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Research Article

**COMBINED LATERAL INTERNAL SPHINCTEROTOMY AND
ANAL ADVANCEMENT FLAP FOR TREATMENT OF
CHRONIC ANAL FISSURE**¹Muhammad Zuhair, ²Abdul Ghani Jan, ³Maheeb ullah¹Medical officer old BHU shaikhan zhob, ²Medical officer DHQ HOSPITAL, Pishin,
Balochistan, ³Medical officer DHQ HOSPITAL, pishin, Balochistan.**Article Received:** September 2019 **Accepted:** October 2019 **Published:** November 2019**Abstract:****Introduction:**

The health issue selected for study here is a common phenomenon among the patients who have chronic constipation and fissure problem. Different treatments are given to the patients but Lateral internal Sphincterotomy and anal advancement flap are the treatments recommended when no other treatment show improvement. Every treatment has its own drawbacks. The present paper will be helpful in analyzing both the techniques.

Method: This research study was conducted on 60 patients who suffered with fissure and constipation. Patients were divided in two groups (group x and group y) and both techniques were applied AAP (group x) and LIS (group y). The study was conducted in Lahore General Hospital from the time period of October 2018 to March 2019.

Results: Medical history and demographic data was also recorded of the selected sample. When compared in the healing and pain management the AAP seems attractive in terms of recovery and relief of constipation as compared to the LIS. Both males and females were the victim of the disease due to many medical reasons and life style

Conclusion: Both techniques are suitable according to the condition of the patients but AAF is considered super in terms of early recovery and lesser pain after the operation. Return to normal life is fast in AAF.

Keywords: Chronic constipation, Fissure, LIS, Mucosal advancement, infection, Anal Advancement Flap.

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INTRODUCTION:

Anal fissure is a painful state because of rectal bleeding and painful defecation. Hard stool become a challenge for the patient to avoid the anal fissure. The anoderm distal get a tear during excretion which causes pain. The tear can be extended from the dentate line to anal verge. If the constipation prevails the infection become non healing and can induce the ulcer. There are many factors which can cause the pathogenesis of anal fissure like life style, trauma, and ischemia and sphincter spasm. The condition can be cured but it cannot be vanished as it was present in 40 percent of the cases even after surgeries if the patients have the issue of hard dry stool and persistent constipation. The management of anal fissure is healing and relaxing the muscles of internal sphincter through the use of pharmacological drugs and laxative agents. It will help in the reduction of spasm and pain and also helps to increase the perfusion of vascular, and heals the ulcer. These agents are available in the market in different combination and usually contain glyceryl Trinitrate and diltiazam. In the treatment of anal fissure the oral therapy won't work then the option left is the surgery of the patient. LIS (lateral internal sphincterotomy) is considered a good standard option for the patient of anal fissure and it has good healing response after surgery. But the risk of getting the fissure exist if the constipation and hard stool issue is present in the patient even after surgery.

Anal Advancement Flap which is also known as AAF, is an alternative effective management of anal fissure surgically and specially in those patients where reoccurrence of the condition is associated and reported. This is considered excellent surgical treatment even for the chronic constipation and anal fissure patient with surgical history. The healing process is fast and pain after the surgery is less. In the past LIS was the options of the surgeon but now there is a shift for the treatment of anal fissure by using AAF technique by the surgeons.

METHOD:

Table 1

| Age | Group X(AAF) | Percentage | Group Y(LIS) | Percentage |
|--------------------|--------------|------------|--------------|------------|
| 15-25 years | 2 | 6 % | 4 | 13% |
| 26-35 years | 7 | 23% | 5 | 16.6% |
| 36-45 years | 11 | 36% | 14 | 46.6% |
| 46-56 years | 4 | 13% | 6 | 20% |
| 56 years and above | 6 | 20% | 1 | 3% |
| Total | 30 | 100% | 30 | 100% |

The table 1 shows that the most cases were recorded in the age group of 30 plus years and it is because of

The present study was conducted in surgical department of Lahore General Hospital Lahore from October 2018 to March 2019. The patients who came with complain and medical history of anal fissure and chronic constipation were selected. Total 60 patients took part in the study. For the treatment of anal fissure the surgeons divided the patients in two groups x and y and applied both the surgical treatment AAP and LIS on the selected sample after dividing them into half including all age group from teen age to senior citizens irrespective of gender. The patients with hemorrhoids, bleeding disorder, pregnancy, malignancy and fistula was not included in the sample selection. The sample patients were initially given oral therapy but when oral therapy was ineffective the treatment of surgery was selected. Physical examination of patients and their medical history was recorded before suggesting for surgery. Constipation, pain, bleeding and any supportive treatment was also noted from the patients.

Anal Advancement flap AAP was given to 30 patients of group X and is a surgical treatment where v shape incision is suggested under local and spinal anesthesia which can be given from the four centimeter from the verge of the anal to the fissure edges distant from the midline. Fat is used and is mobilized in the anal canal for making advancement to cover the defect of the bleeding and fissure. Lower anal mucosa suturing was flap based and was performed under the supervision of senior surgeons.

Lateral internal sphincterotomy LIS was given to the 30 patients of group Y. Incision was made up to five millimeter in the perianal skin under the local anesthesia by adopting the lithotomy position. Internal anal sphincter is carried out with the help of dissection and it is then segmented to the dentate line level.

RESULTS AND DISCUSSIONS:

The sample size was 60 patients with wide range of age group from teen age to senior citizens. Table 1 is about the age group of the sample size selected for two techniques divided in two groups X and Y.

their life style, eating habits, pregnancies and because of stress they suffered from anal fissure and in their

life. In the group x 36 percent of the sample belonged to thirty plus age group and in group Y the 46 % of the patients belonged to 30 plus age group. Both the gender was suffering from the anal fissure problem. From the table 2 it is clear that the male in both groups suffer the anal fissure more as compared to the

females' .In group X the male population was 63 percent while in group Y it is 70 percent of the selected sample. Female ratio is less because of their life style and eating habits. Infection was present in both cases due to their unhealed fissure and persistent constipation.

Table 2

| Gender | Group X | Percentage | Group Y | Percentage |
|--------|---------|------------|---------|------------|
| Male | 19 | 63.3 % | 21 | 70 % |
| Female | 11 | 36.6 % | 9 | 30 % |
| Total | 30 | 100 % | 30 | 100% |

Before surgery suggestion the complete medical and physical examination was performed. Following signs and symptoms were present in both cases.

Table 3

| Symptoms | Group X | Group Y |
|------------------------------------|---------|---------|
| Constipation | 30 | 30 |
| Pain | 28 | 29 |
| Fecal inconsistency | 24 | 26 |
| Bleeding | 27 | 28 |
| Present from more than a year | 29 | 27 |
| Posterior position of anal fissure | 28 | 26 |
| Anterior position of anal fissure | 2 | 3 |
| Combination of both | 0 | 1 |
| Sentinel tag of skin | 27 | 25 |

From the table 3 it is clear that the medical symptoms were present in both groups and irrespective of gender. Pain and bleeding are reported in all cases making patients uncomfortable and hence after the failure of oral therapy they were recommended for surgeries. Dietary changes and regular exercise can help to reduce the risk of reoccurrence of the disease and the development of the infection. Fecal inconsistencies and infection were observed in both groups after surgeries but the rate was 2 percent in AAF and 17 percent in LIS after three months of the treatment. There are other techniques which can also be used for the treatment of anal fissure surgically like Sphincteroplasty, anoplasty, Sphincter replacement, a rectocele or hemorrhoids treatment, dynamic graciloplasty and Colostomy.

The patients were suggested to take the laxatives in their routine life and add fiber and enhanced liquid intake in order to make the effective bowl movement and soft stool defecation. Regular exercise and avoiding stress can also be alternative therapies for the treatment of anal fissure. Patient quality of life enhanced after surgeries of both the groups.AAF technique of group X were more satisfied as compared to LIS in terms of quick healing, recovery and pain free state. Their social and sexual life becomes active

after treatment. Fecal inconsistencies were reduced considerably in both groups after treatment. The study was time bound and also the number of sample was small. Follow ups after surgery was difficult to maintain due to the lack of interest of patients but the short sample follow ups after operation showed satisfaction in terms of pain and bleeding.

CONCLUSION:

It is concluded that management of constipation and changing life style can help to avoid the surgeries in the treatment of anal fissure but if the situation become unavoidable for surgery AAF is more attractive therapy as compared to the LIS. But both techniques are successful. Fecal inconsistencies and infections were reduced considerably after the application of both techniques.

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