J COLOPROCTOL (RIO J). 2014;34(2):109–119

Journal of Coloproctology

www.jcol.org.br

Original Article

Systematic review of efficacy of LIFT procedure in crpytoglandular fistula-in-ano

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ARTICLE INFO

Article history:
Received 6 March 2014
Accepted 15 March 2014
Available online 18 April 2014

Keywords:
Fistula-in-ano
Complex
Intersphincteric
Ligation
Recurrence
Incontinence
Follow-up

ABSTRACT

Background: fistula-in-ano is a common problem. Ligation of intersphincteric fistula tract (LIFT) is a new addition to the list of operations available to deal with complex fistula-in-ano.
Objective: we sought to qualitatively analyze studies describing LIFT for crpytoglandular fistula-in-ano and determine its efficacy.
Data sources: MEDLINE (Pubmed, Ovid), Embase, Scopus and Cochrane Library were searched.
Study selection: all clinical trials which studied LIFT or compared LIFT with other methods of treatment for anal fistulae, prospective observational studies, clinical registry data and retrospective case series which reported clinical healing of the fistula as the outcome were included. Case reports, studies reporting a combination with other technique, modified technique, abstracts, letters and comments were excluded.
Intervention: the intervention was ligation of intersphincteric fistula tract in crpytoglandular fistula-in-ano.
Main outcome measure: primary outcome measured was success rate (fistula healing rate) and length of follow-up.

Revisão sistemática da eficácia do procedimento LIFT em fístula anal criptoglandular

Palavras-chave:
Fístula anal
Complexa
Interesfincteriana
Ligadura

RESUMO

Background: fístula anal é um problema comum. A ligadura interesfincteriana do trajeto fistuloso (LIFT) é uma nova adição à lista de cirurgias disponíveis para tratar a fístula anal complexa.
Objetivo: buscou-se analisar qualitativamente estudos descrevendo o uso de LIFT para fístula anal criptoglandular e determinar a sua eficácia.

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http://dx.doi.org/10.1016/j.jcol.2014.02.008

Recorrência
Incontinência
Seguimento

Fontes de dados: as bases de dados MEDLINE (Pubmed, Ovid), Embase, Scopus e Biblioteca Cochrane foram pesquisadas.
Seleção dos estudos: todos os ensaios clínicos que estudaram LIFT ou compararam LIFT com outros métodos de tratamento da fístula anal, estudos observacionais prospectivos, dados de registros clínicos e série de casos retrospectivos que relataram a cura clínica da fístula anal como desfecho foram incluídos. Relatos de casos, estudos que relatam uma combinação com outra técnica, técnica modificada, resumos, cartas e comentários foram excluídos.
Intervenção: a intervenção foi ligadura interesfincteriana do trajeto fistuloso em fístula anal criptoglandular.
Medida do desfecho principal: a medida do desfecho principal foi a taxa de sucesso (taxa de cura da fístula) e período de seguimento.

Introduction

Fistula-in-ano is a common condition but a potentially complex disease process. A fistula can be found in 26–38% of all anorectal abscesses,[1,2] and is characterized by chronic purulent drainage or cyclical pain associated with abscess re-accumulation followed by intermittent spontaneous decompression.[3] Most are of cryptoglandular origin.[4,5] Fistula-in-ano are more common in men than women.[6,7]

Fistula-in-ano is categorized on the basis of location relative to the anal sphincter muscles according to the Parks classification: inter-sphincteric, trans-sphincteric, supra-sphincteric, or extra-sphincteric.[8] A fistula-in-ano can be "simple" or "complex". Submucosal, low (traversing less than 30% of anal sphincter muscle) inter-sphincteric and low trans-sphincteric fistulas are considered simple. Fistula-in-ano is considered complex if found to have any of the following characteristics: tract crosses more than 30–50% of external sphincter, anterior fistula in a female, presence of multiple tracts, recurrent fistula, preexisting incontinence, local irradiation and Crohn's disease.[9,10]

The goal of surgical management is to effectively eradicate current and recurrent septic foci, associated epithelialized tracts and preserve continence. No single technique achieves these aims for all anal fistulas. It is often necessary to balance the degree of sphincter division and continence disturbance. An ideal procedure for treating a fistula-in-ano should be minimally invasive with minimal failure rates and morbidity.

Ligation of the intersphincteric fistula track (LIFT) has recently been described by Rojanasakul et al. from Thailand.[11] Since the initial description in 2006, several studies on LIFT have been reported in literature with variable results and indications. Our objective to this study was to perform a systematic review to comprehensively summarize existing literature exploring the efficacy of LIFT in treating fistula-in-ano.

Methods

Search strategy

A systematic review of all literature relevant to efficacy of Ligation of intersphincteric fistulous track (LIFT), published between January 2005 and February 2013 was carried out using PubMed, Embase, Cochrane Database, Science Citation Index, CINAHL, National Health Service Centre for Reviews and Dissemination, and Google Scholar. Searches were performed using a combination of Medical Subject Headings (MeSH) terms and text words 'fistula-in-ano', 'complex', 'inter-sphincteric', 'ligation', 'recurrence', 'incontinence', 'follow-up'. Manual reference checks of accepted papers in recent reviews and included papers were performed to supplement the electronic searches.

Definitions

Fistulae with multiple tracts were defined as fistulae with single primary and multiple secondary openings. A successful outcome was defined by the complete healing of the surgical intersphincteric wound and external opening. Recurrence was defined as a non-healing wound or re-appearance of an external opening with persistent discharge or re-appearance of a fistula after the initial wound had healed. In trials with patients with multiple tracts, the procedure was considered successful only if all the tracts were closed.

Inclusion criteria

All randomized/non-randomized, controlled/non-controlled clinical trials, which studied LIFT or compared LIFT with other methods of treatment for anal fistulae, prospective observational studies, clinical registry data and retrospective case series which reported clinical healing of the fistula as the outcome were included, as were conference proceedings.[39–44]

Exclusion criteria

Case reports, reviews, abstracts, letters and comments were excluded. We excluded three studies reporting the usage of bioprosthetic grafts to reinforce LIFT (BioLIFT procedure) for management of complex anal fistulae[12–14] and another reporting the use of LIFT for patients with perianal sinus after stapled hemorrhoidopexy[15] was also excluded. Patients from studies where LIFT patients underwent an additional procedure (advancement flap or fibrin glue) along with the LIFT[16] were also excluded from the review as were studies where the mean or median follow-up was less than two months. Patients with rectovaginal, anovaginal, rectourethral, or ileal-pouch