



## USE OF LIGNOCAINE AND ITS EFFECT IN ACUTE ANAL FISSURE

## General Surgery

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## ABSTRACT

**Introduction:** An anal fissure is a distressing problem faced by the patients. It is one of the commonest cases presenting in surgical OPD. Every practitioner of general surgery would face innumerable patients with complaint during his/her surgical career. Anal fissure is considered one of the commonest causes of severe anal pain.

**Aims And Objective:** The aim of our study is to see the effect after giving lignocaine in acute anal fissure in terms of efficacy, effectiveness and complications. The primary endpoint of the study will be the incidence of chronic pain and immediate recurrence at the site of anal fissure repairs at 2 months. This Study also intends to throw light upon incidence and clinical presentation of acute anal fissure.

**Materials and Method:** This study consists of 100 patients who presented with acute anal fissure and treated with lignocaine 2% jelly local application.

**Conclusion:** Lignocaine is effective in pain relief in patient with acute anal fissure although it helps in delayed healing but dietary modification, stool softener will helps in achieving early results.

## KEYWORDS:

## INTRODUCTION:

Anal fissure is a disruption of the skin at the distal anal canal. Most anal fissure are located in the posterior midline with 10-15% occur anteriorly usually extending from the level of denantate line out of the anal verge.(1,2,3)

Early fissures have the appearance of a single tear in anoderm. With the passage of time, chronic fissure develop thicken skin margins, and fibres of the internal anal sphincter (IAS) become visible at the fissures' base. Many patients with chronic fissure develop a sentinel skin tag at the distal fissure margin and a hypertrophied anal papilla just proximal to the fissure within the anal canal.(4,5) Anal fissure is common disorder, but its exact incidence is unknown. The condition may frequently be misdiagnosed as haemorrhoids by primary care providers. The clinical hallmarks of anal fissure is pain during, and especially after, defecation. The pain may be short lived with acute fissure, but may last hours or even become continues in chronic cases.(6,7)

The pain is often severe enough for patients to dread or even attempt to avoid bowl movement all together. Some patient describes pain as skin to passing razor blades or broken glass. Fissure patient also can experience rectal bleeding, usually consisting of small quantities of fresh red blood.(8,9)

The standard algorithm for anal fissure therapy has a trail of fibre supplementation, size baths, and topical analgesics; if the pain is intolerable or if conservative care fails, surgery is performed (usually a lateral sphincterotomy). This approach has been modified in recent years, as a better understanding of fissure pathophysiology has provided a number of novel therapeutic options.(10)

Surgical techniques like manual anal dilatation or lateral internal sphincterotomy, effectively heal most fissures within a few weeks, but many result in permanently impaired anal continence.(11,12,13) This has led to the research for alternative non-surgical treatment, and various pharmacological agents have been shown to lower resting anal pressure and heal fissures without threatening anal continence.(14)

The present study comprises the study of lignocaine(2%) local application in the treatment of fissure in ano.

## MATERIAL AND METHODS:

This prospective study was conducted between approval of synopsis

by ethics committee in December 2016 & May 2017 on patients with acute anal fissure admitted to S.B.K.S.& M.I.R.C. Dhiraj Hospital Pipariya Vadodara.

## INCLUSION AND EXCLUSION CRITERIA:

## Inclusion criteria:

All the Patients presenting with acute anal fissure in surgery department were included in study.

## Exclusion criteria:

1. Patient not willing for study.
2. Paediatric Patients were excluded

## METHOD OF COLLECTION OF DATA:

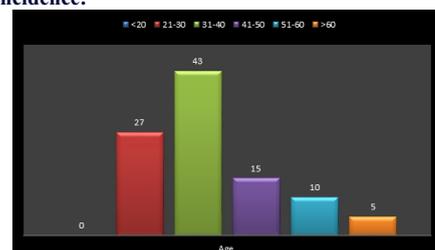
Patients presenting with acute anal fissure repair were enrolled in study and details of them were taken. Written and Informed Consent were obtained for taking part in study. Patient's history and examination were done in details.

Patients were prescribed lignocaine 2% jelly for local application after hot sitz bath. Patient will be followed up after 1 week, 15th day, 1 month and 6months.

100 patients presenting with anal fissure in the General Surgery OPD and undergo acute anal fissure repair at Dhiraj Hospital were enrolled. The study was a prospective one with comparative data being used extensively to formulate a conclusion. The data were primarily gathered in the form of the Performa for patients. It was then sorted out into various aspects of the study by formations of tables and charts and then extrapolated to arrive at a conclusion.

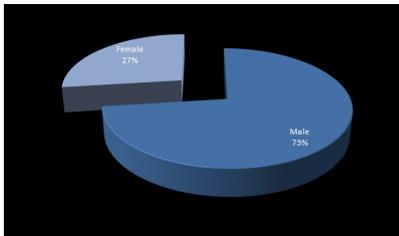
## Results and Discussion:

## 1) Age Incidence:



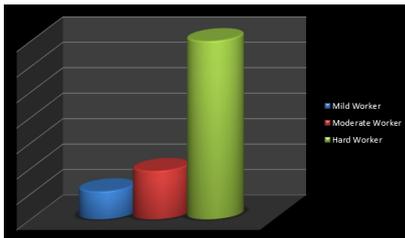
Total 100 patients were enrolled in study. Most common age group affected were 31-40 followed by 20-30 which are most productive age group which may be attributed to working population leaving away from home, less water intake, less fibre in food all contributing to constipation leading to fissure.

**2) Sex Distribution:**



Male populations were having more incidence of fissure than female which may be due to more time away from home in hot climatic condition making them prone to constipation.

**3) Occupation:**



Incidence of fissure was more in hard worker like farmers, truck driver, daily wagers than moderate workers and mild workers owing to low water intake and less fibre in diet.

**4) Lignocaine and its effect:**

Effect	1 Week	15 Days	1 month	6 Month
<b>Pain</b>	100%	100%	100%	100%
<b>Healing</b>	30%	55%	80%	100%

Pain was relieved in all patients at the end of 1st week while healing of fissure was noticed in 30% at the end of 1st week, 55% at 15th day, 80% at the end of 1 month and 100% at 6 month.

**CONCLUSION:**

Lignocaine is effective in pain relief in patient with acute anal fissure although it helps in delayed healing but dietary modification, stool softer will helps in achieving early results.

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