

## AN OVER VIEW OF DISEASE PARIKARTIKA

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### ABSTRACT

Ayurveda is a science of life. The first aim of Ayurveda to keep person healthy and second aim to cure the disease. Longitudinal tear in lower end of anal canal result in fissure in ano. Among anorectal diseases, Fissure in ano is a very common and painful condition mainly due to modern life style and faulty food habits. The parallel word of anal fissure as per Ayurveda terminology is Parikartika mentioned in Ayurvedic classics. The Parikartika, donot have any separate disease entity. It is mentioned as sign and symptom of other diseases or as a complication of Ayurvedic procedure (like Vasti, Virecana). Parikarthika refers to a condition in which patient experiences a sensation of pain as if the anal canal is being cut around with scissors.

### Parikarthika

The description of symptoms of *Parikartika* mentioned in *Sushruta Samhitha* is almost similar with the symptoms of fissure in ano. The cardinal symptoms of fissure in ano explained in modern science is excruciating pain which has similarity in the etymology of *Parikarthika*, *Vagbhata Acharya* has described same signs and symptoms as described by *Acharyas Charaka* and *Sushrutha*.

### Vyutpatti of Parikartika

The word *Pari* when used as prefix it means "all over" or "whole" or "every entity" or "every aspect". The word *Kartika* is derived from "*Krita*" verb which means „to cut" and it is a noun form. Thus the word „*Parikartika*" as a whole has meaning "to cut circumferentially" or "to cut all around."

### Nirukti of Parikartika

*Jejjata* has anticipated that pain present all around in *Guda* is *Parikartika*. According to *Dalhana*, there is cutting and tearing pain everywhere around anus.

A proper explanation of *Nidana*, *Rupa* and *Samprapti* etc. of *Parikartika* is not found anywhere in classics. But many *Nidana* that might directly or indirectly produce

*Parikartika* are described by *Acharyas* which are found scattered in the text.

### Nidana

*Vedana* (pain) is the main symptom of *Parikartika*, so *Vata Dosha* vitiation is inevitable. Hence, all factors responsible for vitiation of *Vata Dosha* can be considered under *Nidana* of *Parikartika*. In the classics, factors responsible for vitiation of *Vata* are as follows

- Diet - Consumption of *Tikta*, *Lavana* and *Katu Rasa Pradana* food,
- Pramithaashana*, *Adhyashana*, *Ruksha* and *Guru Anna*,
- Nisha Jagarana*.
- Athyuchabaashana*.
- Atiyaana*.
- Atichankramana*.
- Excessive intake of *Rasas* like *Kashaya*, *Tikta*, *Katu* and *Ruksha Guna* diet.
- Suppression of natural urges of *Mala Pravritti*.
- Excessive indulgence in eating and sex.
- Agantuja Hetu*
- Nidanarthakara Roga*

**Roopa**

The term Parikartika itself represents the symptom, which is the intensity of pain. It is sharp cutting or sawing type of pain. It's severe pain with bloody mucous discharge associated discomfort in peri anal region as per Charaka. The pain persists before and after defecation mentioned by Susruta

**Samprapthi Sanchaya**

*Nija Hetu* causes *Agnidushti* which causes *Vata Sanchaya* producing symptoms like *Ajeerna*, *Aruchi*, *Adhmana*, etc. *Agantuja Hetu* directly leads to formation of ulcer.

**Prakopa**

Due to continuous *Nidana Sevana*, *Prakopa* of *Vata Dosha* takes place and simultaneously *Pitha* gets involved.

**Prasara**

*Vata Dosha* by *Chala Guna* along with *Pitha* circulates in the body and that causes *Rukshatha* in *Rasa*, *Rakta*, *Mamsa Dhatu* and *Mala* of body.

**Sthana Samshraya**

In this stage *Doshas* get situated in *Purishavaha Srotas* and causes *Malasanga* followed by *Kadinamala Pravritti*.

**Vyakti**

In this stage, *Guda Twak Vidarana* takes place after *Atikadina Mala Pravritti*; hence, in this stage manifestation of *Parikartika* taken place.

**Bheda**

*Parikartika* becomes chronic by the late approach of treatment by patient or failure of treatment in this stage. *Kashyapa* has mentioned the involvement of *Doshas* like *Vataja*, *Pithaja* and *Kaphaja Parikartika*. He has described the classification according to the *Dosha* in chapter of *Garbhini Chikitsa*

**Sadhyasadyata**

In classics, it is not mentioned as separate entity so there is no separate prognosis of that disease.

**MODERN REVIEW****Fissure in ano**

Fissure in ano is an most common pathology among all anorectal disorders.

About fissure, John Goligher states that, "This is a common disease of the anus which causes an amount of suffering out of all proportions to the size of the lesion."

An linear crack on anywhere in the anoderm that causes excruciating pain during and for a few couple of hours after defecation is named as the disease fissure-in-ano.

It is an ulcer in the longitudinal axis of the lower anal canal.

Commonly it occurs in the midline, posteriorly (more common in males), but can also occur in the midline anteriorly (more common in females).

**Etymology**

The term Fissure has been derived from the Latin root "Fissura" that means a cleft, sulcus or groove, normal or otherwise.

The term "fissure" generally denotes a crack or a slit or a cleft or a groove.

**Synonyms**

Anal ulcer, anal fissure, ulcer-in-ano, faecal ulcer.

**Definitions**

- The anal fissure has been described as an acute superficial break in the continuity of the anoderm usually in the posterior midline of the anal margin.
- An elongated ulcer in the long axis of the anal canal.
- Anal fissure is a split in the anoderm.
- An anal fissure appears to be a longitudinal crack in the anal skin but in reality it is a true ulcer of the skin of the wall of the anal canal.<sup>35</sup>

**Epidemiology****Age**

Young or middle aged adults in 3rd decades 30-50 years.

**Sex**

Anterior fissure is more common in women than in men. The ratio of incidence of anterior fissure-in-ano and posterior fissure-in-ano, in women, is about 40:60 and that in men is 10:90.

**Site**

Most common site of fissure in ano is posterior midline, which can also occur in anterior midline.

**Etiology**

About the cause of the disease different opinions are available but the exact cause is unknown.

It can be assumed that habitually takes laxative and purgatives or has irritable colon, suffers from absence of normal stretchability of the sphincters. When this condition persists for many years, it results in fibrous contractures of the sphincters. In such as condition a tear easily occurs when a hard mass is passed while straining during defecation. Other reasons includes, tear by a foreign body like a piece of glass or bone.

Also insertion of overlarge speculum or the one with rough surface are among some of the rare causes

**Risk factors**

Factors that may increase your risk of developing an anal fissure include:

- Constipation
- Child birth
- Crohn's disease
- Anal intercourse
- Age

#### Secondary causes of anal fissure are

- Ulcerative colitis
- Crohn's disease
- Syphilis
- Tuberculosis
- Anal cancer
- Leukemia
- STDs

#### Types

According to pathology, Fissure in ano is classified in to

- Primary-Idiopathic
- Secondary

#### 1) Acute fissure in ano

Acute fissure in ano is a tear of the skin of the lower half of the anal canal.

There is hardly any inflammatory induration or oedema of the edges. Anal sphincter muscle spasm is always present.

#### 2) Chronic fissure in ano

If the acute fissure fails to heal, it will gradually develop into a deep undermined ulcer, termed now as chronic fissure. It is a deep cone shaped ulcer with thick oedematous margins. At the upper end of the ulcer there is hypertrophied papilla. At the lower end of the ulcer there is skin tag known as "Sentinel pile"

There is characteristic inflammation and induration at the margins. Base consists of scar tissue and internal sphincter muscle. Spasm of internal sphincter is always present. Sometimes infection may lead to abscess formation. Chronic fissure-inano may have a specific cause e.g. Crohn's disease, ulcerative colitis, tuberculosis and syphilis; so these should be elucidated. In long standing cases, the muscle becomes originally contracted by infiltration of fibrous tissue.

#### Pathophysiology and histology

The pathophysiology of anal fissures is not entirely clear. It is probable that an acute injury leads to local pain and spasm of the internal anal sphincter. This spasm and the resulting high resting anal sphincter pressure leads to reduced blood flow and ischaemia, and poor healing. Unless this cycle is broken the fissure will persist.

Anal fissure has been associated with increased anal tone for many years. This has been substantiated by a highly successful surgical treatment for anal fissure – internal sphincterotomy which reduces resting anal pressure. In

1994, this opinion was further reinforced by Shouten et al who identified a relationship between anal pressure

#### Clinical features

- Pain on defecation
- Bright red bleeding (in streak during defecation)
- Mucus discharge
- Constipation

#### Secondary changes

##### Sentinel pile

##### Hypertrophic papilla

##### Complications

- Infection in a fissure may lead to fissure abscess formation. It may also give rise to a fistula-in-ano
- Sentinel tag
- Enlarged papilla
- Anal contracture

#### Examination

History and physical examination will allow the diagnosis of an anal fissure without further investigations in most patients. The clinical features are severe tearing pain with the passage of faeces often with a small amount of bright red blood on the stool or toilet paper. The ideal way of examining is to have the patient lie comfortably in a lateral position and then gently part the buttocks to look first at the posterior midline.

An acute anal fissure appears as a fresh laceration, while a chronic anal fissure has raised edges exposing the internal anal sphincter muscle fibres underneath. Chronic anal fissures are also often accompanied by an external skin tag (sentinel pile) at the distal end of the fissure and a hypertrophied anal papilla at the proximal end (difficult to see on physical examination)

A digital rectal examination is usually not needed to make the diagnosis and is contraindicated in many cases given the associated pain. However, examination under anaesthesia with anoscopy, endoscopy, biopsy and imaging (i.e. CT scan, MRI or endoanal ultrasound) may all be required if:

- The fissure cannot be seen
- The diagnosis is unclear
- There is significant bright red bleeding in a patient with an increased risk for colorectal cancer
- There are features suggesting a secondary anal fissure.

The differential diagnosis of a primary anal fissure is limited but includes a Haemorrhoids, anal fistula or solitary rectal ulcer. These conditions can be excluded by careful clinical assessment.

Secondary anal fissures may have characteristic features in the patient's history such as risk factors for anal cancer, or medical conditions such as Crohn's disease, tuberculosis, sarcoidosis, HIV and syphilis. These

fissures often lie laterally or are multiple in number. Further investigations must be performed as the underlying cause will determine subsequent management.

### (1) Inspection

Lesion-Inflammatory skins changes

Ask patient to strain down before inspection is completed and anal margins are separated manually very gently with proper aseptic measures. Sentinel pile is most probably situated in midline posteriorly.

### (2) Palpation

Palpation of the perianal skin should be performed to eliminate other pathologies like fistula or tumours. An inflamed tag will be tender on palpation. A spasmodic sphincter is strongly suggestive of acute fissure-in-ano.

### (3) Digital Examination

Good Lubrication is needed.

Proper globing of the hand

Anesthesia is inevitable in case of fissure-in-ano since it excruciatingly painful.

On digital examination – in acute cases the edges of the anal fissure are impalpable where as in fully established cases a characteristic crater which feels like a vertical button hole can be palpated.

### Intraluminal

Normal- faeces. And elongated ulcer as fissure in ano

### Intramural

Sphincter muscles and anorectal angle

### Extramural

Perianal structures

Fibrous edges of ulcer and tenderness on the site with discharge.

### Discharge

After withdrawal of finger mucus, pus, blood abnormal faecal matter may be there.

### Investigations

- Proctoscopy
- Sigmoidoscopy
- Manometry
- Anorectal Manometry
- Electrophysiology
- Proctography
- Endoluminal ultrasound

### Laboratory investigations

Routine pathological investigations and biochemical investigation to detect any other systematic conditions like Anaemia, Jaundice, Diabetes mellitus or Renal malfunction etc. should be done Stool examinations can be carried out to evaluate the characteristics of bleeding pattern.

### Diagnosis

In fissure, patient complains of a typical cutting or burning / tearing pain associated with the act of defecation. Lasting for few minutes to several hours and then disappearing spontaneously.

Gentleness in behavior and handling too is mandatory to ensure a successful examination when the patient comes with acute fissure. The patient should be well informed about the procedures to be carried out like as separation of the anal margins manually. There may be more or less spasm of the anal sphincter with puckering of the anus. In cases with a very newly developed fissure, diagnosis can be easily confirmed by directly visualizing a longitudinal ulcer. In chronic cases a sentinel skin tag may be present, at times red, swollen and tender i.e, inflamed. In very chronic cases the triad of the diseases i.e, anal fissure, sentinel tag and hypertrophied anal papilla can be demonstrated. A puckered anus is disagnostic or pathognomic of acute fissure-in-ano. As digital examination is very-very painful, hence proctoscopy and sigmoidoscopy should be performed unless mandatory. Here, a local application of a surface anesthesia or infiltration anesthesia should be used.

### Differential diagnosis

- Carcinoma anal canal.
- Inflammatory bowel disease.
- Venereal diseases.
- Anal chancre (painful).
- Tuberculous ulcer.
- Proctalgia fugax.

**Complications** of anal fissure can also include:

- Failure to heal
- Recurrence

### Prevention

Can be prevented by taking measures to prevent constipation or diarrhea. Highfiber foods, drink fluids and exercise regularly to keep from having to strain during bowel movements.

### Treatments

#### General measures for anal fissure

- Adequate fluid intake (6-8 glasses of liquids)
- Fiber rich diet (vegetables, fruits, brown rice)
- Bulk forming agents (psyllium husk, bran)
- Stool softeners (lactulose)
- Local anaesthetic agents (lignocaine 5%)
- Sitz bath
- Avoid constipation
- Once recovers, regular anal dilatation

#### 1. Conservative treatments

There are no clear guidelines on anal fissure management. The goals of management are to break the cycle of anal sphincter spasm allowing improved blood flow to the fissured area so that healing can occur.

## 2. Surgical management

The gold standard surgical operation for anal fissure is lateral internal sphincterotomy.

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