J COLOPROCTOL (RIO J). 2017;xxx(xx):xxx–xxx

Journal of Coloproctology

www.jcol.org.br

Original Article

Assessment of fistulectomy combined with sphincteroplasty in the treatment of complicated anal fistula

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ARTICLE INFO

Article history:
Received 1 April 2017
Accepted 14 May 2017
Available online xxx

Keywords:
Fistulectomy
Sphincteroplasty
Anal fistula

ABSTRACT

Introduction: The ideal method of treating the complex anal fistula is to eradicate the sepsis and preserve the anal sphincter; since there is no definite consensus on the surgical method of treating it. Recent studies show that fistulectomy and immediate sphincteroplasty are a safe and appropriate way to treat the fistula-in-ano. The aim of this study was to evaluate the long term outcomes of fistulectmy and sphincteroplasty in the treatment of complex perianal fistula.

Methods: In this prospective study, we have analyzed the data of 80 patients who underwent fistulectomy and sphincteroplasty from May 2013 to May 2016. Preoperative information included physical examination, preoperative fecal incontinence evaluation and taking a complete history about underlying diseases and past related surgeries were collected.

Results: Of all 80 patients with complex fistula, 57.5% (46 patients) were male. 70-Patients were presented with high transsphincteric fistula (87.5%) and anterior fistula was diagnosed in 10 of them (12.5%). 9 patients (11.3%) suffered from hypertension (HTN) and 43 patients (53.75%) had recurrent fistula after previous surgeries. During the follow-up period, the overall success rate was 98.8% (98.8%) and fistulectomy and sphincteroplasty failed in only one patient (failure rate: 1.3%). preoperative and post-operative scoring showed mild fecal incontinence in 8 patients (10%). We have found no significant relation between the age, gender, HTN, previous surgery and post-operative recurrence.

Conclusion: Fistulectomy and sphincteroplasty is a safe surgical procedure in the treatment of anterior anal fistula in females and high transsphincteric fistulas.

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http://dx.doi.org/10.1016/j.jcol.2017.05.003

Please cite this article in press as: Anaraki F, et al. Assessment of fistulectomy combined with sphincteroplasty in the treatment of complicated anal fistula. J Coloproctol (Rio J). 2017. http://dx.doi.org/10.1016/j.jcol.2017.05.003

Avaliação de fistulectomia combinada com esfincteroplastia no tratamento de fístula anal complicada

Palavras-chave:
Fistulectomia
Esfincteroplastia
Fístula anal

RESUMO

Introdução: o método ideal para tratar a fístula anal complexa consiste em erradicar a sepse e preservar o esfíncter anal, uma vez que não existe consenso definitivo com relação ao método cirúrgico para tratamento desse problema. Estudos recentes demonstram que a fistulectomia, seguida imediatamente pela esfincteroplastia, é procedimento seguro e apropriado no tratamento da fístula perianal. O objetivo deste estudo foi avaliar os resultados em longo prazo da fistulectomia e da esfincteroplastia no tratamento da fístula perianal complexa.

Métodos: Neste estudo prospectivo analisamos os dados de 80 pacientes tratados por fistulectomia e esfíncteroplastia no período de maio de 2013 até maio de 2016. Foram coletadas as seguintes informações pré-operatórias: exame físico, avaliação pré-operatória de incontinência fecal e história completa sobre doenças subjacentes e cirurgias prévias afins.

Resultados: De todos os 80 pacientes com fístula complexa, 57,5% (46 pacientes) pertenciam ao gênero masculino. Setenta pacientes se apresentaram com fístula trans-esfinctérica alta (87,5%); em 10 desses pacientes (12,5%), foi diagnosticada fístula anterior. Nove pacientes (11,3%) sofriam de hipertensão (HT), tendo sido observada recorrência de fístula após cirurgias prévias em 43 pacientes (53,75%). Durante o período de seguimento, o percentual de sucesso global foi de 98,8%, e em apenas um paciente os procedimentos de fistulectomia e esfincteroplastia não obtiveram sucesso (percentual de falha: 1,3%). Os escores pré-operatórios e pós-operatórios revelaram incontinência fecal leve em 8 pacientes (10%). Não observamos nenhuma relação significativa entre idade, gênero, HT, cirurgia prévia e recorrência pós-operatória.

Conclusão: Fistulectomia e esfincteroplastia constituem procedimento cirúrgico seguro no tratamento de fístulas anais anteriores em mulheres e de fístulas trans-esfinctéricas altas.

Introduction

Anal fistulas are mostly cryptogenic in which the main method of treatment is to eradicate the infection, and preserve the anal sphincter function.[1] The standard committee of American Society of Colorectal Surgeons (ASCRS) classified "Complex" fistulas as all intersphincteric, transsphincteric and suprasphincteric fistulas.[2,3]

There are many sphincter-saving methods for the treatment of complex anal fistula, but because of post-operative fecal incontinence (FI) or recurrence, there is no definite consensus about the surgical treatment of it.[4,5] Cutting seton placement has up to 67% incontinence rate[6]; since endorectal advancement flap has up to 35% risk of FI, and 30–60% failure rate.[7,8] Newer techniques such as ligation of intersphincteric fistula tract have the recurrence rate of 30–60% and anal fistula plug has the failure rate of 70–80%.[9,10]

20 years ago, fistulectomy and immediate sphinctroplasty was suggested to reduce the post-operative FI and then many surgeons employed this combined technique for treating complex anal fistula.[11–14] This technique is defined as a safe and appropriate way for treatment of fistula-in-ano and also has a high healing rate,[15] but there are some concerns and doubts about the results of this procedure.[16]

The aim of this study is evaluation the long term results of fistulectmy with sphincteroplasty on treatment of Complex perianal fistula.

Materials and methods

In our prospective study, we have analyzed and evaluated 80 patients who underwent fistulectomy and immediate sphincteroplasty from May 2013 to May 2016. All patients suffered from complex anal fistula (hightranssphincteric and anterior fistula in female). The patients with complex fistula secondary to radiation or IBD were excluded in this study.

All patients were physically examined by colorectal surgeon to identify the type of fistula and make sure that no abscess has occurred. We have assessed all patients in order to find out if they had past surgeries related to abscess drainage or healing the fistula or underlying disease such as Hypertension. Pre-operative assessments also included the examination of fecal incontinence by using Cleveland Clinic Florida fecal incontinence scoring (CCF-FIS) which is tabulated in Supplementary Material.

Bowel preparation was done by using suppository Bisacodil for all patients the day before surgery. Antibiotics (IV Cephtriaxon 1 g and Metronidazol 500 mg) were given on induction of regional anesthesia. All patients were positioned in the

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