بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY

Fistulotomy with Primary Sphincter Repair in High Anal Fistula

Thesis

Submitted for Partial Fulfillment of Master Degree in General Surgery

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List of Abbreviations

Abb.	Full term
EUA	*Examination under Anesthesia*
ICC	*Interstitial Cells of Cajal*
LIFT	*Ligation of the Intersphincteric Fistula Track*
LIFT	*Ligation of the Intersphincteric Fistula Tract*
SPSS	*Statistical Package for Social Sciences*
VRS	*Verbal Categorical Rating Scale*

ABSTRACT

Background: Anal fistula is abnormal communication between the anal canal and the perianal skin or perineum or buttocks. Anal fistula is almost always a consequence of an anorectal abscess that was drained. While the abscess represents the acute phase of the disease, fistula represents the chronic phase as the fistulous pathway may persist in about 1/3 of cases.

Aim of the Work: In this study we will perform fistulotomy with primary sphincter repair in high cryptoglandular fistula with assessment of recurrence rate, incontinence rate and patient satisfaction according to pain score, wound healing, discharge and return to daily activity parameters.

Methods: This was prospective cohort study on 30 patients of high peri-anal fistulae and fistulotomy and reconstruction (primary suture repair) of anal sphincter was done., the patients were followed up 6 months postoperatively regarding their continence using Wexner score, recurrence, discharge and their return to work by scheduled outpatient clinical examination.

Results: Among 30 patients only three patients complaining usual incontinence mostly as post defecation soiling. Three patients reported anal fistula recurrence: One occurred at the 5th month, while the other two occurred at the 6th month after surgery. The procedure was well tolerated by the patients as most of them complaining only minimal pain and returned to work after two weeks without need of other stage like other procedures.

Conclusion: Fistulotomy with primary sphincter repair is an effective therapeutic option for patients with high anal fistula. Our study demonstrated that immediate reconstruction of the sphincters after fistulotomy achieved high success rates and low risk of postoperative fecal incontinence, compared to reported rates after simple fistulotomy.

Keywords: *Fistulotomy - Primary Sphincter Repair - High Anal Fistula*

INTRODUCTION

Anal fistula is abnormal communication between the anal canal and the perianal skin or perineum or buttocks. Anal fistula is almost always a consequence of an anorectal abscess that was drained. While the abscess represents the acute phase of the disease, fistula represents the chronic phase as the fistulous pathway may persist in about 1/3 of cases ***(Kharadi and Varikoo, 2016).***

So that, the initial management strategy prior to any definitive treatment local control of perianal sepsis, particularly if an abscess exists. This may include draining an abscess cavity or placing a draining seton into the fistula to allow the area to clean before surgery ***(Bubbers and Cologne, 2016).***

The main target of treatment of anal fistula is to eradicate suppurative process and to prevent anal incontinence and recurrence which vary from 0 to 63% according to the type (high or low- supra or transsphincteric) and the technique of management and the presence of incontinence like old age and multiparous women ***(Arroyo et al., 2012).***

Fistulotomy has long been considered the "gold standard" for the treatment of "simple" anal fistulas that include opening the entire fistula tract from the primary, internal opening to all secondary, external openings. For "simple fistulas", the recurrence rate after fistulotomy is generally

between 2-9% with a change in continence in 0-17% of patients; also it has a low recurrence rate and an acceptable rate of morbidity ***(Whiteford, 2005).***

In spite of that fistulotomy has a cure rate of over 90%, and is the mainstay of treatment. There is nevertheless a risk of rendering the patient incontinent when the anal sphincter is divided ***(Owen et al., 2016).***

Alternatives approaches have varying rates of cure. For example, cutting seton has a recurrence rate of 0%–28%, and an incontinence rate of 20%–77% ***(Durgun et al., 2002).***

Some non-cutting procedures are described to preserve the normal anatomy and prevent incontinence. However, they face risk of recurrence and need of further surgical procedures. For example the endo-rectal advancement flab, described by Elting in 1912, has risk of recurrence between 20 to 63% and incontinence between 13-35% ***(van Koperen et al., 2008).***

Ligation of the intersphincteric fistula tract (LIFT) has been presented in 2007 as a simple sphincter preserving technique. The success rate varies between 40-95% with low overall incontinence rate (6%) ***(Malik and Nelson, 2008).***

The Surgeries Bio design Fistula Plug (Cook Medical, Bloomington, IN, USA) is associated with recurrence rates of between 17% and 86% and an incontinence rate of approaching zero ***(Champagne et al., 2006).***

Primary sphincteroplasty has been used for long time in obstetric anal sphincter injuries with good short and medium term outcome that gives better results than delayed repair. This also resulted in more improvement when done by colo-rectal surgeons in primary sphincter repair after fistulotomy ***(Dudding et al., 2008).***

More than 20 years ago immediate sphincteroplasty after fistulotomy was suggested to reduce the post-operative fecal incontinence and then many surgeons employed this combined technique for treating complex anal fistula ***(Anaraki et al., 2017).***

Fistulotomy with anal sphincter repair is considered to be a good option for high and complex fistulas with high rate of success in long term follow up and no major anal incontinence although post defecation soiling may happen ***(Ratto et al., 2013).***

So, it will be so important to estimate such a study on Egyptian patients and compare our result with international one, then to improve the quality of life of these patients.