

INFORMED CONSENT: FISTULA PROCEDURE

FISTULA IN ANO

Fistula in Ano is a small tunnel that develops between the end of the bowel and the skin near the anus. It is often caused by an infection in the anal glands, resulting in the formation of an abscess. When the abscess bursts, it may leave behind a channel, or fistula. Common causes include anal abscesses, inflammatory bowel diseases like Crohn's disease, infections (such as tuberculosis or sexually transmitted infections), trauma to the area, and previous surgeries. Radiation therapy to the pelvic region can also increase the risk of fistula development due to tissue damage. Common symptoms include pain, swelling, and discharge from the anus, with possible fever and discomfort.

Risk factors for developing fistula in ano include conditions that predispose to infections, such as chronic diarrhea, constipation, or weakened immunity (as seen in HIV or diabetes). Hemorrhoids and anal fissures can contribute to fistula formation if they become infected or lead to abscesses. Other risk factors include smoking, obesity, and prolonged sitting, all of which can cause irritation or inflammation in the anorectal area, increasing the likelihood of abscesses and fistulas.

What is a Sinus and Perianal Abscess, and How Are They Related to a Fistula in Ano?

A **sinus** is a small channel or tract that can form between tissues, often as a result of infection or inflammation, but does not have 2 openings or ostium. In the case of **perianal sinuses**, these tracts develop around the anus and can be the early stage of a fistula in ano. Sinuses may form due to chronic inflammation or as a consequence of recurring infections in the anorectal area.

A **perianal abscess** is a collection of pus that develops near the anus, usually as a result of an infection in one of the small anal glands. These abscesses can cause significant pain, swelling, and redness, and may lead to fever if the infection spreads. If an abscess bursts, it can drain spontaneously, but sometimes it leaves behind a **fistula**, which is a tunnel that connects the abscess cavity to the skin surface near the anus. The presence of a fistula in ano indicates that the infection hasn't fully resolved and continues to drain through this tract.

In many cases, treating a perianal abscess promptly through drainage and infection control can help prevent the formation of a fistula. However, when a fistula develops, it may require more advanced treatments, such as surgery, to fully resolve and prevent recurring infections.

First-line treatment often focuses on draining any abscesses that form, managing infection, and reducing inflammation. For more persistent or complex fistulas, surgical options may be considered, such as Seton placement, fistulotomy, and laser fistuloplasty, each with different approaches depending on the fistula's characteristics.

Treatment Options

The choice of treatment depends on the complexity, location, and severity of the fistula, as well as the patient's overall health. In our clinic, we generally take care of only simple fistulas. The following are common medical and surgical treatments available in our clinic:

1. Expectant Management

Expectant management with antibiotics is a conservative approach for managing simple or early-stage fistula in ano, especially when symptoms are mild or the fistula is uncomplicated. This strategy involves closely monitoring the fistula while using antibiotics to control any active infection and reduce inflammation. The goal is to manage symptoms, prevent further infection, and allow the body to heal without immediate surgery. Patients are encouraged to maintain good hygiene, follow a high-fiber diet to prevent constipation, and manage bowel movements carefully. While this approach may help control symptoms in the short term, it does not typically lead to permanent resolution of the fistula, and further treatment, including surgical intervention, may be required if symptoms worsen or persist.

2. Seton Placement

This is a surgical technique where a Seton, a piece of surgical thread or tube is inserted through the fistula tract to facilitate drainage and promote healing. The primary goal is to keep the fistula open to allow continuous drainage of infection or abscesses, reducing inflammation and the risk of recurrent abscesses. This approach is particularly

beneficial for complex or high fistulas that involve the sphincter muscles, as it minimizes the risk of incontinence by avoiding direct damage to these muscles during treatment.

Seton placement is often a preparatory step before a more definitive procedure, such as a fistulotomy, advancement flap surgery, or laser fistuloplasty. The Seton helps control infection and inflammation, allowing the tissues around the fistula to stabilize and heal. Once the infection is managed and the fistula is better defined, further surgical intervention may be planned to fully resolve the fistula. This staged approach ensures a lower risk of complications, particularly for patients with high-risk fistulas, while still addressing the underlying condition effectively.

3. **Fistulotomy**

This involves surgically opening the entire length of the fistula to allow it to heal from the inside out. This is usually reserved for simple, low-lying fistulas. Fistulotomy is highly effective, though it poses a greater risk to continence if the fistula involves a large portion of the anal sphincter.

After a fistulotomy, proper post-surgical care is essential for promoting healing and preventing complications. Recovery can take anywhere from a couple of weeks to several months, depending on the complexity of the fistula. During this period, we recommend twice-daily wound care to ensure the wound remains clean and heals appropriately. The wound should be irrigated with a 9:1 saline-to-hydrogen peroxide solution or hypochlorous acid to cleanse the wound bed, followed by the application of Polysporin to prevent infection. The wound is then packed with cotton gauze to keep it open, allowing it to heal from the inside out, which is crucial to reducing the risk of incomplete healing and recurrence.

The primary goal of this regimen is to keep the wound open for as long as necessary to ensure that healing occurs from the deepest layers outward. This method reduces the likelihood of the wound closing prematurely, which can trap infection and lead to the formation of a new fistula.

4. **Laser Fistuloplasty**

This is a minimally invasive procedure where a laser probe is used to seal the fistula tract. The laser energy causes the fistula to collapse and close. This option is particularly suited for longer fistulas that involve more of the sphincter muscle, as it minimizes the risk of incontinence, and typically has the shortest recovery time.

After laser fistuloplasty, proper post-operative care is essential to ensure successful healing and minimize the risk of complications. The fistula site should be irrigated twice daily using either saline, saline peroxide (9:1), or hypochlorous acid. This irrigation is done by filling a 5cc syringe with the selected solution and attaching an IV catheter to the syringe. The catheter is carefully inserted into the external ostium of the fistula tract, and the wound bed is flushed twice a day to ensure thorough cleaning.

This method helps keep the fistula tract clean, preventing debris and infection, while also keeping the tract open to promote healing from the inside out. The goal is to prevent the fistula from closing prematurely, which could lead to incomplete healing and an increased risk of recurrence or abscess formation.

Symptoms and Complications

Following fistula surgery, patients may experience varying levels of pain, swelling, and discharge. While most recover without significant issues, potential complications can include:

- **Pain:** Post-operative pain is common, but usually manageable with medications.
- **Bleeding:** Minor bleeding is expected, but persistent or excessive bleeding should be assessed by a healthcare provider.
- **Infection:** The surgical site can become infected, possibly leading to fever, abscess formation, or worsening symptoms.
- **Incontinence:** There is a risk of temporary or long-term loss of bowel control.
- **Delayed Healing:** Fistula healing can take time, especially with Seton placement, and delayed healing increases the risk of infection.
- **Recurrence:** Even after surgery, there is about a 30% chance the fistula may recur, particularly with more complex cases.

ALTERNATIVES TO TREATMENT

1. **Fibrin Glue:** A non-surgical alternative that involves injecting a biological glue into the fistula tract to seal it. The goal is to close the fistula and promote healing. While it's a minimally invasive option, it has lower success rates

compared to surgical methods and is often used for patients who want to avoid surgery or those with a low-risk fistula.

2. **Anal Fistula Plug:** Made from biocompatible material, the plug is inserted into the fistula tract to block it and stimulate healing. This method has the advantage of being less invasive than surgery and preserves the sphincter muscles, reducing the risk of incontinence. However, recurrence rates can be higher compared to other surgical treatments.
3. **Advancement Flap Surgery:** This is a more complex surgical procedure typically reserved for high or recurrent fistulas. It involves covering the internal opening of the fistula with a flap of healthy tissue (usually taken from the rectal or anal lining) to allow the fistula to heal from the inside out. This method is effective but requires a more extensive procedure and longer recovery time.
4. **LIFT Procedure (Ligation of Intersphincteric Fistula Tract):** The LIFT procedure is a surgical technique that targets the fistula tract while preserving the anal sphincter muscles. It involves accessing the fistula between the internal and external sphincter muscles, tying off the tract, and allowing it to heal. This method is often used for complex fistulas and has a lower risk of incontinence compared to fistulotomy.

Other Information

It is not advisable for patients who are pregnant to undergo surgical procedures, including surgical fissure treatment during pregnancy, as these procedures may comprise a significant component of fetal risk (including fetal death and malformation).

PATIENT CONSENT

I have been informed by my surgeon/anesthesiologist and/or their assistant(s) and/or clinic staff and understand the following:

1. The nature, purpose and reason for the procedure.
2. The probable discomforts, potential side effects, complications and risks of the procedure and anesthesia.
3. The advantages, disadvantages, risks and possible complications of alternative procedures.
4. The reasonable benefits obtainable by these procedures but acknowledge that each has its limitations, and persistence or recurrence of symptoms can happen.
5. It is impossible to identify every possible complication.
6. The risk these procedures and sedation have on the fetus.
7. I am responsible to inform the health practitioner(s) prior to my procedure of any dental issues as well as any other health issues that may need further assessment and care including but not limited to heart/liver/kidney disease, use of anticoagulants, pacemaker, and previous and current treatments.
8. I am responsible for informing the health practitioner(s) prior to my procedure of any contagious illness I may have including but not limited to Covid, hepatitis, AIDS/HIV.

I also authorize and consent to:

1. Such additional or alternative procedure which may be found to be immediately necessary in the professional judgement of the physicians present during the performance of this procedure.
2. The administration of anesthetic, and to refrain from working, driving a motor vehicle or travelling on my own for 24 hours.
3. The help of doctors and assistants as may be necessary.

Please acknowledge your consent by initialing below for the procedure(s) you are undergoing:

- Seton Placement _____ (Patient Initial Here)
- Fistulotomy _____ (Patient Initial Here)
- Laser Fistuloplasty _____ (Patient Initial Here)

If there was anything I did not understand, I raised my concern(s)/question(s), and was given an adequate explanation and completely understand them. I acknowledge that I have read and fully understand the above consent.

Patient Name & Signature

Date