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# "Anal fissure"

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## ABSTRACT

Anal fissure, also known as fissure-in-ano. Anal fissure is a very common Anorectal disease. Anal fissure is common Coues of severe perianal pain. anal fissure is ulceration of the anoderm in anal canal. Its pathogenesis due to multiple factors, in this article provides Aetiopathology, Courses, complaints, Diagnosis, Investigation, complication and Management of anal fissure. It gives an overview of pathophysiology related to anal fissure, and cover ways in which they can be prevented. This article also looks at the way how different treatment options for anal fissure emerged over time.

**Keywords:** Anal fissure, Fissure- in-ano, Sphincterotomy

## INTRODUCTION

Anal fissure is a longitudinal tear in lower end of anal canal result in a fissure -in-ano. it is the most painful condition affecting lower region.[1] anal fissure are common both adults and children. Anal fissure two type acute and chronic, acute are lasting less than six weeks and chronic are more than six weeks. Mostly anal fissure is primary and typically occur at the posterior midline and small percentage of these may occurs at the anterior Medline. Other location atypical or secondary fissures may be due to different underlying situation that require further workup[2,3,4].

## OBJECTIVES

- Describe aetiology, pathology, causes, complaints, diagnosis, Complication, of anal fissure.
- Explain the various treatment options along with postoperative and long-term management of patients with anal fissures.
- Identify the importance of improving coordination amongst the inter professional team to enhance long-term outcomes and quality of life for patients with anal fissures

**Aetiopathogenesis:**

90%Analfissure occurs in the post part of anal canal and10%anterior part of anal canal. It is initiated by hard stool causing a crack, defecation results in pain. Anal fissure is most common in posterior because of relative is chemia. Anterior fissures occur in elderly women secondary to repeated Pregencies. This is due to damaged pelvic floor and lack of support to anal mucous membrane.[5]

In patients with anal fissures, there is evidence that the anal inhibitory reflexes are accompanied by ana abnormally increases contraction. This may be explaining the sphincter spasms and pain that patient with anal fissures experience during defecation.[6]

**Symptoms:**

1. Pain during and after bowel movements.
2. Bleeding during and after bowel movements.
3. Crack skin around the anus.
4. Burning or itching with pooping
5. Skin tag on the skin near the anal fissure.
6. Anal muscle spasm.

**Causes:**

Common Cause:

- Passing large or hard stool.
- Constipation
- Straining during bowel movements.

- Anal intercourse
- Childbirth
- Analinter course.

Other contributing conditions include:

- Crohn's disease
- Anal cancer
- Prior surgery
- HIV
- Tuberculosis
- Syphilis

**Risk factor:**

- Constipation-straining during bowel movements and passing hard stool resulting increase risk of tearing.
- Crohn's disease- inflammatory bowel disease causes chronic inflammation increases risk of tearing.
- Childbirth- anal fissure is most common in women.
- Anal intercourse
- Age- anal fissure can occursat any age, but more common in infants and middle age of adults.
- Eating a low fibre diet.
- Intense diarrhoea.
- Recent weight loss surgery because its leads to frequent diarrhoea.
- Minor trauma.

**Diagnosis:**

Diagnosis based on:

- personal health history
- symptoms

- rectal examination. -
- proctoscopy

**Complication:**

Complication seen with anal fissure sun controlled bowel movements and gas include: -

- Pain and discomfort.
- Reduced quality of life.
- failure to heal
- Recurrence even after treatments.
- Clotting.
- Difficulty in bowel movements.
- Tear that extended to surrounding muscle.

**Treatment:**

Acute anal fissure typically heals within 6 weeks with conservation. If anal fissure more than 6 weeks then it called as chronic fissure. These fail conservative treatment need surgery approach.

Anal fissures that do not heal well may be caused by an imbalance of anal pressure, which reduces blood flow to and from the blood vessels surrounding the anus. The lack of blood flow makes it difficult for the anal fissure to heal properly. Medications, Botox injections and some topical treatments that increase blood flow may improve the healing of anal fissures.

Prevention:

- To prevent constipation or diarrhoea.
- Eat high fibre foods.
- Avoiding dehydration by drinking Plenty of fluids.
- Regularly exercise.
- Sitting in worm bath-sitz bath is part of treatment for anal fissures. Benefits are improvement in hygiene, decreased pain and decreased hypertonicity of anal canal.[7]

Medicine:

- Laxatives: Adults- bulk forming laxatives.
  Children-osmatic laxatives oral solution.
- Painkiller- such as paracetamol,ibuprofen
- Glyceryl trinitrate-

The dose of GTN has been studied extensively and no dose affected improvement in three studies comparing doses of GTN ranging from 0.05% to 0.4%.[8,9,10.]

- Topical anaesthetics creams
- Calcium channel blockers
- Botulinum toxin injections

Surgery: chronic anal fissure that is resistant to other treatments or if symptoms are severe then recommended to surgery.

- Anal dilation –
  The theory of sphincter was first described by Recamier in 1838 for the treatment of proctalgia fugax and anal fissurs.[11]
  Sphincter damage after anal dilation was visualized by direct ultrasound. [12,13] internal sphincter damage was observed in 65% and12.5% of reported incontinence. Damage to the external sphincter was observed in 11/18 patient with urinaryincontinence[12].
- Lateral internal sphincterotomy- LIS involves cutting a small portion of the anal sphincter muscle. This procedure may help promote healing and reduce spasm and pain.

## CONCLUSION

Anal fissure can have a significant negative impact on a patient's quality of life. conservative treatment with laxative (stool softeners)and analgesia should be explored first. Conservative treatments with nitro-glycerine, painkiller, topical anaesthesia cream, calcium channel blockers, botulinum toxin injection can be used; however, side effects and recurrence rates in some patients may indicated ineffective treatments. after 6-8weeksmedical treatment has not

been shown to be effective, secondary care should be switched. If an anal fissure is suspected to be secondary to a serious underlying condition, referral should be expedited.

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