

GUDAVIVARDHAN, ANAL DILATATION BY DILATORS: A NON-SURGICAL THERAPY FOR FISSURE IN ANO**Pratiksha Suresh Mane^{1*} and D. D. Chavan²**

¹PG Scholar, Surgery Department, YMT Ayurvedic Medical College and Hospital Kharghar, Navi Mumbai.

²Guide, Associate Professor and HOD, Surgery Department, YMT Ayurvedic Medical College and Hospital Kharghar, Navi Mumbai.

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Corresponding Author*Pratiksha Suresh Mane**

PG Scholar, Surgery
Department, YMT
Ayurvedic Medical College
and Hospital Kharghar, Navi
Mumbai.

ABSTRACT

The process of dilating the luminal diameter of anal canal by using anal dilator is referred as Gudavivardhan, through this process, the aim is to relax the anal sphincter to relieve the hyperactivity and rigidity of anal sphincter. Anal fissure is a common anorectal condition. It's symptoms consist of pain and bleeding during defaecation. Common site of fissure is midline posteriorly, but 25% of women and 8% of men have anterior fissure. The Aim of this study is to relax the anal sphincter to relieve the hyperactivity and rigidity of anal sphincter and to determine the outcome of anal dilatation in the management of chronic fissure in ano. In this study total 10 patients of chronic fissure in ano are included from surgery department between the age of 18 to

64 years. Out of 10 patients, in 08 patients anal sphincter relaxed and because of sphincter relaxation, circulation improved and fissure wound healed completely. Anal dilatation by standard sized dilators is a simple, less traumatic and cheap procedure for treatment of anal fissure. Anal dilatation is effective in the treatment of chronic fissure in ano. Anal dilatation performed in systematic and standardized way has successful outcome without complication. Anal dilatation by dilators relaxes the anal sphincter and reduces the hyperactivity i.e spasm and rigidity of anal sphincter.

KEYWORDS: Fissure in ano, Gudavivardhan, Anal dilatation, Anal dilators.

INTRODUCTION

The process of dilating the luminal diameter of anal canal by using anal dilator is referred as Gudavivardhan, through this process, the aim is to relax the anal sphincter, to relieve the hyperactivity and rigidity of anal sphincter. According to sushrut, Gudavivardhan is treatment of Sannirudha guda.^[1]

त्र्यहात त्र्यहात् स्थूलतरां सम्यङ्नाडी प्रवेशयेत् ।

स्त्रोतो विवर्धयेदेवं स्निग्धमन्नं च भोजयेत् ।

भित्त्वा वा सेवनीं मुक्त्वा सद्यःक्षतवदाचरेत् ॥45॥ (सु. चि 20/44, 45)

Sannirudha guda is the deformity of anal canal characterized by narrowing of anus resulting in a difficulty on defaecation. According to samprapti of sannirudha guda, Due to suppression of natural urges, The vat dosha is depressed takes shelter in anus and causes obstruction by narrowing the orifice and because of narrow passage faeces passed out with difficulty.^[2]

वेगसन्धारणाद्वायुर्विहतो गुदमाश्रितः ।

निरुद्धि महत् स्रोतः सूक्ष्मद्वारं करोति च ॥ 56॥

मार्गस्य सौक्ष्म्यात् कृच्छ्रेण पुरीषं तस्य गच्छति ।

सन्निरुद्धगुदं व्याधिमेनं विद्यात् सुदुस्तरम् ॥57॥ (सु.नि. 13/57, 58)

When we observe practically, there are many conditions which causes sannirudha guda i.e narrowing the lumen of anal canal-

- 1) Fissure in ano, due to spasm of sphincter muscle.
- 2) Post op haemorrhoidectomy.
- 3) Chronic laxative abuse.

Anal fissure is a most common anorectal condition. Anal fissure is an ulcer situated in the mucosa and the lower part of the anal canal from anoderm to dentate line. It occurs more commonly in young adults. Its occurrence is less common beyond age 65. It is particularly common after childbirth.^[3] It's Symptoms consists of pain and bleeding during defecation. In male, Fissures are predominantly located in the posterior midline but in female, located midline anteriorly. Chronicity of anal fissure is the result of poor anodermal perfusion, specially at the posterior commissure. Local ischemia is likely a function of increased resting

anal pressure commonly associated with fissure. So the treatment is to lower resting sphincter pressure by relaxing anal sphincter and to promote wound healing.^[4]

Anal dilatation is the treatment of fissure in ano. The objective of anal dilatation is to relax anal sphincter, to relieve hyperactivity i.e spasm and rigidity of anal sphincter by deliberate rupture of the internal sphincter.

Controlled sphincteric dilatation using a progression of anal dilators up to a diameter of 48mm were compared with LIS and the results are similar to sphincterotomy.^[5]

In this study anal dilators are used with the aim of to relax the anal sphincter to relieve the hyperactivity i.e spasm and rigidity of anal sphincter spasm in fissure in ano patients.

AIM AND OBJECTIVES

- 1) To relax the anal sphincter to relieve the hyperactivity i.e spasm and rigidity of anal sphincter by deliberate rupture of the internal sphincter.
- 2) To determine the outcome of anal dilatation in the management of chronic fissure in ano.

METHODOLOGY

Sample size- 10

Inclusion criteria

- Age group 18 to 64 years.
- Both sexes.
- All patient diagnosed with chronic fissure in ano.

Exclusion criteria

- Acute fissure in ano.
- Immunocompromised patients.
- Fissure with chron's disease, ulcerative colitis.

Assessment criteria

- 1) Pain assessment criteria

Symptoms	Score
No pain	0
Mild (Pt can bear pain without analgesic)	1
Moderate (Pain relieving with analgesic)	2
Severe (Pain not relieving with analgesics)	3

2) P/R bleeding assessment criteria

Symptoms	Score
No bleeding	0
Bleeding as a stick on stool	1
Few drop occasionally	2
Few drop daily	3

3) Anal spasm assessment criteria

Symptoms	Score
No spasm (No resistance)	0
Mild spasm (Slight resistance)	1
Moderate (Moderate resistance)	2
Severe (Maximum resistance)	3

4) Healing of fissure (local ulcer) assessment criteria

Symptoms	Score
No healing (Dushta awastha)	0
Mild healing (Shudha awastha)	1
Moderate healing (Ruhyaman awastha)	2
Excellent healing (Rudha awastha)	3

MATERIALS AND METHODS

- Anal dilator – Small (no.2), Medium (no.4), & Large size (no.6).
- Lignocaine jelly.
- Ghruta.

**Treatment details**

- 14 days anal dilatation by dilators.
- Awagah sweda.
- Laxative- Syp. Cremaffin plus 15 ml HS
- Oral analgesic sos.

Procedure

- Patient in lithotomy position.
- 5ml lignocaine jelly instilled in anal canal with the help of feeding tube.^[6]
- After 10 minutes digital examination done to assure the effect of local anaesthesia.
- Assorted size of dilator lubricated with ghruta and inserted in the anal canal repeatedly for 3 to 4 min.^[7]
- Day 1 & 2 = used small dilator
- Day 3 & 4 = Medium size
- Day 5 & 6 = Large size dilator used.
- Awagaha swed (Sitz's bath) was given for 10 to 15 min.^[8]
- Day 7 to 14th day dilated with large dilator for maintenance of relaxation.

Procedure image**Day 1****Day 3****Day 7**

DISCUSSION

In the pathogenesis of fissure in ano, which is a painful ulceration of anal mucosa, hyperactivity i.e spasm of internal sphincter is an accepted cause as a result of the traumatizing effect of hard stool which develop secondary to constipation.

In our patients, high internal sphincter spasm were found pre-operately.

Anal dilatation has been used for a long time in the treatment of fissure in ano and it is advantageous as it is easily applied. It does not require much equipment.

As well as no episodes of incontinence existed after this application which occurs due to sphincter damage.

RESULT

Out of 10 patients, in 08 patients anal sphincter relaxed. Hyperactivity of anal sphincter also reduced. Because of that blood circulation increased and fissure wound healed completely. Anal dilatation had no anal incontinence or other complications.

CONCLUSION

Anal dilatation by standard sized dilators is a simple, less traumatic and cheap procedure for treatment of anal fissure. It is effective in the treatment of chronic fissure in ano. Anal dilatation performed in systematic and standardized way has successful outcome without complication. Anal dilatation by dilators relax the anal sphincter and reduces the hyperactivity i.e spasm and rigidity of anal sphincter.

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