INTRODUCTION

Anal fistula is a communication between ano rectal mucosa and the skin. Most common etiology behind fistula in anorectal region is clogging of anal glands due to cryptoglandular infection (90%). Other causes may include tuberculosis, radiation, trauma, malignancy, foreign body perforation and IBS (Crohn’s disease). Fistula in ano, sphincter saving procedure, laser treatment for fistula, fistula laser closure.

FISTULA LASER CLOSURE-SPINCINDER SAVING, MINIMAL INVASIVE TECHNIQUE FOR FISTULA IN ANO

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ABSTRACT

Abstract: Several surgical procedures both sphincter cutting and sphincter saving like Fistulectomy, Fistulotomy, fibrin glue, fistula plug, anorectal advancement flap, VAAFT have been described for treatment of anal fistula. Despite these different approaches, possibility of recurrence and incontinence still prevail. The aim of this study is to describe minimally invasive and sphincter saving technique fistula laser closure (FiLaC).

Introduction: Anal fistula is a communication between ano rectal mucosa and the skin. Most common etiology behind fistula in an is clogging of anal glands due to cryptoglandular infection (90%). Other causes may include tuberculosis, radiation, trauma, malignancy, foreign body perforation and IBS (Crohn’s disease).

Aim: Many minimally invasive techniques have been described over a period of time. Fistula Tract Laser Closure (FiLaC) is a novel sphincter saving technique for anal fistula. A study was conducted to know the efficacy and safety of FiLaC.

Method: The patients with anal fistula underwent FiLaC under spinal anesthesia in lithotomy position. The surgical procedure opted for these patients was closure of the internal opening followed by laser ablation of the tract with diode laser using a radial fibre corona 360 degree. All the patients gave informed consent to undergo laser procedure and to participate in the regular follow up assessment.

Results: A total of 42 patients underwent FiLaC from March 2017 to April 2019. Out of this 7 patients had recurrence indicating a success rate of 83.4%.

DISCUSSION

The fistula follows the path of least resistance through the skin of the buttocks next to the anus. It appears as a small opening in the perianal region discharging yellow or blood stained pus. Based on the anatomical course relative to the sphincter, the fistulas may be classified as intersphincteric, transphincteric, supra sphincteric, and extrasphincteric. Fistula may be simple

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RESULTS

or complex; simple fistula includes low transsphincteric and intersphincteric fistulas that cross less than 30% of the external sphincter. Complex fistula include high transsphincteric fistulas, suprasphincteric, extrasphincteric, horse shoe fistula, anterior fistula in females, recurrent fistulas and those associated with inflammatory disease. Treatment options of fistula in ano range from Fistulotomy, Fistulectomy, Setons to sphincter saving techniques. The anorectal advancement flap (ARAF), anal fistula plugs (AFP), LIFT (Ligation intersphincteric fistula tract), VAAFT (Video Assisted Anal Fistula Treatment) are sphincter saving techniques. Though Fistulotomy is considered as gold standard treatment for fistula in ano, nevertheless complications of these procedure like incontinence, recurrence cannot be ignored especially in high transsphincteric fistulas, supra sphincteric fistulas. The recurrence rate in fistulotomy is 5%. LIFT though a sphincter saving procedure does not provide complete removal of the fistula tract.

“Fistula laser Closure” (FiLaC) is another minimally invasive novel sphincter saving technique. FiLaC was first described by Wilhelm in 2011 for the treatment of fistula in ano. The most important feature of FiLaC is that it is a sphincter saving procedure. FiLaC success in healing anorectal fistula in different studies in the literature is 71% -82%. The shrinkage and the denaturing effect elicited by the laser energy are confined to the lumen of the fistula tract and hence, there is no impairment of the sphincter function. Giamundo et al. have treated anal fistula entirely with the laser probe without the closure of internal opening which may be one of the reason for early recurrences. Hence the technique was modified by closure of the internal opening with Vicryl 2.0. FiLaC showed effective results in inter sphincteric and low perianal fistula. Few patients had recurrence which may be attributed to the giving away of sutures at the internal opening. Various ways were tried to close the internal opening but no substantial Improvement was observed (fig.1). The recurrent fistulas were treated successfully by Fistulotomy.

CONCLUSION

Sphincter saving procedures for the treatment of anal fistula are the standard of care. The use of FiLaC is feasible and safe, with minimal morbidity, short term healing rates with no sustained effect on continence. This procedure can be promoted as first line treatment because of being sphincter saving and preserving anal continence.

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