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Case Report

Pain in the ass to Smile on the Face-the Miracle of Laser Surgery!

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Abstract

Anorectal disorders including fissure and hemorrhoids are among the most common digestive complications. While approximately 5% population suffer from hemorrhoids, about 15% suffer from Anal fissures at any given point of time. Though Hemorrhoids are most common between ages 45 and 65, it's not unusual to see them in younger adults. Anal fissures are more common among young adults but co-exist with hemorrhoids in senior citizens. Some 10% of patients walking into an average Indian Primary care doctors' clinic complain of Anal pain- located in or around the anus or rectum when pooping, that lasts for minutes to several hours after completing the task. Common causes of anal pain include- i) Anal fissures - small tears in the anal lining ii) Hemorrhoids, inside our anus or rectum iii) Infections- sexually transmitted (STIs) and fungal infections iv) Perianal abscess caused by an infected anal gland, v) Trauma, from straining to pass hard poops or from vi) anal penetration following anal sex or penetrative wounds.

In most cases, anal pain resolves on their own in a few weeks. Increasing intake of fluids and high-fiber foods and soaking anal region in warm water for 10 to 15 minutes (Sitz Bath) a day help, to relieve the symptoms and facilitate healing. For temporary relief there are a few Anal/ Rectal Ointments containing antibiotic, anesthetic and cortisones used.

If the medical treatments do not benefit in a week's time surgical treatments like i) laser heat treatment, ii) chemical solution injections (sclerotherapy), iii) rubber band ligation, or surgical removal of the hemorrhoids, fistula and fissures are resorted.

There are two primary surgical methods: 1. Traditional surgery, called a lateral internal sphincterotomy (LIS), involves making a small incision in the anal sphincter muscle to reduce spasm and pain, promoting healing of the fissure. 2. Laser surgery for anal fissure uses focused light to create precise incisions and promote tissue healing. In the last decade laser technology, offering a minimally invasive approach is opted by many. Despite modernization potential side effects must be considered before undergoing this treatment.

Materials and Methods: This article is based on referring and observing the latest technique followed in a case of triple whammy of Fissure, fistula, and hemorrhoid in an elderly man and following it up for 2months till the resolution all the three problems. Review of literature of the development in anal surgeries for the last 60 years since author had seen it as a student in mid-1960's traditional surgery, until recently in October-November 2023, a laser surgery with minimal intervention technique.

Keywords: anal pain; fissure; fistula; hemorrhoids; family physician (primary care provider) dietary advises; stool smotherers; medical management; antibiotics; traditional lateral internal sphincterotomy (lis); laser surgery

Introduction

Anorectal disorders including fissure and hemorrhoids are among the most common digestive complications. Some 10% of patients walking into an average Indian Primary care doctors' clinic complain of Anal pain- located in or around the anus or rectum when pooping, that lasts for minutes to several hours after completing the task. They describe it as sharp, tearing, cutting, or burning. Some among them complain that the pain radiates to their buttocks, upper thighs, or lower back and few of them may also complain of intermittent bleeding with defecation and describe simply as Piles [1,2]. The fact is that the causes of anal pain include- Anal fissure- a small tear /crack in the lining of the anal canal, Anal fistula- an abnormal channel between the anus or rectum to the skin near the anus and Anal cancer [2]. Anal pain is more common than most people think, but most people don't like to talk about it. Most of the causes are temporary and not serious, but some may need treatment to get better.

The prevalence of anal symptoms is about 15-16% in general population, However, 85% of these patients do not share their symptoms with their

family members or even their family doctors, despite a discomfort rating of 3 out of 10. Only 65% of patients of them agree to an anal examination. Performing the examination is associated with a significantly higher diagnosis rate of 76% versus 20%. Proctologist and general practitioner diagnoses are consistent in about 80% of cases [3,4]. Most of the patients do not often discuss anal symptoms, resulting in late diagnosis of proctological disorders and impacting health. Poor epidemiological knowledge is a contributing factor to this, which can be a significant problem in general medicine [5]. The common symptoms encountered by general practitioners include bleeding (32%), pain (31%), pruritus ani (22%), swelling (22%), oozing (14%), and anal discharge (14%). General Practitioners usually make diagnoses of hemorrhoids, anal fissure, and anal discharge. Anal incontinence, continuous bleeding and prolapse are the factors associated with referral to a specialist [5].

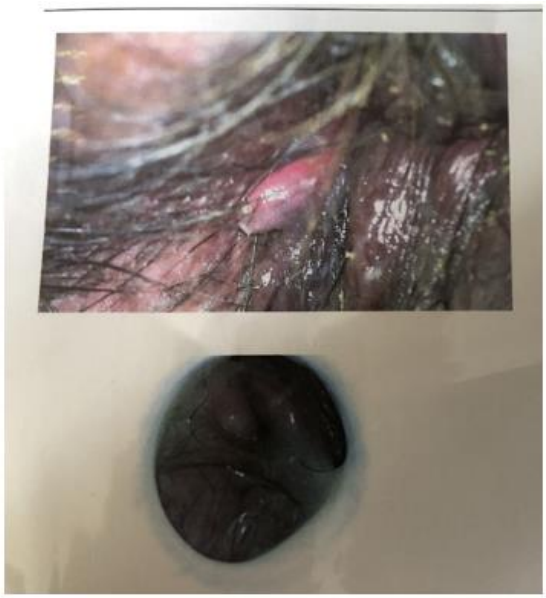
In most cases, anal fissures resolve on their own in a few weeks. To promote healing and to relax the anal sphincter, increasing intake of fluids and high-fiber foods and soaking the anal region in warm water for 10 to 15 minutes (Sitz Bath) each time 4-6 times a day help. Nonsurgical treatment includes warm tub baths (sitz baths), pain medications, Nitroglycerine application and stool softeners. If the symptoms continue to worsen, surgical interventions are recommended [1,2,5]. Four surgical methods known as of today are: 1. Traditional surgery, called a lateral internal sphincterotomy (LIS), 2. Fistulectomy involves anal dilatation for four minutes by using a four-finger technique followed by fistulectomy. 3. Ano cutaneous advancement Flap (AAF) and 4. Most recent Laser surgery (LS).

This article is based on referring and observing a laser surgery -the latest technique in a case of triple whammy of Fissure, fistula, and hemorrhoid in an elderly man in October-November 2023.

Case Report:

Gururaj a 73 old man complained of pain in the anus in Brisbane, Australia a few weeks before his return to Bengaluru, scheduled for 19 October 2023. He was examined by a primary health care provider and given some stool softeners and pain relievers. He reached Bengaluru on 19th October 2023.After a week and his annual cardiac check-up, that showed a high BP, he complained of recurrence of anal pain after defecation. A General surgeon did a per rectum examination, and diagnosed it to be a case of Anal fissure and gave Cremaffin (a liquid Paraffin) and a local ointment with an antiseptic and local anesthetic to try for a week. He advised that if it did not help in a week's time, surgery was the only option. The first 2 days after smooth passing of stools, there was a bit reduction of the pain, but that was short lived as he started feeling intense pain. Looking for a laser intervention we located a Private integrated Tertiary Care Centre for Colorectal disorders called "Smiles Hospital" with a motto of 'Spreading Smiles Globally'. On 13 November the Proctologist examined him and recorded clinical findings as C/o pain & burning and itching per rectum (PR). No bleeding, No pus, no bloating, no abdominal pain. Key investigations done were MRI Fistulogram that read 'There is T2 and PDFS hyperintense signal fistulous track in the posterior aspect region along midline. The track courses anterio-superiorly through the inter-sphincteric space and opens into anal canal at 6 O'clock position. The length of the track measures about 3.1 cms. Internal opening is located about 1.9 cms from the anal verge." No other abnormality particularly Levator-ani muscle complex. A provisional diagnosis was made as a case of "Inter-sphincteric Fistula in Ano with Chronic Fissure in Ano with Sphincter Spasm with Sentinel Pile.' He was asked to stop taking blood thinners (Aspiring 150 mg daily) before taking laser surgery.

After basic investigations of Prothrombin time-PT (20 vs15 seconds), Activated, Partial Thromboplastin Time- APTT (29 vs 30 seconds) on 20/11/23 before taking for the surgery.



Steps followed:

1. An enema is given 2 hours before the start of the procedure to empty your bowels, as despite overnight laxatives the bowels were not empty.
2. Under Spinal anesthesia with aseptic precautions, the patient was put in lithotomy position and direct rectal examination and Proctoscopy examination was done.
3. This was followed by a Colonoscopy which showed "Grade 2 internal haemorrhoids X 3 columns & Posterior fissure in Ano with sentinel Pile.
4. "Inter-sphincteric Fistula in Ano with Chronic Fissure in Ano with Sphincter Spasm with Sentinel Pile was noted.
5. Fistulotomy with lateral internal sphincterotomy (LIS) and ablation of the tract was done.
6. Then Fissurectomy with anal dilatation for four -5 minutes by using a four-finger technique was done. The fissure was excised using a laser scalpel, and the wound was curated till a healthy margin was reached up to the level of the internal sphincter. Thus, a fresh ulcer was made without scar tissue and was allowed to heal.
7. Finally, the sentinel Pile was ligated, and concomitant skin tag was excised.
8. Then an anal pack was given to stop any bleeding which was taken out after 24 hours and an oral liquid diet was started after four hours.
9. IV antibiotics and analgesics were given for 2 days. The patients were discharged on the second day after a final look into the wound.
10. He was advised to do a warm sitz bath and use a stool softener for two to three weeks along with local ointment to lubricate the anal canal.

Post surgery he was put on 1) Tab CETIL CB (Cefuroxime 500mg + Clavulanic 125 mg) twice a day for 7 days 2) Caps HAPPI-d (Rabe Prazole 20mg + Domperidone 30mg once before food, 3) Tab Chy moral-AP (Paracetamol/Aceclofenac+Trypsin) three times daily, for one week. 4) Syrup Dexluz (Lactulose oral solution) 3 TSP after food. 5) Cremagel H Ointment (Sucralfate, Metronidazole + Lignocaine hydrochloride) after each Sitz Bath daily. 6) Jonac Suppository PR daily twice for 7 days 7) Gerbisa Suppository (Bisacodyl) SOS 8) Anal spray.

Histopathology Report:

Sections studies showed hyperplastic stratified squamous epithelium with foci of ulceration. Sub-epithelially numerous dilated and congested blood vessels were seen Stroma showed moderate mixed inflammatory cell infiltrates comprising of lymphocytes, plasma cells and neutrophils. Inference: "Lesional Tissue with foci of acute on chronic Inflammation"

Follow-ups:

Daily wound dressing was done for the first 5 days and then alternate days. After 1 week on 28/11/23: Wound was clean, Sphincter control was fine. stools was hard. The laxative was changed.

After 3 weeks 13/12/23: Wound was clean and dry, pain minimal.

As of 31 December 2023, the patient is painless and leading almost a normal life, though stool softener and Sitz batch are being used for convenience.

Discussions:

Anorectal disorders including fissure and hemorrhoids are among the most common digestive complications. Our anus is the last 3 to 4 centimeters of our large intestine and our rectum is the 6-inch segment that comes just before the anus. Together with the surrounding skin they make up our perianal region which is very sensitive. It's important to acknowledge anal pain and if it gets worse or doesn't get better, over a day or two consult a primary care provider or a proctologist without embarrassment [1].

Anal pain makes Patients approach a practitioner with -i) Anal pain after pooping is due to an anal fissure, a common cause as pooping stretches the fissure. A thrombosed hemorrhoid can also cause intense, localized pain. Generally, patients complain of Sharp anal pain, or cutting in nature which suggests an open wound, like an ulcer or fissure. Some people describe the muscle spasms in elevator ani syndrome as a stabbing pain. ii) A feel of pressure along with pain inside the anus if there is a mass or swelling inside like a hemorrhoid, an abscess or, rarely, a tumor iii) A constipation, will pain from stress and strain along with pressure from hardened, impacted poop stuck inside the rectum or anal canal iv) Anal pain with itching indicates a skin condition inside the anus. Hemorrhoids can cause both, and so can an anal yeast infection, and Anal warts due to human papillomavirus (HPV), infection a common STI. Pooping can also irritate hemorrhoids and cause them to bleed or to prolapse out of anus v) Anal pain during the menstrual periods of a woman due to Menstrual cramps affecting the perianal and uterine muscles due to Prostaglandin. Rarely, endometriosis can cause menstrual pain and bleeding vi) Anal pain during pregnancy as the weight of the growing fetus puts pressure on perianal nerves and pain more when sitting.

Some of the most common causes of anal pain include- i) Anal fissures, small tears in the anal lining ii) Hemorrhoids, - the swollen blood vessels inside our anus or rectum iii) Infections, including sexually transmitted infections (STIs) and fungal infections iv) Perianal abscess caused by an infected anal gland, v) Trauma, from straining to pass hard poops or from vi) anal penetration. Some other less common causes of anal pain include- vii) Anal fistula, a tunnel that develops when an anal abscess erodes through the skin, viii) Inflammatory bowel disease (IBD) in the rectum, like ulcerative colitis or Crohn's disease ix) Rectal ulcers, due to IBD or solitary rectal ulcer syndrome x) Elevator ani syndrome or proctalgia fugax, conditions that cause anal muscle spasms and xi) Cancer in the anus or rectum. However, in clinical practice a practitioner generally comes across the most common causes of anal pain due to Anal Fissures are● Anal intercourse, ● Straining during childbirth, ● Hard Bowel movements, ● Overly tight anal sphincter muscles.

Let us review three key conditions seen in general practice:

Benign anorectal disorders are common and increasing in incidence over the last 2 decades due mainly to consumption of junk food, the decreasing intake in dietary fiber. It is estimated that 15-20% of the Indians have such benign conditions [3,4].

1.Idiopathic anal fissure is defined as a longitudinal split in the distal anoderm which extends from the anal verge to the dentate line. Fissures are either primary or secondary type. The posterior midline is the most common location for primary fissures in men, while, anterior primary fissures, though rare, are more common in females. Secondary fissures are associated with other systemic diseases, occur at an abnormal position in the anoderm. A high percentage of acute fissures heal spontaneously within three weeks with conservative medical management comprising of a high fiber diet, warm sitz bath, and topical analgesic with steroids. Secondary anal fissures heal only after primary cause is addressed, most of them need surgical treatment.

A single hospital study of 629 patients with a mean (SD) age of 38.27 (9.25) years and a total of 438 (69.63%) of patients were males. Around half of the patients (n=308; 48.97%) had normal BMI. A total of 112 (17.81%) of patients were diagnosed to have anal fissure. Mixed dietary habits and history of constipation were found to be associated with the prevalence of fissure. Similarly, patients with no exercise or physical activity had more prevalence of fissure than patients who exercised on a regular basis (19.87% versus 11.54%). Most patients had bleeding and pain (n=326); out of these patients, 89 (27.30%) had an anal fissure [2]. The prevalence of anal fissure among patients with anorectal complaint was found to be around 18% in India.

2.Hemorrhoids represent the most common benign anorectal disorder; however, anal pain is most often secondary to an acute or chronic anal fissure and not hemorrhoidal disease. While fissures are kind of cracks and fistulas are an opening of a cavity and Piles are mainly the swollen blood vessels. About 50% of the population would have hemorrhoids at some point by the age of 50 yrs., and about 5% of the population suffer from hemorrhoids at any given point of time [2]. Quite often both or even all three conditions can co-exist as was noticed in our case report.

3.Anal Fistulas: In fistulas, pus is discharged out of the anal area, Fissures cause a lot of pain, and Piles are mostly painless and unnoticeable. The most common site of anorectal fistula is in the more proximal rectum rather than the anus and are often sequelae of a procedure. Their external opening is in the perianal area and the tract courses superiorly to enter the anal canal above the dentate line. The immediate cause of fistula is related to pregnancy and delivery in women and perianal abscess in men. Following perianal abscess drainage, nearly one thirds of them develop perianal Fistula. A higher incidence of fistula is found among male patients aged 40 years and above. The most common site of fistula is to be posterior [6]. Every year, 2 out of every 10000 people in India suffer from an anal fistula. Men are more likely to develop anal fistulas than women. Iincidence of low fistula in Ano, in rural papulation of Indore, MP, was around 8.6 per 100000, and male: female ratio 11.8:1. Fistulotomy is the ideal surgical procedure.

Ever experience of obstetric fistula among women in some Indian states ranges from 0.3 percent to 3.4 percent, being highest in Uttarakhand. Women living in rural areas have higher chance of obstetric fistula. Age and physical maturity are important factor in the occurrence of fistula, and it is found that those women who were below 18 years at the time of their first birth have higher risk of fistula in comparison to those who had child at 18 or above years. In addition to this, those having problems at the time of delivery are around two times more likely to have fistula [6].

4. Proctalgia fugax, a condition estimated to affect between 8-18% of people, is a mild to severe bursts of pain that come and go very quickly around the anus and lower rectum, lasting for few minutes, the longest any one episode might last is 30 minutes, with no pain between episodes, which might happen a few times a year.

Proctalgia fugax mainly affects people between 30 and 60 years old and is more common among women. It's believed that a spasm of the anal sphincter contributes to it. The spasm may have no reasons though sometimes times there might be triggers, such as sexual activity, menstruation, constipation, bowel movements, and stress.

5. Levator Ani Syndrome is like proctalgia fugax but episodes last longer than 30 minutes, often for hours, and are chronic or recurrent. It is described as a dull ache and there may be some feeling of pressure high in the rectum, which gets worse when sitting or lying down.

Diagnosis of Anal Pain:

A detailed medical history to look for risk factors that may have caused anal fissures and hemorrhoids. The doctor then performs a physical examination to gently inspect the anal region and look for visible tears and cuts. The basic diagnosis is based on the symptoms of ● Severe pain during bowel movements, ● Pain after bowel movements that lasts for hours, ● Itching or a burning sensation in the anal area, ● A visible tear in the skin around the anus.

MRI Fistulogram: Stylography is a traditional radiological technique used to define the anatomy of fistulas. The external opening is catheterized with a fine cannula, and a water-soluble contrast agent is injected to define the fistulous tract. Radiologists have developed a grading system for perianal fistulae, which is based on landmarks on the axial plane and incorporates abscesses and secondary extensions to the grading system.

grade 1: simple linear intersphincteric, grade 2: intersphincteric with abscess or secondary tract. grade 3: transsphincteric, grade 4: transsphincteric with abscess or secondary tract within the ischiorectal fossa and grade 5: Supralevator and translevator extension.

It is use is more of academic interest as there are two major drawbacks: 1) Difficult to assess secondary extensions secondary to lack of proper filling with contrast material. 2. inability to visualize the anal sphincters and to determine their relationship to the fistula

Ultrasound: The benefits of ultrasonography over MRI are the former's ubiquity and lower operating costs. There are three ultrasonography methods for the evaluation of perianal fistulae: a) endoanal ultrasound (EAUS), b) transvaginal ultrasound (TVUS), c) Trans-perineal ultrasound (TPUS)

Management:

Medical Treatment: The common medical approaches for relieving pain are:

1.Foods to Avoid: ● Processed foods like bread, biscuits, cakes, etc. ● Coffee, tea, or other caffeinated drinks. ● Spicy foods or any frozen pre-prepared foods

2. Increase Fiber contents in food through vegetables and fruits.

3. Use of stool softeners (mild laxatives)

4. Ice packs help reduce swelling and sitting in a warm bath filled with plain water for 10 minutes (long periods may cause more irritation) several times a day will relieve symptoms.

5. Treat● Blood pressure ● Anesthetic creams local application ● Nitroglycerin application, and ● Analgesic & Anesthetics and Cortisone Injections.

Washing the area with rubbing is not advised as it would also cause more irritation.

6. For temporary relief there are a few Shields Rectal Ointments used e.g. a) Recti care Anorectal Cream b) Tropolone Hemorrhoid Cream c) Doctor Butler's Hemorrhoid and Fissure Ointment d) Equate Hemorrhoid Cream e) Anu sol Hemorrhoidal Ointment f) An ovate Cream and g) Cheryll Hemorrhoids Ointment.

To apply the Nitroglycerin ointment [8]:

Wash your hands before using the medicine.

Cover your finger with a plastic wrap, disposable surgical glove, or finger cot.

Lay the covered finger next to the dosing line on the side of the medicine box. The tip of your finger should be at one end of the dosing line.

Squeeze the ointment onto your finger. The amount of medicine should be the same length as the dosing line.

Gently insert your finger with the ointment into the anal canal. Do not push your finger past the first finger joint.

Carefully apply the ointment around the inner sides of the anal canal.

If you have too much pain in the anal canal, apply the ointment directly to the skin on the outside.

Throw the finger covering in the garbage and wash your hands.

Surgical Treatment for Anal Fissures, hemorrhoids, and Fistulas:

If the medical treatments do not benefit in a week's time surgical treatment are recommended. Surgical treatment includes i) laser heat treatment, ii) chemical solution injections (sclerotherapy), iii) rubber band ligation, iv) surgical removal of the hemorrhoids, fistula, and fissures:

Fissure treatment, which once required traditional surgical intervention, is now addressed with laser technology, offering a minimally invasive approach. Despite modernization potential side effects must be considered before undergoing this treatment [6].

There are four surgical methods: 1. *LIS:* Traditional surgery, called a lateral internal sphincterotomy (LIS), involves making a small incision in the anal sphincter muscle to reduce spasm and pain, promoting healing of the fissure. 2. *Fistulectomy* (FIS) : In the fistulectomy anal dilatation is done for four minutes by using a four-finger technique followed by fissurectomy. The fissure is excised using a scalpel, and the wound is curated till a healthy margin is reached up to the level of the internal sphincter. Thus, a fresh ulcer was made without scar tissue and was allowed to heal. The presence of any concomitant skin tag or sentinel pile is excised without impairing anal continence. Complete healing of the secondary wound takes 10 or 15 weeks. 3. *Ano cutaneous advancement Flap (AAF):* In this procedure to shorten healing time, primary wound closure after fistulectomy is performed with ano-cutaneous or mucocutaneous advancement. *4. Laser surgery (LS): LS* for anal fissure uses focused light to create precise incisions and promote tissue healing [9,10].

Sphincterotomy as the surgical treatment of choice for chronic anal fissure was first described by Boyer [3]. Following that, a lot of procedures have been developed to address the issue. Fissurectomy, anal dilatation, posterior and lateral sphincterotomy, and advancement flap are a few of the procedures followed.

1. *Lord's procedure of Fissure Dilatation*: Dilating the anal sphincter to release some tension helps the stools pass freely, reducing the intense pain. Fissure dilatation is a procedure in which the surgeon placing the fingers inside the anal opening, stretches gently to widen the anal sphincter opening. Alternatively, the procedure can be done using anal dilators or with rectal dilators under general anesthesia. Fissure dilatation is recommended for chronic anal fissures causing severe symptoms, with increased tone in the sphincter muscles. It is not recommended in old people or any other person with weak muscles as dilatation, carries a high risk of fecal incontinence. Basic steps include:
   i. An enema is given 2 hours before the start of the procedure to empty your bowels.
   ii. The patient is put in lithotomy position (lying on his back with legs wide apart), to get a good view of the anal region.
   iii. The surgeon will insert 2 fingers into the anal opening up to the anorectal line (where the anus and rectum meet).
   iv. After a gentle stretch, 2 more fingers are inserted into the anus.
   v. Once four fingers are inside, the hand is gently pronated (palm facing downwards). The fingers are spread, and the stretching is

carried out in the 3 and 9 o'clock positions as the muscles in the 6 and 12 o'clock positions are naturally weaker. The stretch is held for 3 to 4 minutes at a time.

vi. The surgeon puts stretches based on the fissure's severity & the clinical assessment.

vii. Alternatively, the surgeon may use anal dilators to dilate the sphincter. The dilators are cylindrical instruments with increasing diameters.

viii. The relief from the symptoms is seen immediately, though, the full recovery takes 3 to 4 weeks.

2. *Traditional Fissurectomy:*

In lateral sphincterotomy the surgeon removes only the fissures while in fissurectomy the skin underlying the fissures are also removed. Of late Surgeons combines both the process to eliminate the anal fissures completely and eliminate the reoccurrence of anal fissures. It takes four to eight weeks for the surgical site to heal. Because of postoperative pain and sleeping from the surgical wound, patients typically may have to stay home for two to four weeks. In lateral internal sphincterotomy (LIS), the internal sphincter is divided in its distal third away from the fissure itself - either in the right or left lateral position. The main aim of LIS is to increase the blood flow of the anoderm by decreasing the maximum anal sphincter pressure by 18%-50%. The rate of healing of fissure is in the range of 93% to 95% (open) and 90% to 97% (close) techniques. Fissurectomy with manual dilatation is done in young adults with very high sphincter tone.

Risks associated with Anal Fissures Surgery: Most cases of anal fissure surgery have no complications, but some patients may experience minor complications such as: Fecal incontinence, Infection, unexpected bleeding, Perianal abscess.

3. *Laser treatment for anal fissures:* Laser treatment for anal fissures is the most advanced technique and by far the safest and least painful. The overview of the surgery steps is:

i. A rectal exam, to locate the fissure (at the time of diagnosis).

ii. Patients must fast overnight before the process.

iii. Patients must not drink water for 6 hours prior to the surgery.

iv. A bowel preparation involving giving a laxative or an enema is undertaken, to clean the system of any excreta still present.

v. The surgeon inserts a laser into the natural opening of the anus, moving it to the location of the fissure.

vi. An incision using laser in the fissure scar and anal muscles is created thereby loosening the sphincter muscles.

The fissure scar heals, is most effective as it reduces the pain with immediate effect and chances of the fissure opening again. Post-operatively, the patient is asked to follow:

a) The doctor prescribes stool softeners, and the patient must use as instructed.
b) Patients must change their diet into a high fiber diet.
c) An adult patient must keep the anal area free.
d) The patient can get back to normal and work activities immediately. as there is no need for hospitalization.

Common side effects associated with fissure surgery:

Reaction to Anesthesia: As with any surgery involving anesthesia, there's a small risk of adverse reactions to the anesthesia used during the procedure.

Pain: Postoperative pain is common after fissure surgery as after any surgery. The degree of discomfort varies among individuals but is usually manageable with analgesics.

Bleeding: Mild bleeding occurs for a few days following the surgery. However, heavy, or persistent bleeding indicate complications and must be reported to the surgeon.

Infection: Any surgical procedure carries a risk of infection, despite use of antibiotics used to minimize this risk.

Changes in Bowel Movements: Fissure surgery can occasionally lead to changes in bowel habits, like mild constipation, rarely - incontinence-inability to control bowel movements.

Recurrence: There's a chance that the anal fissure can return, after surgical intervention. The recurrence rate is very low, ranging from 1-3%.

Anal Stenosis: Although very rare, some patients may experience narrowing of the anal canal after surgery, leading to constipation and straining during bowel movements.

Rare complications include:

1.Bleeding and urinary retention - incapable of passing urine.

2.An infection that may develop, though it is with laser surgery.

3.An anal fistula can develop.

Conclusion:

Primary care doctors' get to hear or see the complaint of Anal pain-located in or around the anus or rectum when pooping, lasting for minutes to several hours after completing the task.

After a basic history and Ano-rectal inspection, PCP need to refer for emergency treatment if i) Anal pain that gets much worse, spreads or comes with fever, chills, or anal discharge. ii) A large amount of rectal bleeding or continuous bleeding if it comes with dizziness.

In other simple anal pain cases, one can try relief measures for about a week:

a) Advise eating more fruits, vegetables, and whole grains, and exercising daily.
b) Advise not to strain while defecating and ease pain and opt for correct position where hips are at a lower level than knees while squatting!
c) Give stool softeners, to help with bowel movements,
d) Sitting in a tub of hot water up to your hips, known as a sitz bath, several times a day.
e) Applying nonprescription hemorrhoid cream for hemorrhoids or hydrocortisone cream for anal fissures.
f) Taking a nonprescription pain reliever such as acetaminophen (Tylenol, others), aspirin or ibuprofen (Advil, Motrin IB, others).

Surgical treatment is opted for Fissure, fistula, and hemorrhoids when medical treatment does not resolve the problem. Surgery over three decades ago required traditional surgical intervention, with long healing time and laying off, is now addressed with laser technology, offering a minimally invasive approach and the patient can be active after 2-3 days and complete healing occurring in 2-3 weeks. Despite modernization potential side effects must be considered before undergoing this treatment

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