Original Research Paper

Volume-9 | Issue-6 | June-2019 | PRINT ISSN No. 2249 - 555X

General Surgery

CLINICAL ANALYSIS OF NEED FOR INTERVENTION IN FISSURE IN ANO

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ABSTRACT

BACKGROUND: An anal fissure is a tear of the squamous epithelium that usually extends from the dentate line to the anal verge. In most of the cases, the fissure manifests in the posterior midline of the anal canal.

OBJECTIVES: This study was mainly done to know the need for intervention in individuals with fissure in ano based on history and examination of patients

PATIENTS AND METHODS: Study was carried out in Department of General surgery UNIT IV, Osmania General Hospital, Hyderabad, Telangana between July 2018 to December 2018. Hundred patients with clinical diagnosis of Fissure-in-Ano were recorded. All patients were explained about the disease and their treatment plan and followups(3 visits)-1 week,1 month,2 months.
Surgical intervention-Lateral internal anal sphincterotomy upto the dentate line was performed.

RESULTS: Of 100 patients,4 patients deferred to participate in the study.
Of 84 patients with chronic fissure managed conservatively 52 dint responded and 32 patients responded.These 52 patients were advised surgical management and of them 3 patients deferred to undergo surgery and was advised local botox inj and of them 2 improved and 1 patient dint responded. And remaining 49 patients underwent surgical intervention of them 48 improved and 1 dint responded.

CONCLUSION: On analysis, patients who did not respond to conservative management n=55 i.e.,52(chronic fissure-49 with multiple skin tags, hypertrophied anal papillae, visible transverse fibers, multiple fissures and 3 without stigmata)+3(acute fissure).n=50(90%) patients improved with surgical intervention and 1 patient dint responded.Remaining 4 patients deferred from surgery and was given local botox inj of them 3 improved and 1 dint improve.

KEYWORDS : fissure in ano, hypertrophic anal papilla, exposed spincter muscle, multiple skin tags,

INTRODUCTION

Historically, an anal fissure was thought to be a result of mechanical trauma caused by a hard stool tearing the anoderm as it was passed. In addition, anal fissures have been associated with increased anal tone for many years.

Even though usually associated with constipation, anal fissure can also be a consequence of frequent defecation and diarrhea.

The fissures can be classified into 1] Acute fissure and 2] Chronic fissure in ano. Acute fissures usually are superficial and heal with conservative management. Fissures lasting greater than two months with features of chronicity (Sentinel skin tag, hypertrophied anal papilla, exposure of the underlying internal anal sphincter or anal cicatrisation) are unlikely to heal with conservative management. Fissures due to an underlying disease (for example, perianal Crohn's disease where fissures are often multiple and situated laterally) are also unlikely to resolve with conservative management.

Pathophysiology: The cause of anal fissure is likely to be multifactorial. The passage of large and hard stools, low-fiber diet, previous anal surgery,trauma, and infection may be contributing factors. Increased resting anal canal pressures and reduced anal blood flow in the posterior midline have also been postulated as causes.

SYMPTOMS:

Patients describe the pain of anal fissures as feeling like "passing broken glass," and they commonly mention a burning pain that can remain for several hours after defecation.Many patients report having a lower quality of life because of the pain.

Treatment of anal fissures is divided into two categories: nonsurgical and surgical. Nonsurgical treatment is considered first-line therapy and includes modalities such as the following:

- High-fiber diets
- Stool softeners
- Warm sitz baths
- Topical analgesics/anesthetics
- Chemical sphincterotomy(GTN,CCBs)
- Local injection of botulinum toxin

When nonsurgical methods fail to heal the anal fissures or relieve symptoms, however, surgical treatment may be necessary. The surgical treatment options are as follows:

- Internal anal sphincterotomy(open/closed)
- Fissurectomy
- Sphincter stretch
- Carbondioxide laser surgery(laser vapourization of fissure)

fig1: MULTIPLE SKIN TAGS

fig 2HYPERTROPHIED ANAL PAPILLAE

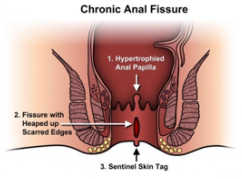


Fig3: chronic fissure in ano

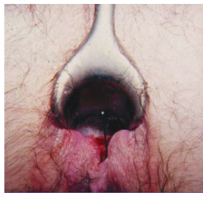
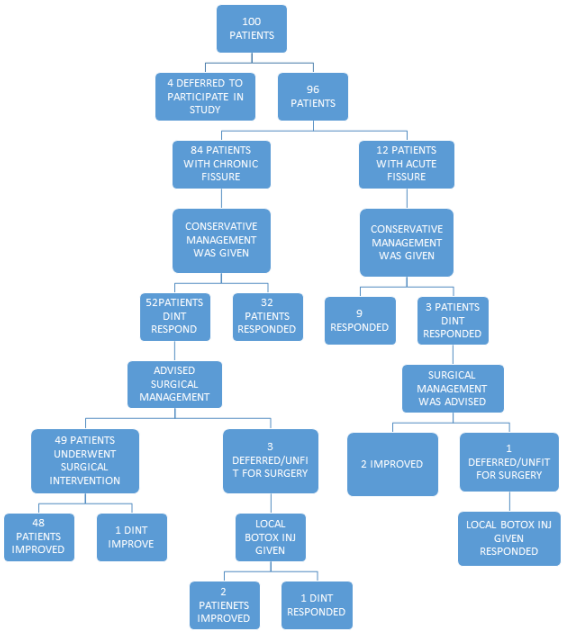


fig4: Fissure Complicated With Fistula

fig5: Fissure With Visible Transverse Fibers Of Internal Anal Sphincter

CASES: There were 100 patients examined in this study. Of which 4 deferred to participate in the study out of 96 patients 84 patients had different features of chronic fissure and other associated complications and remaining 12 patients presented with features of acute fissure.



Flowchart 1 details of cases and interventions

METHODS:

Study was carried out in Department of General surgery, Osmania General Hospital, Hyderabad, Telangana between July 2018 to December 2018 . Hundred patients with clinical diagnosis of Fissure-in-Ano; whose age, sex, any previous treatment taken were recorded. All patients were explained about the disease and their treatment plan and followups(3 visits)-1 week,1 month,2 months

Treatment failure based on the persistence of symptoms pain while defecation(pain score--VAS),VAS 6 OR GREATER recurrences, wound infection

RESULTS:

Of 100 patients who came to opd in osmania general hospital in surgery dept in unit IV and were diagnosed as fissure in ano 4 patients deferred to participate in the study.So n=96(96%) of cases were taken into the study. Of them 12(12.5%) patients presented with features of acute anal fissure and remaining 84(87.5%) presented with features of chronic anal fissure .All the patients who participated in study were initially managed conservatively.Of 12 individuals with acute fissures 9 responded to conservative management and remaining 3 individuals did not show any improvement so were advised surgical management.Of these 3 patients, 2patients showed improvement with surgery and 1 patient deferred from surgery and was given local botox injection and responded.

Of 84 patients with chronic fissure managed conservatively 52 dint responded and 32 patients responded.These 52 patients were advised surgical management and of them 3 patients deferred to undergo surgery and was advised local botox inj and of them 2 improved and 1 patient dint responded. And remaining 49 patients underwent surgical intervention of them 48 improved and 1 dint responded.

Males were 36.4%(n=35) and females 63.6%(n=61) with age varying between 22yrs -54yrs.All cases studied dint underwent previous treatment.

DISCUSSION:

Anal fissure may contribute to large hard stool,hypertonic sphincter. Most medical therapies are directed to achieve the goals of relaxation of the anal sphincter without causing fecal incontinence, passage of soft and formed stools, and relief of pain. Nonsurgical therapy is safe and often effective, with limited side effects, and should be the first-line therapy for anal fissure.

However, a subset of patients may benefit from upfront surgical intervention, and the treatment should generally be individualized.

Patients with severe or chronic fissures and those who have failed to respond to medical therapy may benefit from surgery. Lateral internal sphincterotomy remains the operation of choice and has been shown to be superior to all other medical therapies, anal dilation, or fissurectomy. Lateral internal sphincterotomy can be carried out by the closed or open technique, depending on the surgeon's preference. There is no significant difference between these techniques for rate of healing or rate of incontinence.

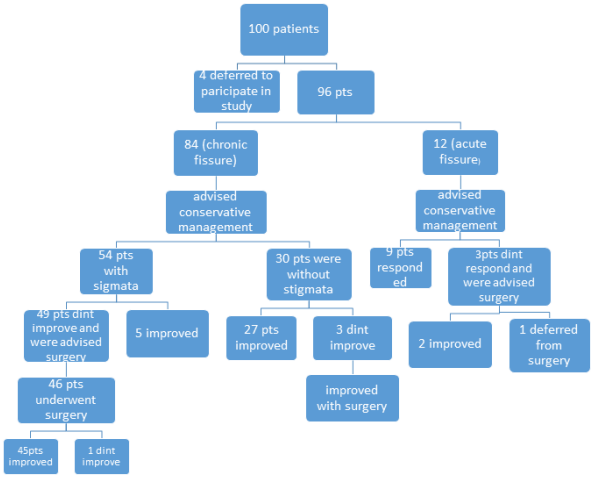
In terms of the extent of sphincterotomy, sphincterotomy to the level of the dentate line is superior to sphincterotomy to the fissure apex.

In this study,sphincterotomy upto dentate line was performed. Incontinence of flatus occurred in 28% of patients. Incontinence of liquid or solid stool occurred in 2% of all patients.It is important to evaluate for any preexisting incontinence before undertaking surgical intervention so as not to further compromise sphincter function.

ANALYSIS:

In this study number of females were more than males A subgroup analysis was done which showed most of the patients with chronic fissure having stigmata like multiple skin tags,hypertrophied anal papillae,visible transverse fibers at the base of fissure,multiple fissures showed no improvement with conservative management and needed surgical intervention for improvement.

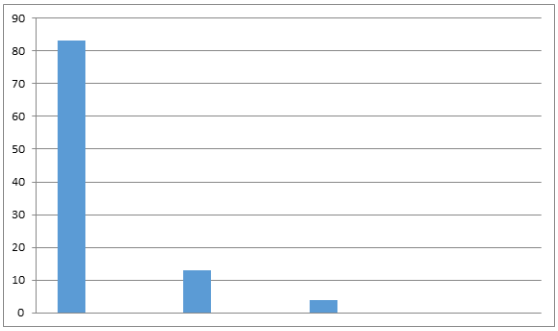
Therefore, patients who did not respond to conservative management n=55 i.e.,52(chronic fissure-49 with stigmata(89%) and 3 without stigmata)+3(acute fissure).n=50(90%) patients improved with surgical intervention and 1 patient dint responded. Remaining 4 patients deferred from surgery and was given local botox inj of them 3 improved and 1 dint improve.



Flow Chart 2 dertails of type of fissure and intervention

Of (n=84)-- 35.7%(n=30) presented without indications of interventions mentioned above(fibrosed ulcer,ulcer with granulation tissue).27 patients improved with conservative management and remaining 3 improved with surgical intervention .64.3%(n=54) presented with stigmata i.e., multiple skin tags alone or also had hypertrophied anal papillae or with visible transverse fibers at the floor of fissure or with multiple fissures/anterior or lateral fissures 49 patients were advised surgical management of them 46 underwent surgery and 45 improved and 1 dint respond.Remaining 3 deferred surgery and local botox injection was advised of them 2 improved and 1 dint improved.Remaining 12.5%(n=12) presented with acute fissure. Thus, 83.33% (n=45) Individuals with chronic fissure and having stigmata (multiple skin tags, hypertrophied anal papillae, visible transverse fibers ,multiple fissures) showed improvement with surgical

management successfully after failed conservative management.



GRAPH 1 No. Of patients responding to different modalities of treatment

Category I:(n=45 i.e.,83.3%)No. of pt with stigmata showed improvement with surgery

Category II:(n=7 i.e.,12.9%) improved with conservative management

Category III:(n=2i.e.,3.8%) no improvement

CONCLUSION:

Thus, in patients with stigmata(multiple skin tags,hypertrophied anal papillae, visible transverse fibers at the base of fissure,multiple fissures) conservative management might be a wastage of resources which may add to loss of working hours adding to the cost burden on the patient.

So patients with these stigmata should be directly advised surgical management.

ACKNOWLEDGEMENT:

1)Dr.B.SREENIVAS REDDY,SENIOR RESIDENT,DEPT OF GENERAL SURGERY,OSMANIA GENERAL HOSPITAL

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