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Original Article

Surgical management of anal stenosis: anoplasty with or without sphincterotomy

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ABSTRACT

Aim: Anal stenosis is an uncommon complication of anorectal surgery, mostly resulting from circumferential hemorrhoidectomy or resection of the skin tag in surgical management of chronic anal fissure. The aim of anoplasty is to restore normal function to the anus by dividing the stricture and widening the anal canal. Internal sphincterotomy may cause gas incontinence and if we manage the stenosis without sphincterotomy it could be failed. Could we use anoplasty without sphincterotomy?

Method: The patients with anal stenosis were assigned in to two groups. The first group underwent Y-V anoplasty without partial lateral internal sphincterotomy and the second one underwent Y-V anoplasty with partial lateral internal sphincterotomy.

Result: A total of 25 patients (10 male and 15 female) underwent anoplasty, 14 without partial lateral internal sphincterotomy and 11 patients with partial lateral internal sphincterotomy. The healing rate of stenosis was 91% and 93% in groups undergoing anoplasty without partial lateral internal sphincterotomy and anoplasty with partial lateral internal sphictrotomy, respectively (*p* value 0.69). There was no significant change in both groups for post-operative incontinence complaints.

Conclusion: The healing rate of anal stenosis was the same in the patients who underwent Y-V anoplasty with or without partial lateral internal sphincterotomy. There was no significant change in post-operation incontinence between the two groups. Therefore, Y-V anoplasty would be a safe and simple surgical method in selected patients. Partial lateral internal sphincterotomy procedure has been noticed in individual cases.

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Tratamento cirúrgico da estenose anal: anoplastia com ou sem esfincterotomia

Palavras-chave:
Anoplastia
Esfincteroplastia
Estenose anal

RESUMO

Objetivo: A estenose anal é complicação incomum da cirurgia anorretal, sendo principalmente resultante de uma hemorroidectomia circunferencial ou ressecção do pólipo cutâneo no tratamento cirúrgico da fissura anal crônica. O objetivo da anoplastia é a restauração da função normal do ânus, mediante a divisão da constrição e alargamento do canal anal. A esfincterotomia interna pode causar incontinência gasosa; e se tratarmos a estenose sem esfincterotomia, poderá ocorrer insucesso. Poderíamos usar a anoplastia sem esfincterotomia?

Método: Os pacientes com estenose anal foram designados para dois grupos. O primeiro grupo foi tratado com anoplastia em Y-V sem esfincterotomia interna lateral parcial, e o segundo grupo foi tratado com anoplastia em Y-V com esfincterotomia interna lateral parcial.

Resultado: No total, 25 pacientes (10 homens e 15 mulheres) foram tratados com anoplastia–14 sem esfincterotomia interna lateral parcial, e 11 com esfincterotomia interna lateral parcial. Os percentuais de cura da estenose foram de 91% e 93% nos grupos tratados com anoplastia sem esfincterotomia interna lateral parcial e com esfincterotomia interna lateral parcial, respectivamente (p = 0,69). Não ocorreu mudança significativa nos dois grupos com relação às queixas de incontinência pós-operatória.

Conclusão: O percentual de cura da estenose anal foi igual nos pacientes tratados com anoplastia em Y-V com ou sem esfincterotomia interna lateral parcial. Não foi observada mudança significativa na incontinência pós-operatória entre os dois grupos. Portanto, a anoplastia em Y-V seria um método cirúrgico seguro e simples em pacientes selecionados. Em casos isolados, o procedimento de esfincterotomia interna lateral parcial tem sido observado.

Introduction

Anal stenosis is an uncommon serious complication of anorectal surgery. This narrowing may result from functional or anatomic anal stenosis. Functional stenosis results from a hypertonic internal anal sphincter, while in the anatomic one, the normal anoderm is replaced with an inelastic cicatrized tissue.[1]

Anatomical anal stenosis usually results from surgery of the anal canal, inflammation of the anus in Crohn's disease, ulcerative colitis, radiationtherapy, venereal disease, tuberculosis and chronic laxative abuse. 90% of anal stenosis is caused by radical imputative hemorrhoidectomy.[2]

There are several management options to decrease complaints of anal stenosis. Most of treatments modalities have been non-surgical approaches such as topical medications or dilation, but in severe anal stenosis, surgical approaches would be a choice. A significant number of surgical methods have been described and the simple procedure is partial lateral internal sphincterotomy. However, most of the patients have had a history of pervious partial lateral internal sphincterotomy and extensive fissurectomy. Different types of anoplasty had been presented before in anal stenosis.[3] Selection of surgical procedure depends on location, type, extension of stenosis and surgeon´s experience. Numerous surgical techniques have been described for the treatment of anal stenosis refractory to non-operative management. These procedures include simple stricture release and sphinctrotomy to complex advancement flaps.

Different surgical procedures have been performed if the patients need surgical intervention because in the majority of the patients medical management would be a choice.[3]

The surgical methods such as stricture release, sphinctrotomy and advancement flap are common techniques. Performing partial lateral internal sphinctrotomy with anoplasty at the same time has been a debatable issue to prevent incontinence versus unhealed wound.[4]

The aim of anoplasty is to restore normal function to the anus by dividing the stricture and as a result widening the anal canal, thus decreasing the symptoms and relief pain.[5] In this study, we evaluated the successful rate of Y-V anoplasty in management of severe anal stenosis and incontinence (the most important complication of the procedure).

Materials and methods

There was a retrospective study that was approved by the ethics committee of Shiraz University of Medical Sciences and the people participating in this study were informed completely.

This study was done in Faghihi Hospital during 2007–2012 in Shiraz, Iran. Eligibility criteria consisted of patients who

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