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# A COMPARATIVE STUDY ON EFFECTIVENESS OF PICCHA BASTI AND LATERAL INTERNAL SPHINCTEROTOMY IN MANAGEMENT OF FISSURE IN ANO

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#### **ABSTRACT**

Parikartika (Fissure-in-Ano) literally means Kartanavat Vedana (Cutting type of pain) and Guda vidara i.e. Vidarana in guda pradesha (Ulceration in Anal canal). The factors responsible for causation of Parikartika are found in various texts as Vamana-Virechana vyapad, Bastikarma vyapad, Atisara, Grahani, Arsha, and Udavarta etc. The Ayurvedic principle regarding the management of this disease aims at, vata shamana and Vatanulomana. Taking these factors into consideration and to avoid surgical intervention, the present study is planned to evolve an effective treatment by Ayurvedic approach. The present clinical study has been undertaken to assess comparative efficacy of piccha basti and lateral internal sphincterotomy. The present clinical study includes 40 patients who are randomly divided

into 2 groups of 20 patients each viz. Group A & Group B. All patients complained moderate to severe pain and maximum relief was observed in group-B. Maximum patients complained of mild to moderate burning sensation per anum and group-A showed maximum improvement as compare to other groups.

**KEYWORDS:** Parikartika, Fissure-In-Ano, Piccha basti, Lateral internal sphincterotomy.

#### INTRODUCTION

Parikartika (Fissure-in-Ano) is a very common and most painful anorectal disorder. It is a condition in which patient experiences a sense of pain as if the suffering site is being cut around with scissor. Chakrapani had stated this the definition.<sup>[1,2]</sup> It is severe life threatening pain in anus with massive stricture. [3] Constipation associated with severe cutting pain in sacral, umbilical, pelvic and groin region are the other symptoms. [4,5,6] Based on clinical symptoms it is classified into two varieties; viz. acute fissure-in-Ano and chronic fissure-in-Ano. Some of the causes of Fissure-in-Ano are trauma to the anal canal and spasm of internal sphincter. The treatment for acute fissure is most likely of conservative nature with oral painkillers, stool softeners, soothening ointments or injection of long acting anaesthetizing drug. Surgical procedures like Lords dilatation, Sphincterotomy, Fissurectomy and excision of anal ulcer gives relief, but complications like incontinence, stenosis and stricture formation are very common. Thus the problem of complication after operation and recurrence after medical treatment of fissure-in-ano still gives a wide scope for deep consideration and thorough concentration to evolve newer methods of cure. This drawback in the management of fissure-in-Ano has provided scope for adopting principles of Ayurveda. Present study has put forth a comparative approach towards management of Parikartika (Fissure in Ano). Two groups have been made Group A and Group B. Group-A- It is treated with ayurvedic remedies only i.e. Snehana, Swedana, Pichha basti, Triphala guggulu, and Haritaki churna. And Group-B- It is treated with lateral internal sphincterotomy, analgesics, antibiotic if needed, warm sitz bath and enema along with oral ayurvedic drugs i.e. as given in Group A. And finally conclusions have drawn from observations obtained by attenuation of symptoms.

#### **OBJECTIVES**

The present study delineates an assessment on efficacy among administration of Piccha basti and lateral internal sphincterotomy in Parikartika (Fissure in Ano).

## MATERIALS AND METHODS

Patients attending OPD of SS Hospital, IMS, BHU fulfilling inclusion and exclusion criteria, were randomly selected for the present study irrespective of gender, religion, caste and divided into two groups named as Group A and B. The details of the patients were recorded by using a standard proforma.

#### Inclusion Criteria

Age limit - 18 years to 65 years, patients having chronic anal fissure (more than 6 weeks) in the anterior and posterior anal midline.

#### **Exclusion Criteria**

Patients having anal fistulas or anal fissure of various causes such as Crohn disease, anal suppuration, subfissural infiltration, abscesses, acute haemor-rhoidal attacks or inflammatory bowel disease, Patients having anal or perianal cancer, Patients having myasthenia or any genetic muscle disease, Immunosuppressive patients, Pregnant females, Postoperative fissures

### **Grading scale for Assessment**

Assessment points were tabulated in following table (Table No.01)

| Sl.No. | Assessment points  | Grade 00                        | Grade 01  | Grade 02  | Grade 03   | Grade 04             |
|--------|--|---------------------------------|---|---|--|----------------------|
| 01     | Pain   | No pain -<br>Absence of<br>pain | Mild pain - Tolerable pain, no analgesics required  | Moderate pain -<br>Tolerable after<br>taking analgesics                                       | Severe pain -<br>Not tolerable,<br>needs constant<br>attention | -                    |
| 02     | Burning sensation  | No burning sensation            | Mild burning<br>sensation<br>(during<br>defecation) | Moderate burning<br>sensation (during<br>and after<br>defecation<br>persists for 5-10<br>min) | Severe burning sensation (persists ≤ 10 min)                   | -                    |
| 03     | Bleeding per rectum  | No bleeding per rectum          | bleeding present<br>streak wise on<br>stool         | 1-2 drops after defecation  | ≥3 drops after defecation                                      | -                    |
| 04     | Constipation   |                                 |   |   |  |                      |
|        | a)According to consistency                                     | No constipation                 | Dry stool   | Hard stool  | Pellet like  | -                    |
|        | b)According to<br>frequency of<br>bowel<br>movements           | No constipation                 | 1-2 times in 1-2 days                               | 2 times per week  | Once per week  | -                    |
| 05     | Position of ulcer  | -                               | Anterior  | Posterior   | Anterior – posterior both                                      | -                    |
| 06     | Itching around anal verge                                      | No itching                      | Mild itching  | Moderate itching  | Severe itching   | -                    |
| 07     | Incontinence-<br>solid, liquid<br>and flatus<br>(Wexner score) | Never                           | Rarely less than once in a month                    | Sometimes(more<br>than once a<br>month, less than<br>every week)                              | Usually(more<br>than once a<br>month, less<br>than everyday)   | Always(e<br>veryday) |

## **OBSERVATION**

Table No.02: Effect on pain at anal region in 2 groups.

| Group   | Grade | Pain per rectum No and % of Cases |       |    |       |  |
|---------|-------|-----------------------------------|-------|----|-------|--|
|         | 5     | BT                                |       | AT |       |  |
|         | 0     | 0                                 | 0.0%  | 9  | 56.3% |  |
| Crown A | 1     | 8                                 | 50.0% | 4  | 25.0% |  |
| Group-A | 2     | 6                                 | 37.5% | 3  | 18.7% |  |
|         | 3     | 2                                 | 12.5% | 0  | 0.0%  |  |
|         | 0     | 1                                 | 5.8%  | 14 | 82.3% |  |
| Cwayn D | 1     | 9                                 | 52.9% | 2  | 11.8% |  |
| Group-B | 2     | 7                                 | 41.1% | 1  | 5.9%  |  |
|         | 3     | 0                                 | 0.0%  | 0  | 0.0%  |  |

Table No.03 Effect on burning sensation at anal region in 2 groups.

| Group   | Grade | Burning sensation per rectum No and % of Cases |       |    |       |  |  |
|---------|-------|--|-------|----|-------|--|--|
|         | 5     | ]  | BT    |    | AT    |  |  |
|         | 0     | 1  | 6.3%  | 13 | 81.3% |  |  |
| Cmoun A | 1     | 8  | 50.0% | 3  | 18.7% |  |  |
| Group-A | 2     | 7  | 43.7% | 0  | 0.0%  |  |  |
|         | 3     | 0  | 0.0%  | 0  | 0.0%  |  |  |
|         | 0     | 2  | 11.7% | 13 | 76.5% |  |  |
| Cwann D | 1     | 10   | 58.9% | 4  | 23.5% |  |  |
| Group-B | 2     | 5  | 29.4% | 0  | 0.0%  |  |  |
|         | 3     | 0  | 0.0%  | 0  | 0.0%  |  |  |

Table no. 04 Effect on bleeding per anus in 2 groups.

| Group   | Grade | Bleeding per rectum No and % of Cases |       |    |       |  |  |
|---------|-------|---------------------------------------|-------|----|-------|--|--|
|         | 5     | BT                                    |       | AT |       |  |  |
|         | 0     | 4                                     | 25.0% | 12 | 75.0% |  |  |
| Cmann A | 1     | 8                                     | 50.0% | 4  | 25.0% |  |  |
| Group-A | 2     | 4                                     | 25.0% | 0  | 0.0%  |  |  |
|         | 3     | 0                                     | 0.0%  | 0  | 0.0%  |  |  |
|         | 0     | 5                                     | 29.4% | 15 | 88.2% |  |  |
| Cwayn P | 1     | 9                                     | 52.9% | 2  | 11.8% |  |  |
| Group-B | 2     | 3                                     | 17.7% | 0  | 0.0%  |  |  |
|         | 3     | 0                                     | 0.0%  | 0  | 0.0%  |  |  |

Table no. 05 Effect on constipation in 2 groups.

| Group   | Grade | Constipation-according to consistency No and % of Cases |       |    |       |  |
|---------|-------|---|-------|----|-------|--|
|         | 5     |   | BT    | AT |       |  |
|         | 0     | 4   | 25.0% | 11 | 68.8% |  |
| C A     | 1     | 4   | 25.0% | 5  | 31.2% |  |
| Group-A | 2     | 6   | 37.5% | 0  | 0.0%  |  |
|         | 3     | 2   | 12.5% | 0  | 0.0%  |  |
|         | 0     | 3   | 17.6% | 14 | 82.3% |  |
| Crown P | 1     | 7   | 41.2% | 3  | 17.7% |  |
| Group-B | 2     | 7   | 41.2% | 0  | 0.0%  |  |
|         | 3     | 0   | 0.0%  | 0  | 0.0%  |  |

Table no. 06 Effect on itching in perianal region in 2 groups.

| Group   | Grade | Itching around anal verge No and % of Cases |       |    |       |  |  |  |
|---------|-------|---|-------|----|-------|--|--|--|
|         | G     | BT  |       | AT |       |  |  |  |
|         | 0     | 4   | 25.0% | 13 | 81.3% |  |  |  |
| Cmann A | 1     | 8   | 50.0% | 3  | 18.7% |  |  |  |
| Group-A | 2     | 3   | 18.8% | 0  | 0.0%  |  |  |  |
|         | 3     | 1   | 6.2%  | 0  | 0.0%  |  |  |  |
|         | 0     | 4   | 23.6% | 14 | 82.3% |  |  |  |
| Cwayn D | 1     | 11  | 64.7% | 3  | 17.7% |  |  |  |
| Group-B | 2     | 2   | 11.7% | 0  | 0.0%  |  |  |  |
|         | 3     | 0   | 0.0%  | 0  | 0.0%  |  |  |  |

Table no. 07 Presence of Incontinence-flatus/solid/liquid in 2 groups

|         | Grade |    |                   | ce-flatus/solid/liquid |        |  |
|---------|-------|----|-------------------|------------------------|--------|--|
| Group   | ra    |    | No and % of Cases |                        |        |  |
|         | 9     | BT |                   |                        | AT     |  |
|         | 0     | 16 | 100.0%            | 16                     | 100.0% |  |
|         | 1     | 0  | 0.0%              | 0                      | 0.0%   |  |
| Group-A | 2     | 0  | 0.0%              | 0                      | 0.0%   |  |
|         | 3     | 0  | 0.0%              | 0                      | 0.0%   |  |
|         | 4     | 0  | 0.0%              | 0                      | 0.0%   |  |
|         | 0     | 17 | 100.0%            | 15                     | 88.2%  |  |
|         | 1     | 0  | 0.0%              | 2                      | 11.8%  |  |
| Group-B | 2     | 0  | 0.0%              | 0                      | 0.0%   |  |
|         | 3     | 0  | 0.0%              | 0                      | 0.0%   |  |
|         | 4     | 0  | 0.0%              | 0                      | 0.0%   |  |

## **DISCUSSION**

Fissure in ano is a disease which occurs due to rupture of anal valve which leads to a vertical tear in anal mucosa up to the anal verge, with prevalence of 1 in 350 patients. Anal fissures are located in the posterior midline in 90% of the cases, although 10-20% in women and 1-

10% in men are located in the anterior midline.<sup>[7]</sup> It is the third most common ano rectal disease after chronic constipation and hemorrhoids. In modern management anti inflammatory drugs, Calcium channel blockers and sphincterotomy used to relieve exaggerated sphincter tone. With the help of anorectal manometry, it is proved that this management is effective to relax the sphincter tone. It was Notaras (in 1971) who introduced the subcutaneous method of lateral sphincterotomy in which the lower part of the internal sphincter was divided as in subcutaneous tenotomy, leaving virtually no wound at all. This method soon became popular. [8] Similarly in Ayurvedic scripts some evident remedies are found to relieve the pain in parikartika. Some scholars had already proven the results of basti, but had not proved effects of basti against scientific parameters of ano rectal manometry technique. As piccha basti is found to be effective in this regard, hence this study is held in consideration to carry out the assessment of the effect of PICHHA basti in fissure in ano with the help of ano rectal manometry. [9] All patient complained moderate to severe pain and maximum relief was observed in group-B. Maximum patients complained of mild to moderate burning sensation per anum and group-A showed maximum improvement as compare to other groups. Incontinence and hematoma as a complication was seen post operatively in group-B.

#### **CONCLUSION**

The sample size selected for the study was not large enough to conclude any decision, a large number of patients should have taken to evaluate and compare the effect in different groups. Requirement of long duration and more number of follow up is mandatory to evaluate the efficacy in sustaining the improvement.

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