TECHNIQUE OF PRESERVING THE ILEUM-CAECAL PAPILLA IN THE DEFINITIVE ILEOSTOMY AND ILEUM-RECTAL ANASTOMOSE

Técnica do aproveitamento da papila íleo-cecal na ileostomia definitiva e na anastomose íleo-retal

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From the Department of Surgery, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil.	ABSTRACT - <i>Introduction</i> - When ileostomy is done with the ileum-caecal papilla, the liquid is decreased and happens much less local irritation and its possible that the patient can live without the use of the bag. <i>Objective</i> - To present a surgical technique that preserves the papilla in ileostomy or ileo-rectal cancer. <i>Method</i> - It is done with the preservation of the vasculature of the cecum and terminal ileum; cecum section is made leaving 1 cm border, coronal, on the ileal papilla, which is fixed on the skin for a counter-opening for permanent ileostomy. When a colectomy is needed, the anastomosis can be made with the rectal stump (papilla-ileum-retostomy). <i>Results</i> - They are good because there is a decrease in the number of bowel movements
HEADINGS – Ileum. Cecum. Ileostomy. Anastomosis, surgical.	loss of fluid in the stool and less epidermal irritation. Conclusion - The procedure is feasible and brings results that improve the quality of life of patients.
Correspondência: Alcino Lázaro da Silva, e-mail: franciscoalberto@superig.com.br	RESUMO – <i>Introdução</i> - Quando se faz ileostomia com a papila, a perda líquida é bem menor e a irritação local às vezes é nula, podendo o paciente viver sem o uso da bolsa. <i>Objetivo</i> - Mostrar uma técnica operatória em que se preserva a papila na ileostomia ou na anastomose íleo-retal. Ela consta da preservação da vasculatura do ceco e íleo terminal e secção do ceco deixando-se 1 cm de orla na papila ileal que é fixada na pele por contra-abertura para ileostomia definitiva. Quando se resseca o cólon, a papila é anastomosada ao reto (íleo-papilo-retostomia). <i>Resultados</i> - São bons, pois há diminuição do número de evacuações, da perda de líquidos nas fezes e da irritação epidérmica. <i>Conclusão</i> -O procedimento é exeguível e traz resultados
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DESCRITORES - Íleo. Ceco. Ileostomia. Anastomose cirúrgica.	que melhoram a qualidade de vida do paciente.

INTRODUCTION

The studies of the ileal papilla (ileocaecal valve) come from many years, led by Schilli¹⁰ and DiDio¹. Based in physiological concepts issued by them and after experimental attempts, the use of the papilla started to be done in permanent ileostomy, post total proctocolectomy with ileo-rectal anastomosis and total colectomy. The clinical outcome is satisfactory and gives the patient condition of life less painful.

The aim of this article is to describe the technique of this procedure.

METHOD

Colon mobilization

After laparotomy, is performed ligation of colonic vascular pedicles, preserving the arcades of the ileum and cecum. One of them is maintained at the end. In obese patient, in general, it can not be taken advantage of the vascular arcade of the terminal ileum; so special care is focused on the arcade of the cecum (lower branch of right colic artery or the end of the superior mesenteric artery called the ileum-cecum-apendicular artery).

Lock-up of the abdominal cavity with gauze pads is done to make the procedure easier. Next, the section the cecum around the ileal papilla



is performed. There is heavy bleeding at this moment. Ligation is done as sectioning goes on. The complete coronal outline of the papilla is achieved, leaving 1 cm of cecum wall around the valve.

Utilization of ileal papilla (ileocaecal valve)

If the anastomosis is done with the rectal stump, the rectal site is prepared to receive the papilla. The ileum is transferred to the pelvis and anastomosed to the rectum in non absorbable sutures. Review of the cavity and mesentery closure to prevent internal hernias is the final of operation.

When the rectum is resected, it is perform ileostomy settling terminal ileum to the , right abdominal wall. After exteriorization, the edge cecal is sutured to skin, exposing only the papilla (Figures 1-9)⁹.



FIGURE 1 - Diagram of the operation: the cecum is intersected in 1cm around the ileal papilla, preserving the marginal vasculature of the ileum or the end of the superior mesenteric artery (ileum-cecum-apendiculocolic artery); the cecum margin serves as the border suture the papillae on the abdominal skin or rectum



FIGURE 4 - Fullness of the rectum by barium: it can be seen the resistance of the ileal papilla anastomosed to it, simulating a stenosis

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FIGURE 2 - View of the ileal papilla as terminal ileostomy, 14 days after implantation; the suture was removed and the wound is not draining because the ileal content is in smaller amount and less liquid



FIGURE 3 - Anastomosis of the ileal papilla to the rectum: there is a sphincter component simulating an ileo-rectal stenosis



FIGURE 5 - Increased fullness of the rectum trying to overcome the resistance of the ileal papilla





FIGURE 6 - Proctoscopy: proctitis due to acute relapse of ulcerative colitis in operation carried out eight years ago in a patient unattended in this period; it can be seen a stenosis corresponding to the area of the narrowing swollen papilla

RESULTS

They are satisfactory in regard to two aspects. In the first - ileostomy to the papilla -, ileal emptying and incontinency, drops to half and the ileal content becomes less liquid. In the second, uncomfortable and unhealthy irritation of the skin around the stoma is much lower than the one obtained with classical ileostomy without papilla.

When the anastomosis is performed with the rectum, the number of bowel movements per day fell by half in a few days. The perineal irritation is much smaller or zero when compared to ileo-rectal anastomosis without papilla.

If the patient is well oriented, in a shorter time it is possible to get better control the number of bowel movements per day, in both procedures.

DISCUSSION

With experience, without the possibility of randomized control, it can be accepted the method of preserving the ileal papilla. It is legitimate by the time and superior to the traditional procedure, without papillae. The fluid loss in classic ileostomy is greater than in this one, especially in the immediate postoperative period, and can take the patient to dehydration. Besides, in the classic technique there is big skin irritation leading in some patients to shallow ulcers, painful, uncomfortable and do not provide good fixation of the ileostomy bags. When the ileostomy is done with the papilla, the loss is much less and irritation, sometimes, is avoided. One of our patients can live without the use of bags, with relative control of ileal emptying; after care, she wears a bandage, compressing and closing the ileal hole for a few hours; no leaks happen^{2,3}.

The secret is to mobilize all ileocaecal area without damage to the vascularization. After dissection, the visualization leads to the preservation of the proper vessels that may stay in place to maintain alive the ilealcecum or ileal area.

The author believes that there is no doubt about this procedure being the one of first choice when doing ileostomy or ileo-rectal anastomosis in cancer.

The challenge to face infuture is trying to mobilize an effective and well-vascularized ileal papilla to anastomose it in anus. In experimental level is possible. In men the difficulty is the lengthening of ileal pedicle to reach the level of the anus. For this, perhaps, there is the possibility to be done the operation in two stages, ie, elongation of the pedicle and then the lower suture^{4,5,6,7,8}.

CONCLUSION

The procedure is feasible and yields results that improve the quality of life of patients.

REFERÊNCIAS

- Didio LJA e Carril CF. Observações sobre o mecanismo do piloro íleo-ceco-cólico em indivíduo vivo com papila íleo-ceco-cólica exteriorizada. Rev. Bras. Gastroenterol, 1954; 6: 67-69.
- Formiga GJS, Barreto Neto PF, Nossa FLC e Silva JH. Ileostomia Continente-Relato de Quatro Casos. Rev. Bras. Coloproctol, 1998; 18(1): 34-36.
- Glassman JA. Artificial Ileocecal Valve. Surg. Gynecol. Obstet., 74: 92-98, 1942.
- Kalil M. Colectomia Total e Telescopagem ileorretal preservando-se a papila ileocecal com ou sem mucosectomia retal. Tese Mestrado. Belo Horizonte, FM, UFMG, 1990.
- Lázaro da Silva A. Ileostomia, Alternativas Técnicas. Rev. Assoc. Méd., MG., 1978; 29: 28-29.
- 6 Lázaro da Silva A. Ileal Papilla and Ileal Pylorus. Arq. Bras. Cir. Dig., 1993; 8(2): 48-49.
- 7 Lázaro da Silva A. Ileostomia Continente. Rev. Bras. Colo-proctol, 1991; 11(1): 33-35.
- Mattos MP e Lázaro da Silva A. Study of ileostomy in dogs. Functional aspects, optic and scanning electronic microscopy. Arq. Gastroenterol, 1986; 23: 159-168.
- 9. Ogilviie, WH. The preservation of the ileocaecal sphincter in resection of the right half of the colon. Br. J. Surg., 1931; 19: 8-16.
- 10. Schiller WR, Didio LJA and Anderson MC. Production of Artificial Sphincters. Ablation of the Longitudinal Layer of the Intestine. Arch. Surg., 1967; 95: 436-42.