WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.453
Volume 13, Issue 19, 493-501. Review Article ISSN 2277–7105

PARIKARTIKA (FISSURE IN ANO) A REVIEW STUDY

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Article Received on
13 August 2024,

Revised on 03 Sept. 2024,
Accepted on 23 Sept. 2024

DOI: 10.20959/wjpr202419-34052

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ABSTRACT

Ayurveda, the "science of life" helps in achieving a longer life span by preventing the occurrence of diseases as well as curing it to the possible extent. The hasty life style now-a-days has resulted in many troublesome diseases. The busy schedules, untimely meals, use of junk foods, sedentary habits, prolonged journey times have resulted in increased incidence of a very painful condition called *Parikartika* i.e. Fissure-in- ano. It appears to be the most painful condition among all ano rectal disorders. The earliest description of Parikartika is available in the Ayurvedic Textbook of Surgery, the Sushruta Samhita (1500 B.C). Acharyas have explained Parikartika as Vyapad of Vaman and Virechan. Constipated people are unable to pass stool or pass hard stool which breaks the smooth wall of anal verge or longitudinal tear in lower end of anal canal this conditionis called Parikartika. This Ano-rectal disease closely resembles Anal-fissure described in modern medical science. Acute fissure can be treated by Nidana Parivarjana, Avagahana-sweda (hot fomentation-sitz bath), Matrabasti and Pathya Sevana. Chronic Fissure can be treated by Kshara lepa and Agnikarma. This article attempts to throw light on Parikartika and its treatment in Ayurveda.

KEYWORDS: Anal fissure, Parikartika, Basti, Vaman, Virechan, Guda, Constipation.

INTRODUCTION

There are 2 terms explained in these contexts, viz.Parikartika and Parikartana.

Vyutpatti: The word Parikatika can be split into two. Pari-around, about; Kartana- act of cutting off; Krintati- clip, cut off. The Parikartika is sharp shooting pain (in rectum).[1]

Nirukti: Excrutiating cutting type of pain all around Guda,

Bastishiras and Nabhi is termed as Parikartika.[2]

An anal fissure is an elongated ulcer in the long axis of anal canal.[3]

Typically, it is observed in individuals who are young or in middle adulthood, although it can also occur in other age groups, such as infancy and early childhood.[3] This condition tends to be more prevalent in women. Anal fissures typically develop during midlife and are less common in older individuals due to decreased muscle tone.[4] These fissures are usually found in the midline region. In males, the most common location of fissures is posteriorly, accounting for 90 percent of cases overall. The next most frequent location is along the midline anteriorly.[4] In most cases, fissures are found in the middle of the back (90%) rather than the front (10%). In women, fissures are more likely to be located on the Posterior midline fissures are more frequently observed compared to anterior midline fissures, with a ratio of 60 to 40. The occurrence of anterior fissures is relatively less common. The higher prevalence of anal canal trauma in females may be attributed to the impact of the foetal head on the front wall of the anal canal during childbirth.[5] An anal fissure can be categorized as either acute or chronic in nature.

Acute anal fissure is a deep tear through the skin of the anal margin extending into the anal canal. There is little inflammatory indurations or oedema of its edges. There is accompanying spasm of the anal sphincter muscle.[6]

Chronic anal fissure are those present for more than 6 weeks,[6] often have a sentinel tag at the distal aspect caused by inflammation.[7]

Aetiology

Diet is a crucial factor in Parikartika, as indicated by various references. Vagbhata and Kashyapa have noted that consuming pulses like Mudga, Kodrava, Chanaka, and other dry foods that absorb water (Sangrahi) can result in constipation. This can exacerbate Apanavata in its natural location (Pakwashaya). Parikartika occurs when there is a blockage in the

adhovaha srotas, leading to dryness and obstruction in the passage of feces, flatus, and urine.[8,9] According to contemporary scientific research, consuming low-fiber foods can result in the hardening of stools and lead to the development of Fissure-in-ano. When there is an accumulation of feces in the colon, individuals may experience constipation, which can lead to significant discomfort, difficulty passing hard stools, and delayed bowel movements. This results in Parikartana which ultimately leads to Parikartika.[10] Individuals suffering from weak digestion or low digestive fire, known as Mridukoshta or Mandagni, may experience aggravation of Pitta and Vata doshas, leading to the development of a condition called parikartika when consuming excessively atirooksha, atiteekshana, atiushna, or atilavana ahara.[11]

Fissure-in-ano is most frequently found in the midline posteriorly, although it can also occur in the midline anteriorly and rarely in other areas around the anal opening. The location of fissures in the anus is mostly found along the posterior midline, which is thought to be due to the posterior angulation of the anus. The anal canal is positioned in a fixed manner towards the back.

The external sphincter muscle fibers diverge posteriorly, creating an elliptical shape in the anal canal. Inadequate blood flow and a Y-shaped formation of the sphincter fibers contribute to this anatomical structure. Decussation occurs in the posterior midline and is connected to the mucosa. Due to limited support and a relatively fixed position. issue leading to an increased likelihood of anoderm tears. Constipation has been the most common aetiological factor. Additionally, there is also a spasm of the internal sphincter. The implication of causing fissure-in-ano has been attributed to it. Additionally, excessive consumption may also lead to this condition. Excessive skin removal during a surgical procedure for haemorrhoids can lead to a narrowing of the anal canal, potentially causing the development of anal fissures when hard stool passes through. A stricture is a condition characterized by a narrowing or constriction of a passage or structure in the body.

Secondary causes of anal fissure must be remembered. These are (1) Ulcerative colitis, (2) Crohn’s disease, (3) Syphilis and (4) Tuberculosis.[5]

Pathophysiology

In the case of anal fissure, the pathophysiology is intricate. The condition involves damage to the lower part of the anus. The anal canal may experience discomfort due to the passage of

hard, dry stool. This can result in intense pain, leading the patient to potentially avoid bowel movements. Prolonged periods of avoiding defecation can result in the hardening of stools, causing the anoderm to tear during bowel movements, creating a harmful cycle. The inferior region of the anal canal receives innervation from the same somatic nerves that supply the muscles of the sphincter. Any irritation to the lower part of the anal canal will result in the sphincters contracting involuntarily. Anal fissures consistently demonstrate that excessive muscle contraction can lead to abnormally high pressure in the anal canal. During the process of bowel movements, the tightening of muscles around the anal fissure can cause the edges to separate further, hindering the natural healing process of the fissure. Furthermore, this heightened pressure and tightening will constrict the blood vessels in the anal canal, resulting in decreased blood flow. This relative lack of blood flow also plays a role in slowing down the healing process of ulcers. Fissure-in-ano is a complex condition that is influenced by various factors such as anodermal ischemia, infection, chronic constipation, and hypertonicity of the smooth muscle of the internal anal sphincter. The sphincter and its increased pressure.

Constipation or changes in bowel habits can result in the passage of hard stools, leading to frequent bowel movements that can cause injury to the mucocutaneous junction of the anal canal, known as a tear or acute anal fissure. Anal fissures can either heal on their own or develop into chronic fissures, which can result in the stagnation of fecal matter. The infectious agent present in a chronic wound can result in an infection of the crypt of the anal canal. This infection can then spread through the anal gland to the perianal region, ultimately leading to the formation of. An abscess that ruptures and leads to the formation of a fistula-in-ano. Clinical characteristics and identification of an anal fissure. The main symptoms experienced by adults include anal pain. Symptoms of anal fissures may include vivid red blood, swelling around the anal area, and sometimes discharge of mucus. The pain experienced is intense and sharp. Typically commencing during the act of defecation, the pain is frequently intense and may persist for an hour or longer. A mild discomfort is commonly experienced. After having a bowel movement, individuals may experience discomfort for a period of 3-4 hours. Occasionally, this discomfort may abruptly stop, and the person may feel at ease until the next episode. Subsequent bowel movement is anticipated, with intermittent periods of relief lasting for several days or weeks. The patient is more likely to experience constipation than endure the pain of defecation. Bleeding is also present. The amount of blood loss is minimal and appears as a bright red color. Excessive bleeding is uncommon. Chronic fissures are typically identified by swelling and discharge, which can further lead to

issues such as anal itching and skin irritation around the anus. Discharge could be a sign of an inter-sphincteric abscess or a fissure-fistula.

Chronic Fissures often have a sentinel tag at the distal aspect caused by inflammation.7 (ch. 21 p.237) It is characterised by inflamed indurated margins, and a base consisting of either scar tissue or the lower border of the internal sphincter muscle. The ulcer is canoe shaped, and at the inferior extremity there is a tag of skin, usually oedematous. This tag is known picturesquely as a sentinel pile 'sentinel' because it guards the fissure. There may be spasm of the involuntary musculature of the internal sphincter. In long standing cases, this muscle becomesorganically contracted by infiltration of fibrous tissue. Infection is common and may be severe, ending in abscess formation. A cutaneous fistula may follow.

Examination

In the majority of cases, a diagnosis of anal fissure can be made through visual examination without the need for further tests. The patient commonly anxiouus often experience anxiety and discomfort during rectal examinations due to the natural fear associated with the procedure. This often results in the perianal skin being tense and contracted due to spasms of the internal and external muscles. Anal sphincters and tightly contracted buttocks. Examination shows that even with increased sphincter activity, it is typically It is feasible to observe a skin tag on the perineum accompanied by a minor presence of blood or discharge. Delicate pulling on the skin tag may be necessary for further examination. The sides of the perineum typically show a crack below the dentate line. Occasionally, there may be an issue with the perianal area. Fungal dermatitis, known as dermatitis, can also be found near the anal verge, leading to itching in the patient. This condition is characterized by inflammation of the skin. Treating both dermatitis and fissures is essential.

Palpation

This procedure is conducted following inspection examination to identify any related issues in the anal canal. A rectal examination (DRE) involves inserting a lubricated index finger into the rectum while keeping the thumb outside to feel for any abnormalities near the anal opening. Severe contraction of the sphincter muscles and an irregular, painful indentation close to the opening of the anus are typically noticeable. Characteristics of an acute fissure include the presence of a fissure bed with hardened edges, while chronic fissures may exhibit a similar feature at times. is linked to an enlarged anal papilla. Abscesses can develop in the

subcutaneous tissue, submucosal layer, and intersphincteric region. Symptoms related to chronic fissures can also be identified through digital rectal examination.

Proctoscopy

It is usually not done in case of fissure in ano, if hemorrhoid or other pathology present it can be done in local anesthesia.

Sigmoidoscopy

This is necessary in case of secondary fissure toidentify the primary pathology. It is done under general anesthesia to diagnose distal proctitis, colitis, crohn'sdisease, tuberculosis, adenomatous polyps which can cause secondary fissure.

Management

There are so many topical applicant are available in allopathic system of medicine such as topical anesthetic agent, steroids, nitrate preparation, topical calcium channel blocker, injection of botulinum toxin, sclerotherapy using sodium tetradecyl sulphate preparations in the modern medical science but all have certain limitations. Various surgical procedures such as anal dilatation, fissurectomy, fissurectomy with skin grafting, open sphincterotomy, closed lateral subcutaneous sphincterotomy, sphincterotomy with cryotherapy, sphincterotomy with radiofrequency surgery are used to treat in various stage of chronic fissure and sentinel tag. But impairment of continence, fistula or abscess formation, bleeding, wound healing are the more or less complication with these surgical procedure. Hence to avoid these complications Ayurvedic medicaments can be used.

Treatment for acute fissure in ano

Around 70% of acute fissures can be successfully treated with conservative medical methods. If left untreated, these fissures may develop into chronic fissures. Ayurvedic remedies are typically utilized in the early stages of a disease to reduce the likelihood of it progressing into a chronic condition. The primary objective of treatment is to alleviate sphincter spasm and promote healing of the fissure wound, as well as to provide relief to the anal canal and reduce the severe pain. and the related feelings of burning and bleeding.

1. **Avgaha sweda (Hot fomentation-sitz bath):** Sitting in the warm/hot water tub after each bowel movement soothes pain and relaxes spasm of internal sphincter for some time. It also helps in cleaning of fissure wound. Sitz bath is highly effective in treatment of fissure. It is done for10 to 15 minutes.[10]

2. **Taila/ Ghrita pichu:** It forms protective layer over fissure wound, it sooths the anal canal so relieves pain byreleasing sphincter tone and it cleans the wound thus helps in healing of ulcer.[10]

3. **Matra basti (type of anuvasana basti):** It acts as a retention enema and it helps in easy voiding of stools, by this Vatanulomana occurs and it cures the diseases caused by aggravated Vata as Parikartika is Vata dominate Vyadhi. By giving Matrabasti local Snehana occurs, spasm will also be relieved and thus brings down the pain. It softens the stools, lubricates the anal canal and provides an easy evacuation.[11]

4. **Tailapoorana:** In this Procedure Per rectal administration of 15-20 ml oil (having Vranaropana property) will reduce the spasm of the sphincter muscles by that pain reduces and ulcer heals.[11]

5. **High fibre diet:** The rate of intestinal passage of food depends on the nature of the diet and its fluidity. The greater the indigestible residue and water content, the more rapidly it reaches the rectum and produces its distension and there after evacuation. Hence patients should take daily fibre rich food and plenty of fluids to improve digestion and regularize bowels. These are hygroscopic, which allows them to expand and become mucilaginous. These fibres are a complex carbohydrate, which binds with water in the colon creating larger, softer, stool. Larger, softer, stools stretch and relax the sphincter muscles helping the blood to flow and it also require little pressure to pass.

Treatment for chronic fissure-in-ano

In Ayurvedic text information available on Shushkarsha, Bahyarsha can be correlated with Sentinel Piles. Acharya Sushruta mentioned four modalities of management 1)Bheshaja (Conservative line of management) 2) Kshara 3) Agni 4) Shastra.[11]

Kshara lepa: Lepa of Apamarga Pratisaraneeya kshara is done over the (Chronic fissure-in-ano) ulcer surface, by scraping action of Kshara, this reduces the excess fibrous tissue present over the ulcer surface and ulcer heals & sphincter relaxation occurs simultaneously.

Kshara sutra therapy: Ligation of Kshara sutra to sentinel pile masses, by this themselves they may fall within few days.

Agnikarma: Para surgical procedure like Agnikarma has been widely advised by Sushruta & by doing Agnikarmatreatment has provided marked relief & no recurrence. Excision of sentinel piles by Agnikarma i.e. by electro thermal cautery it is done.

DISCUSSION

On the basis of location, nature of pathology and features, Gudaparikartika can be correlated to Fissure-in ano. The detail description about Nidana (Etiology), Samprapti (Pathogenesis), Lakshna (Symptoms) & Chikitsa (Treatment) is mentioned in Sushruta samhita, Kashyapa samhita, Astanga Hridaya etc. There is detail description about conservative and surgical treatment for Fissure-inano.

CONCLUSION

The current high incidence of Fissure-in-ano is believed to be influenced by a combination of poor dietary habits and stressful lifestyles. Fissure-in-ano is primarily caused by the passage of hard, constipated stools which lead to tears in the lower anal canal, resulting in severe pain during and after defecation. Ayurvedic treatments have been found to be effective in curing fissures and improving bowel regularity in up to 90% of cases of acute fissures. These treatments can be considered for patients who are unwilling to undergo surgery, such as those with cardiac conditions or medical conditions like diabetes, AIDS, or Hepatitis B, where post-operative healing may be challenging. Kshara therapy, including Kshara Lepa and Ksharasutra ligation, is utilized in the management of Parikartika (Chronic Fissure-in-ano).

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