ORIGINAL ARTICLE

Role of Counselling Session in the Conservative Treatment of Anal Fissure

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ABSTRACT

Background: Anal fissure is prevalent disease in our community and its treatment varies considerably ranging from topical hydrocortisone, topical 0.2% GTN to Surgical intervention.
Aim: To determine the effect of counselling session on the conservative treatment of anal fissure.
Methods: Total of 174 patients presenting to surgical OPD of Sughra Shafi Medical Complex, Narowal were randomly assigned into 02 groups and the effects of treatment were monitored according to a proforma on subsequent follow up. All the patients consented for study.
Results: The overall fissure healing rate in Group A (n=87) was 87% and in group B (n=87) healing rate was 74%. Total 30 (17.2%) patients who failed conservative treatment were subjected to surgery. No surgical complication was noted. However, one patient from Group B reported with relapse after surgery within one month of surgery who was again given a trial of conservative treatment after proper counselling.
Conclusion: Most (87) % of anal fissures heal well with conservative treatment if their problem is given appropriate attention. Therefore, on findings of our study, we strongly recommend topical 0.2% Glyceryl Trinitrate alongwith proper counselling as the first line of treatment for anal fissure.
Keywords: Anal Fissure, Counselling Session, 0.2 % Glyceryl trinitrate (GTN), Sphincterotomy

INTRODUCTION

Anal fissure is defined as a longitudinal tear in the continuity of squamous epithelial lining the anal canal beyond dentate line[1,8]. The condition is usually encountered in 1 in 350 persons[2]. The etiology of the disease has been much debated owing to the presence of constipation leading to passage of hard stools, anal trauma, anal sex, Crohn's colitis, syphilis, cancer, to name a few. On the other hand, watery diarrhoea has also been reported in some cases. However, there's no consensus on the exact etiology of the condition that equally affects both sexes[1].

The patient typically presents with painful defecation-cardinal symptom of the disease- associated with bleeding per rectum.It is classified on the basis of duration of symptoms as acute if symptoms are persisting for less than 06 weeks and chronic if symptoms persist beyond 06 weeks duration. Another way to classify is the location, most anal fissures are located on posterior midline hence termed posterior fissure- owing to relatively poor blood supply on the posterior commissure, they account for 90% of cases. Anterior fissures are usually located anteriorly and attributed to other factors mainly obstetric trauma, account for 10% of cases. Fissures present on other locations usually laterally are termed atypical and account for sinister etiology like crohn's disease, tuberculosis, tumours, and biopsy correlation is mandatory[1].

On examination, most anal fissures can be seen if patient allows gentle parting of buttocks avoiding the need for proctoscopy. There is usually increased tone of the anal sphincter and sometimes blood can be seen on anal verge or toilet paper. Acute fissures usually don't have skin tags while chronic fissures have skin tags as a hallmark feature[2].

Treatment is aimed mainly at reducing the anal sphincter tone either by non-pharmacological, pharmacologic, or surgical means.

Non-Pharmacologic methods involve W-A-S-H regime using a high fibre diet containing 10-15% of unprocessed fibre, warm sitz baths twice a day and avoiding hard stools using a stool softener have been shown to heal half of the anal fissure[1]. Pharmacologic agents that have been tried include 0.2-0.4% Glyceryl trinitrate (GTN), Diltiazem, Nifedipine and Botulinum Toxin among others. These agents have shown equal efficacy with some debatable advantages over each other[1,2,3].Glyceryl Trinitrate (0.2%) that causes muscle relaxation by releasing Nitrous Oxide (NO), is usually used due to its low price and easy availability but its use is limited due to potential complications especially headache in subset of patients. Pharmacologic agents especially 0.2% Glyceryl Trinitrate can reach upto 70-88% cure rate depending upon patient Compliance and duration of symptoms[4,13-16].

Botulinum toxin, a neurotoxin obtained from Clostridium Botulinum (Botox Injection) has been used as an alternative to surgical therapy in cases which fail to respond to conservative treatment. Its use is limited due to cost, controversies over dose and the site of injection, short duration of relief from symptoms. Symptoms usually recur 03 months after therapy. Therefore, Botulinum toxin is

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usually reserved for patients who are not willing for surgery or there is some contraindication to surgical procedure[11,12].

Surgical treatment mainly aims at dividing internal sphincter fibres to relieve ischemia either by open technique popularly known as open lateral internal sphincterotomy or Closed (subcutaneous) lateral internal sphincterotomy remains the Gold standard treatment achieving almost 100% results since its inception in 1950s by Eisenhammer[1]. Surgical sphincterotomy,often reserved for failed pharmacologic treatment,is feared due to its risk of bleeding, haematoma formation, wound infection, and permanent incontinence among other potential complications[1-4,9]. Anal Dilatation using anal dilators twice a day has been tried but abandoned due to poor tolerability and prolonged duration of treatment[8].

Although there is immense body of literature available on various treatment modalities, our team at Sahara Medical College/Sughra Shafi Medical Complex, Narowal focussed to study the role of "Counselling session'' on the treatment of anal fissure using 0.2% Glyceryl Trinitrate as the pharmacological agent due to its cheap price and easy availability so that practice guidelines can be generated for local population.

MATERIALS AND METHODS

This Prospective Randomised Controlled Clinical Trial included 174 patients who presented to surgical OPD of Sahara Medical College /Sughra Shafi Medical Complex, Narowal from March 2016 to August 2017. The patients were randomly divided into two groups by pulling an envelope method, group A comprised of 87 patients in which a "10-15 minutes Counselling Session'' was arranged for the patients where they were explained in detail about pathogenesis of their disease, treatment method, possible outcomes of treatment, they were also given written information (attached brochure) about their treatment and opportunity to call their physician anytime if they had any problem. Group B also consisted of 87 patients who were given "written prescription'' of their treatment and only their querries were answered. An informed written consent was obtained from all the participating patients and Ethical approval sought from hospital Ethical committee.

All the patients were started with nonoperative treatment first and in cases of failure of conservative treatment, were offered surgical treatment. Nonoperative treatment consisted of high fibre diet (ispaghula husk 2 tsf at night), warm sitz bath twice daily, stool softener(syp .Lactulose 2 tsf x HS), oral NSAID'S twice daily and topical 0.2% Glyceryl trinitrate (GTN) three times daily and were followed after every 02 weeks in outpatient department in terms of pain after defecation using visual analogue score to grade the pain between 0 to 10(0 being no pain and 10 being severe pain), bleeding per rectum, headache and healing of fissure on clinical grounds. If the patients had significant improvement in their symptoms clinically, they were followed in OPD on Fortnightly basis for a total duration of 06 weeks. On the other hand, if patients had no significant improvement in symptoms, then they were offered Surgical Intervention in the form of Left Lateral Sphincterotomy.

Patients requiring surgery were admitted to surgical ward and were treated with division of internal Sphincter, antibiotics (Ciprofloxacin X BD and metronidazole X TDS), NSAID'S analgesics and warm sitz bath two times daily. They were discharged home on 2nd postoperative day when they were fit to go home. Patients were followed in surgical OPD on fortnightly basis and they were monitored for healing and relapse if any.

All the patients presenting to Surgical OPD with diagnosis of anal fissure were included in this Study Except patients with atypical fissures, previous history of anal surgery, haemorrhoidal disease, diabetics, and those with cardiac disease on oral/ sublingual Nitrates. The data was analysed using SPSS version 17.

RESULTS

Total 174 patients were included in this study who were closely followed up for a period of 03 months after completion of their treatment. The demographic data showed age ranging from 16 to 60 years (mean 28years). Almost equal sex ratio M; F 46:54. All the patients had history of painful defecation (100%), 143(82.1%) patients had history of active bleeding while 121(69.5%) patients reported constipation and passage of hard stool was seen in 106(60.9%) patients. Demographic details are depicted in Table 1 below.

Table 1: Demographic details

Total patients	174(87 in each group)
Age	16-60 years (mean 28 yrs)
Sex M:F ratio	46:54
History of pain	174(100%)
History of bleeding per rectum	143(82.1%)
History of constipation	121(69.5%)
Passage of hard stools	106(60.9%)

The patients in Group A i.e., 87 who were Counselled about their disease and possible outcomes of treatment in 10-15 minutes long session and ensured telephonic availability of treating physician showed overall better Compliance and had fissure healing in 76(87%) patients as compared to 68(74%) patients in Group B who were only given written prescription. Failure of Nonoperative treatment was noticed in 11(13%) patients in Group A while it was significantly higher in Group B 19 patients (26%). Two patients in Group A reported having headache after commencing therapy with Nitrates and they improved by reducing the amount of topical application of 0.2% Glyceryl trinitrate (GTN) as they had already been counselled while in Group B 9 out of 87 patients developed Headache and resorted to normal after taking NSAID'S and reducing the dose of 0.2% Glyceryl trinitrate (GTN).

Patients who failed nonoperative treatment (11 from Group A and 19 from Group B = total 30(17.2%) patients) were subjected to Surgical Intervention- Lateral Internal Sphincterotomy after admission to surgical ward. All the patients tolerated the surgical procedure well and were discharged home on 2nd day of surgery. No haematoma, bleeding, wound infection, or permanent faecal incontinence was noted on fortnightly follow up for 03

months. However, 01 patient from Group B reported recurrence of symptoms after 45 days of surgery probably after passage of hard stools due to constipation and was managed conservatively on basis of treatment protocols set for Group A.

We found that patients who were Counselled, given written information about their disease and ensured telephonic availability of treating physician were overall more satisfied as compared to those who were only given prescription (Table 2).

Table 2: Results

Total Patients= 174	**Group A n=87**	**Group B n=87**
Pain relief	95%	78%
Healing of fissure	87%	74%
Headache	2	9
Failure of treatment	11(13%)	19(26%)
Surgical intervention	11	19
Complications(Haematoma, wound infection, and incontinence	0	0
Relapse	0	1

DISCUSSION

With proper Counselling, providing written information about the management plan and ensured telephonic availability of treating physician, we found patients showed greater compliance towards 0.2% Glyceryl trinitrate (GTN), leading to better tolerance of treatment (87% healing rate) as compared to those who were only provided with written prescription (74%) in our study. We also observed less headache and better pain relief in our study group who were already instructed about their condition.

Our results are like the reported efficacy of Nitrates in literature ~ 47-88%, largely dependent upon concentration of nitrates used, duration of symptoms and patient compliance. In a study conducted by Nicholas et al in 2015 that compliance to ACPGBI algorithm can lead to fissure healing upto 83.3% obviating the need for surgery compared to 26.1% with non-compliant methods. They also targeted to provide information leaflet to patients in a way to improve patient understanding and compliance[5].

In a study conducted by El Tinay OE et al; in 2005 among 115 patients, 110 patients (95%) who tolerated topical 0.2% Glyceryl trinitrate (GTN) were symptomatically cured within one month of nonoperative treatment. Only 02 patients developed recurrent symptoms, but they were also successfully managed with repeattopical 0.2% Glyceryl trinitrate (GTN) course. Six patients (5.2%) who could not tolerate topical 0.2% Glyceryl trinitrate (GTN) due to side effects were successfully managed with Surgical Sphincterotomy[4,9].

Contrary to our study Farouk R Et al; reported in 1998 that Lateral Sphincterotomy is the Primary form of treatment for Chronic anal fissure (88%) followed by Manual Dilatation of anus (10%) although abandoned since then while 0.2% Glyceryl trinitrate (GTN) was used only in7% 0f their patient population of 221[6].

Other studies conducted by Khan HU et al and Latif A et al showed 74% success rate of conservative treatment of anal fissure that is comparable to our study results[7,2].

CONCLUSION

In this era where trend is changing towards least invasion and people are more aware about their health and keen to understand basic concepts of their treatment, patient compliance can be enhanced by better understanding of their problem to optimise the least invasive form of treatment. Our study has clearly shown that conservative treatment provides best cure if it is properly instituted and patients are motivated by thorough counselling. Therefore, we strongly recommend 0.2% Glyceryl trinitrate (GTN) with atleast 10min councelling session, as the First line of treatment for anal fissure with surgery only reserved for patients who failed appropriate conservative medical treatment.

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What are Anal Fissures?

An anal fissure is a

- Small, oval shaped tear in skin that lines the opening of the anus.
- Fissures typically cause severe pain and bleeding with bowel movements.
- Fissures are quite common in the general population, but are often confused with other causes of pain and bleeding, such as hemorrhoids.
- Patients may also notice bright red blood from the anus that can be seen in the toilet paper or on the stool.
- burning and itching around the anus
- smelly discharge

What causes it?

- Fissures are usually caused by trauma to the inner lining of the anus.
- Patients with tight anal sphincter muscles are more prone to developing anal fissures.
- Dry bowel movement is typically responsible, but loose stools and diarrhea can also be the cause.
- Anal fissures may be acute or chronic (present for a long period of time)

Diagnostics

Your doctor will likely ask about

- your medical history and perform a physical exam including inspection of the anal region
- Often the tear is visible. Usually this exam is all that has needed to diagnose.
- Your doctor will probably refrain from performing a digital rectal exam, which involves inserting a gloved finger into your anal canal, because it is likely to be too painful.
- If anal fissure is suspected but can't be identified, your doctor may use a short, lighted tube (anoscope) to inspect your anal canal.

If an underlying condition is suspected, your Doctor may recommend further testing such as:

- Flexible sigmoidoscopy- Is a thin, flexible tube with a video camera is inserted into the bottom portion of your colon. This test may be done if you're younger than 50 and have no risk factors for intestinal diseases or colon cancer.
- Colonoscopy.