lateral internal sphincterotomy. It is possible that another unrelated problem (hemorrhoids, fistula, etc) may be identified which may require treatment at the same time.

## ***DISCHARGE INSTRUCTIONS AFTER SURGERY – Anal Fissure***

### ***Diet***

There is no special diet required. You will be encouraged to eat a well balanced diet. Since constipation can be a problem after any operation, your diet should include adequate water intake. Proper diet combined with moderate activity, such as light walking, should help restore normal bowel function and avoid constipation.

It is unlikely that the wounds will become infected or disrupted as a result of having a bowel movement. Though some pain may be experienced initially after bowel movements, you will be given a prescription for pain medication.

### ***Pain Medication***

You will be given a prescription for pain medication to be taken by mouth. One of these prescriptions may be a narcotic. **You should not drive, drink alcohol, perform strenuous exercises or make important decisions (like sign important papers) while taking this medication. You should not use a hot stove or equipment that may cause injury, or be responsible for the care for children.** Some of the side effects include: itching, shortness of breath and constipation. **Do not take this medication on an empty stomach**, since it may make you nauseated. Most narcotic pain medications can cause constipation. You may also be given another pain prescription medication referred to as a non-steroidal anti-inflammatory drug or NSAID (for example, ibuprofen or Motrin). This medication is not a narcotic. It may be taken in addition to the prescribed narcotic medication. However, you should not take more than one NSAID (for example, either Motrin or aspirin but not both).

### ***Bulking agents***

You may be asked to take Metamucil, Citrucel, Fibercon, Benefiber, or some other fiber supplement. Although these are referred to as bulk laxatives, they are not laxatives in a true sense. In fact, people with diarrhea are often prescribed bulking agents in order to control diarrhea. In those people who have constipation, fiber supplements provide soft, bulky bowel movements that are beneficial in people taking narcotic pain medication. Furthermore, bulking agents provide a natural expansion of the anal canal which is beneficial to people who have had recent anorectal surgery.

### ***Stool Softener***

You may be asked to take a stool softener like Colace. This medication is designed to offset the constipating effects of the narcotic pain medication. It should be taken at the recommended dose. If you have problems with diarrhea, you should call our office. You may then be asked to stop taking this medication.

There are other options to treat constipation including Miralax and Milk of Magnesia. If the above regimen to include bulking agents, stool softeners, and plenty of water does not resolve the problem, call our office and we will discuss these options with you.

### ***Warm tub or sitz baths***

We will ask you to sit in a warm tub or in a sitz bath several times a day. Most people prefer to do this four or five times a day. The frequency is more important than the duration. It is better to sit in a warm tub for 15 or 20 minutes four times a day, than to sit for one hour, once or twice a day. This will keep your wounds clean and provide you with some comfort. You may expose the wound to shower water if you prefer. You may need to cover the wound with gauze to protect your clothes from bleeding and drainage. If you do not have a bathtub, a hand held shower head works well. You may have gelatin packing in your anal canal. It is flesh colored and will pass with the first bowel movement. You do not need to remove it yourself.

### ***Fluids***

We will ask you to drink plenty of water. You should drink six to eight glasses of water a day unless otherwise instructed by your primary physician. This is a very important step in preventing constipation after this type of surgery, particularly when taking narcotic pain medication. It will also keep you adequately hydrated.

### ***Constipation***

The following are options to avoid constipation. You may try the option that appears most comfortable for you.

Take a fiber supplement (Metamucil, Citrucel, Fibercon, Benefiber are examples) starting the evening after surgery. You should take one tablespoon in 8 ounces of water or orange juice with dinner and with breakfast. In addition, take a stool softener like Colace 100mg by mouth twice a day. If you do not have a bowel movement within 4-5 days after surgery, you should call our office. We may recommend another medication to assist you with this (for example, Milk of Magnesia, Miralax, or an enema). It is very important not to go four, five or six days after surgery without a bowel movement if this is not your routine. This can lead to fecal impaction in the rectum that, under the worst of circumstances, may require a trip to the operating room to remove.

### ***Activity***

Have someone stay with you tonight. Restrict your activities and rest for 24 hours. Resume light to normal activity tomorrow. This would include walking or climbing stairs. Jogging or running, bicycle riding and other exertional activities should be avoided until your post-op visit, at which time you will be given further instructions. You should not drive a car if you are taking narcotic pain medication. Expected time off from work after this surgery is typically one week.

## ***Other Issues***

We should be notified of any problems seemingly related to your operation. Some specific ones are:

- 1) A temperature over 100.5 F.
- 2) Pain not controlled by pain medication.
- 3) Increased redness, warmth, hardness around operative area.
- 4) Excessive bleeding. You will have some bleeding. This should not alarm you. However, if you are soaking pads every few hours, you should call the office.
- 5) Inability to urinate or the feeling of not being able to empty your bladder completely.
- 6) Failure to resolve discomfort, drainage, and bleeding within two weeks after surgery.

## ***Questions or Concerns***

If any additional problems arise concerning your operation or you need reassurance, please call our office and ask to speak with one of the office nurses. If you have any questions, please feel free to contact our office at (734) 712-8150.

## **References:**

- 1) [www.fascrs.org](http://www.fascrs.org)
- 2) Perry WB, et al Practice parameters for the management of anal fissures (revised). Dis Colon rectum 2010;53:1110-1115
- 3) [www.besttreatments.co.uk/btuk/conditions/1000307477.html](http://www.besttreatments.co.uk/btuk/conditions/1000307477.html)
- 4) [www.medicinenet.com/anal\\_fissure/article.htm](http://www.medicinenet.com/anal_fissure/article.htm)