
FISSURECTOMY AND MIDLINE INTERNAL SPHINCTEROTOMY IN THE TREATMENT OF CHRONIC FISSURES

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Summary

Eighty six patients with chronic anal fissures were treated at Al-Kindy Teaching Hospital from 1992-1996 by fissurectomy and internal midline posterior sphincterotomy. All patients had satisfactory results with a period of follow up ranging from 4-7 years, no recurrence of the symptoms or major complications resulted from this operation. The advantage of this operation and its safety is discussed. We have found this procedure is useful and safe for the treatment of chronic anal fissure.

Introduction

Anal fissures represent denuded epithelium of the anal canal overlying the internal sphincter. They are painful because of their location below the mucocutaneous junction¹.

A fissure is defined as chronic when it becomes a clearly recognized, well-circumscribed ulcer².

On examination, the patient with chronic anal fissure has the following criteria:

- 1- The presence of the ulcer.
- 2- The presence of external skin

tag.

- 3- The presence of hypertrophied anal papilla proximally³ (Figure 1).



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Figure 1. Chronic posterior anal fissure

The aim of this study is to assess the operation of fissurectomy (excision of the fissure) with superficial internal sphincterotomy in a cohort of patients with resistant chronic anal fissures.

Patients and Methods

Between January 1992 and December 1996 a cohort of 86 patients with chronic anal fissure at Al-Kindy Teaching Hospital had been selected according to the following criteria:

- 1- Duration of their symptoms was more than 2 years.
- 2- Recurrence of their symptoms after transient relief by conservative or minor surgical treatment.
- 3- All had a positive ulcer triad i.e. presence of anal ulcer, sentinel skin tag and the hypertrophied anal papilla proximally.

They were 64 male patient with a mean age of (33.5) and 22 female patient with a mean age of 26. Male to female ratio was 3:1.

Among the female patients 6 were single.

All patients presented with pain and bleeding as their main symptoms.

All patients had their fissures located in the posterior midline position.

The follow up period for these patients was from 4-7 years.

Surgical procedure:

All of them underwent standard fissurectomy in addition to midline internal sphincterotomy through the raw area under general anaesthesia (Figure 2). The internal sphincter was incised through the raw area by dividing the transverse fibers only. The anal mucosa was sutured by (000) chromic catgut to insure perfect haemostasis. No packing was required, but, a small light dressing

was left in the anal opening which was removed easily by the patient next day.

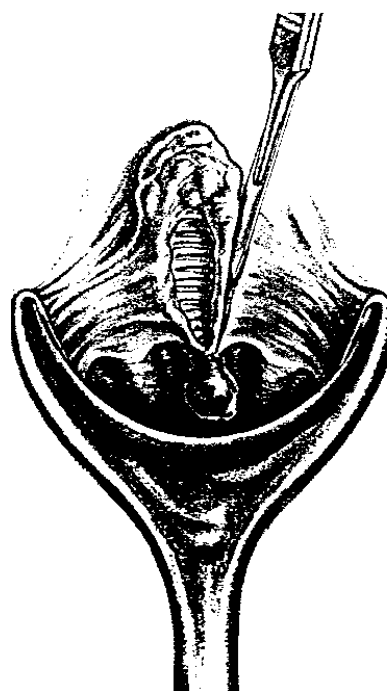


Figure 2. Chronic anal fissure is treated by excision of the fibrous tissue skin tag and hypertrophied anal papilla, with posterior internal anal sphincterotomy.

Results

The results of this procedure were evaluated and assessed according to the complications that occurred post-operatively and in the follow up period.

Table I. The types of complications and the number and percentage of their occurrence.

Complications	No.	Sex	%
Urinary retention	5	M	5.8
Flatus incontinence	4	3M + 1F	4.6
Minor bleeding	9	6M+3F	10.4
Recurrence	10	4M+6F	11.7

The very early complication of urinary retention occurred in 5 male patients over the age of 40, which necessitated the passage of a Foley's catheter in three of them.

Transient flatus incontinence occurred in 3 males and in one female patient, which disappeared in all of them at the end of the one month postoperatively.

When patients returned to their normal diet and activity 2 weeks after operation, 9 of them (6 of them were males) developed slight bleeding with defecation.

Ten patients (4 of them were males) had recurrence of the acute fissure in the fissurectomy scar. All were initiated by passage of a large hard constipated stool. These ulcers healed completely with the use of bulk stool softeners. In the long follow up period, no patient had significant stricture formation, key-hole deformity or major persistent problems with anal competence.

All patients prefer their postoperative condition to their preoperative state.

There were no deaths or preoperative anaesthetic complications.

Discussion

The very common problem of anal fissure was first described in 1826 by Recamier, who recommended stretching of the anal sphincter to treat the condition⁴.

There was a general agreement that there was no place for conservative treatment in cases of chronic anal fissures, since then, many surgical procedures had been described and tried⁵.

Fissurectomy and midline internal sphincterotomy because the single most popular procedure for the treatment of complicated chronic anal fissures, which resulted in excellent pain relief^{6,7,8}.

But the major criticism of fissurectomy is that it is complicated by major or prolonged problems with anal competence, symptomatic stricture formation, and anal soilage secondary to the key-hole deformity^{9,10}.

Altered anal continence produced by a relatively insensitive fissurectomy scar and compounded by decreased internal anal sphincter pressure after surgery produce persistent postoperative fecal soilage in some patients¹¹. The reported incidence of this complication ranges from 6-50% in the literature^{8,9,10}. No one of the patients in this study developed these complications. This may be due to the attention to the detail during operation, specifically, when, only dividing the scarred, contracted fibers of the internal sphincter muscle.

This effectively releases any contracture that might be present, widens the anal canal and relieves associated spasm of the internal sphincter. Minor problems with anal incontinence during early postoperative period seems to be an unavoidable sequelae to operations on the anus.

The data in this study agree with the literature that these are transient problems that usually resolve completely with time^{10,11}.

Conclusion

The results obtained by this procedure revealed that:

1- No significant complications occurred by this operation.

2- The key-hole deformity, symptomatic stricture, and major problem with anal canal competence are not present.

3- Fissurectomy with internal sphincterotomy is a viable procedure for the surgical treatment of chronic anal fissures.

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