Risk Factors and True Incidence of Pouchitis in Patients after Ileal Pouch–Anal Anastomoses

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Abstract. Total colectomy, mucosal proctectomy, and ileal J pouch–anal anastomosis (IPAA) has become the procedure of choice for patients with ulcerative colitis and familial adenomatous polyposis. The purpose of this study was to determine the short- and long-term outcomes of patients undergoing IPAA by a single surgeon, correlating intraoperative technical aspects with outcomes, and to characterize better the clinical syndrome of pouchitis. A retrospective review was performed of 114 consecutive patients who underwent IPAA by a single surgeon between December 1987 and August 1996. Clinical follow-up and operative notes were reviewed, and patient questionnaires were obtained for all patients. The mean follow-up was 3 years (range 0.5–8.0 years). The average age of the patients was 39 years (range 16–72 years). There were 64 males and 50 females. Indications for operation were ulcerative colitis ($n = 101$) and familial polyposis coli ($n = 13$). Long-term morbidity occurred in 41% of patients (small bowel obstruction 10%, anastomotic stricture 9%). Pouch excision was required in only three patients. Stool frequency (mean ± SE) was 6.1 ± 0.2 and did not change with duration of follow-up. Only 7% of patients reported fecal soilage. The incidence of pouchitis was 59% ($n = 67$), with 4.2 ± 0.3 episodes of pouchitis per patient. Using multivariate analysis, the factors significantly associated with the incidence of pouchitis were gender ($p = 0.008$) and duration of follow-up ($p = 0.02$). A total of 37 of 50 women (74%) but only 30 of 64 men (47%) developed pouchitis. The incidence of pouchitis increased with the duration of follow-up. The incidences of pouchitis in patients followed for 6 months, 1 year, and 3 years were 25%, 37%, and 50%, respectively. Of patients followed more than 6 years, the incidence of pouchitis was 94% (15/16). There was not a significant correlation between anastomotic tension or the extent of arterial dissection of the ileal mesentery required to achieve IPAA and the incidence of pouchitis. The best antibiotics for pouchitis were metronidazole (54% of patients) and ciprofloxacin (37%). Eleven patients have required nearly continuous antibiotics. Patient satisfaction with the outcome is high, with a mean satisfaction of 8.4 (0, dissatisfied; 10, extremely satisfied). This review demonstrates a high incidence of pouchitis in patients after IPAA, which is due to the more liberal definition of the syndrome and the complete follow-up achieved in this report compared to previous series. This study also is unique in identifying the significantly higher incidence of pouchitis in women, although the overall satisfaction with the clinical outcome in patients undergoing IPAA remains high.

Since its introduction by Utsonomiya et al. in 1980 [1], the ileal J pouch–anal anastomosis (IPAA), or ileoanal reservoir, has become the most widely accepted procedure for the surgical treatment of patients with chronic ulcerative colitis or familial adeno-

matous polyposis. Patient satisfaction with the procedure has been good, although long-term postoperative morbidity is frequent.

The purpose of this review was to assess the functional results in our patients after IPAA. The emphasis was to determine accurately the true incidence and risk factors for the development of the most frequent long-term complication, pouchitis. Whereas some define pouchitis using histologic criteria, we believe pouchitis is a clinical syndrome in post-IPAA patients, who develop changes in stool frequency, continence, malaise, or fever that responds to antibiotics. Although the causation of pouchitis clearly requires bacterial overgrowth within the pouch, we also suspected that mucosal ischemia may predispose to pouchitis. The histologic examination of the pouch of our only patient requiring excision for refractory pouchitis suggested mucosal ischemia. Furthermore, another patient in our series with known vascular compromise during pouch construction and tension of the pouch–anal anastomosis has developed chronic pouchitis. We hypothesized, therefore, that pouch ischemia might be a significant cofactor in the development of pouchitis, and that patients with division of one or more major mesenteric vessels during pouch construction would have an increased incidence of pouchitis. To address this hypothesis, we reviewed the details of pouch construction and the presence of tension at the pouch–anal anastomosis in relation to clinical outcomes and the incidence of pouchitis.

Methods

Operative Intervention

Between December 1987 and August 1996 a total of 117 IPAAs were performed by a single surgeon at Virginia Mason Medical Center. The operative technique has been previously described [2]. In most patients with chronic ulcerative colitis, the transitional epithelium overlying the anorectal columns above the dentate line was preserved to facilitate postoperative continence and stool-versus-gas discrimination. In patients with familial adenomatous polyposis (and in those with ulcerative colitis with mucosal dysplasia), this mucosa was stripped. Temporary diverting loop ileostomies were performed, and closed-suction drainage catheters were placed in the pelvis in all cases. J pouches were constructed

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in all of our patients, and tension-free hand-sewn J pouch–anal anastomoses were achieved in virtually all patients using the techniques of mesenteric lengthening, as previously described [3]. All patients underwent contrast radiographic examinations prior to ileostomy closure to determine the integrity of the anastomosis and pouch capacity. All patients were continent of water prior to ileostomy closure. After closure of the ileostomy, patients are routinely seen at 2-week, 1-month, 6-month, and then yearly intervals.

Follow-up

Data were obtained by retrospective chart review, office visits, a mailed questionnaire, and telephone conversations. Technical aspects of each operation in all patients were reviewed noting the ultimate arterial anatomy supplying the pouch and the presence or absence of tension at the pouch–anal anastomosis. Clinical and functional results evaluated included stool frequency, incontinence, nocturnal stool pattern, overall sense of well-being, and the presence or absence of pouchitis. Patients were recorded to have pouchitis if they responded positively on the mail or phone questionnaire. If pouchitis was present, it was further characterized as the presence of urgency, bleeding, fatigue, malaise, fever, number of episodes, antibiotics taken, and the best individual response to a particular antibiotic regimen. Postoperative morbidity and mortality and long-term morbidity were evaluated in all patients.

Statistical Analysis

To determine whether any variables independently affected outcomes, multivariant analyses were performed using a Cox proportional hazards regression analysis, with a p value of < 0.05 considered significant (BMDP Statistical Software, Los Angeles, CA, USA).

Results

Patient Demographics

Follow-up data were available for 114 patients, of whom 64 were male and 50 female. Eighty-three patients filled out questionnaires; the remainder were contacted by telephone. Three patients have died, one related to complications of amyotrophic lateral sclerosis (ALS), one in a motor vehicle accident, and another due to a drug overdose. The mean follow-up period was 38 months (range 6 months to 8 years). Eight patients were followed for less than 6 months, 52 patients for 6 months to 3 years, 29 patients for 3 to 5 years, and 57 patients for more than 5 years. The mean age of the population was 39 years (range 16–72 years). Most patients had chronic ulcerative colitis ($n = 98$; 87%); three were diagnosed with Crohn's disease postoperatively; 13 (10%) had familial adenomatous polyposis. Most of the patients underwent a two-stage procedure, although 13 had three-stage operations. All 114 patients have had their ileostomies closed, with a mean interval between the IPAA and ileostomy closure of 3.4 months (range 2–96 months). Three patients have required resection of their pouches with permanent ileostomy (intractable pouchitis in one, complications of Crohn's disease in one, and excessive stool frequency in one).

Table 1. Perioperative and long-term complications in patients after ileal pouch anal anastomosis.

Complication	No. of patients	%
Perioperative		
Small bowel obstruction	6	5.0
Transient	5	4.0
Required exploration	1	1.0
Pelvic abscess	2	1.7
Long term		
Small bowel obstruction	11	10.0
Transient	5	4.0
Operation	6	6.0
Anastomotic stenosis	10	9.0
Required repeat dilatation	6	5.0
Incisional hernia	6	5.0
Pelvic mucocele	3	2.6
Perirectal abscess	3	2.6
Fistula	5	4.0
Pouch-vaginal	1	0.8
Pouch-vesical	1	0.8
Enterocutaneous	1	0.8
Fistula in ano	2	1.7

Technical Aspects

A review of the operative summaries demonstrated that it was necessary to divide one of the major arterial branches supplying the pouch to achieve IPAA in 74 (65%) of our patients. Thirty-one (27%) patients required division of distal arcade vessels in the pouch; twenty-five (22%) patients had both a major arterial branch and a distal arcade vessel divided to create enough length for a tension-free anastomosis. Twelve patients (11%) had significant tension at the anastomotic line when the construction of the J pouch–anal anastomosis was completed.

Morbidity

The perioperative morbidity rate following ileoanal pull-through was 20% (Table 1). A few patients had more than one complication. There were six episodes (5%) of early small bowel obstruction, one of which required exploration and enterolysis; the remainder resolved with conservative treatment. There were six wound infections (5%); ileoanal separation occurred in one patient (0.8%) and pelvic abscess in two (1.7%). There were no deaths in our series. The long-term morbidity rate was 41% (Table 1). There were 11 (10%) small bowel obstructions, 5 of which require operative intervention. Anastomotic stricture occurred in 10 (9%) patients, most of whom required repeated dilatations; 2 required dilatation under general anesthesia. There were six (5%) incisional hernias, all of which occurred at the ileostomy closure site. Three (2.7%) patients had sterile pelvic mucoceles drained by computed tomography (CT) guidance, and three patients had perirectal abscesses. Fistulas occurred in four (3%): one enterocutaneous fistula, two fistulas-in-ano, and one pouch–vesical fistula occurring in a patient 1 year after ileostomy closure, which was repaired by fistulectomy and omental flap interposition. There were no late deaths attributable to the surgery.

Table 2. Determinants of stool frequency.

Factor	24-Hour stool frequency	
	Mean ± SE	p
Diagnosis		
Chronic ulcerative colitis	6.0 ± 0.2	0.006
Familial adenomatous polyposis	7.3 ± 0.8	
Age (years)		
≤ 40	5.8 ± 0.2	0.11
> 40	6.5 ± 0.2	
Gender		
Male	5.7 ± 0.2	0.12
Female	6.7 ± 0.2	
Duration follow-up (years)		
≤ 3	6.1 ± 0.3	0.83
> 3	6.2 ± 0.3	

Table 3. Determinants of pouchitis.

Factor	p
Gender	0.008*
Duration of follow-up	0.019*
Major artery divided	0.202
Diagnosis	0.334
Tension	0.584
Distal arcade vessel divided	0.622
Age	0.722

  *Statistically significant.

Stool Frequency

Functional results were evaluated in all 114 patients. All patients could evacuate the pouch spontaneously at the time of the last follow-up. The stool frequency (mean ± SE) at the time of follow-up for the entire population was 6.1 ± 0.2. Stool frequency did not change with duration of follow-up, with average daily stool frequencies of 6.0 ± 0.2, 6.1 ± 0.2, and 6.2 ± 0.2 in patients at follow-ups of less than 6 months, less than 36 months, and more than 36 months, respectively. The incidence of patients reporting nocturnal stools was comparable to that in other series, with 46 patients (40%) reporting regular nocturnal bowel movements, 16 of whom reported more than one stool regularly per night. Continence was excellent, with only eight patients (7%) reporting daytime or nighttime soilage. As shown in Table 2, the only variable that independently affected stool frequency in our series was the preoperative diagnosis: ulcerative colitis versus familial adenomatous polyposis ($p = 0.006$). Patients with chronic ulcerative colitis had a mean stool frequency of 6.0 ± 0.2, and those with a diagnosis of familial adenomatous polyposis had a mean stool frequency of 7.3 ± 0.3. Patients who had not had an episode of pouchitis had a mean stool frequency of 5.5 ± 0.2, whereas those whose pouchitis was in remission had a mean stool frequency of 6.7 ± 0.3. Stool frequency was no different in men than in women, and age was not significantly correlated. There appeared to be no significant determinant of postoperative incontinence, although the few number of patients in our series reporting incontinence made any analysis of these data difficult to interpret.

Pouchitis

Pouchitis occurred in 67 (59%) of our patients, 44 of whom have had more than three episodes; 11 patients are maintained on chronic antibiotic regimens to keep the pouchitis in remission. The average number of episodes of pouchitis was 4.2 ± 0.3. The most common symptom during episodes of pouchitis in our patients was increased stool frequency in 65 (98%), with mean stool frequency increasing from 6.6 ± 0.2 per day while pouchitis was in remission to 13.3 ± 0.5 during an episode of pouchitis. Other symptoms were urgency ($n = 61$; 92%), fatigue ($n = 53$; 80%), bleeding ($n = 24$; 36%), and fever ($n = 18$; 27%). Pouchitis was most frequently treated by ciprofloxacin 500 mg twice daily or metronidazole 250 mg three times daily. Altogether, 54% of the patients with pouchitis thought they responded better to metro-

nidazole, and 37% thought they responded better to ciprofloxacin; 7% responded better to a third antibiotic, usually amoxicillin. Of the 11 patients who are maintained on chronic antibiotic regimens to keep their pouchitis in remission, seven (64%) take ciprofloxacin, four (36%) take metronidazole, and one (9%) takes amoxicillin. Endoscopic inspection or biopsies (or both) were undertaken if symptoms did not readily respond to antibiotics.

As shown in Table 3, the variables that significantly correlated with the presence of pouchitis were gender ($p = 0.008$) and duration of follow-up ($p = 0.019$). Altogether, 37 of 50 women (74%) developed pouchitis, whereas only 30 of 64 men (47%) did so. In addition, the likelihood of pouchitis increased with the duration of follow-up; the incidence of pouchitis in patients followed for less than 6 months, 1 year, and 3 years was 25%, 37%, and 50%, respectively. The incidences of pouchitis in patients followed for 2 years or more ($n = 89$), more than 4 years ($n = 26$), and more than 6 years ($n = 16$) were 65%, 81%, and 94%, respectively. In contrast to most other reports, the preoperative diagnosis did not appear to affect significantly the chance of one developing pouchitis: 39 (60%) of those patients with chronic ulcerative colitis developed pouchitis, as did 7 (54%) of those with familial adenomatous polyposis.

An analysis of intraoperative technical details revealed no significant correlation between the arterial dissection (and potential devascularization) during J pouch reconstruction and the future incidence of pouchitis ($p = 0.20$). A total of 59% ($n = 27$) of those without a history of pouchitis and 70% ($n = 47$) of those with a history of pouchitis had either the ileocecal artery or the ileal artery divided to achieve adequate mesenteric length; 28% ($n = 13$) of those without a history of pouchitis and 27% ($n = 18$) with a history of pouchitis had a distal arcade branch divided. Additionally, there appeared to be no significant correlation with the presence of tension at the anastomosis and the future incidence of pouchitis ($p = 0.58$).

Patient Satisfaction

Patient satisfaction with the surgery and outcome is high, with a mean overall satisfaction score of 8.4 (0, dissatisfied; 10, extremely satisfied). When categorized into groups without or with a history of pouchitis, satisfaction is higher (8.6) in those without pouchitis, although it remains high even in patients with a history of pouchitis (8.2).

Discussion

Since its introduction by Utsonomiya et al. in 1980, the ileoanal reservoir, or IPAA, has become the most widely accepted tech-

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nique for surgical treatment of patients with chronic ulcerative colitis and familial adenomatous polyposis [1]. Standard Brooke ileostomies are not without short- and long-term morbidity, as previous studies have demonstrated that up to 25% of patients have severe daily limitations as a result of having an external pouch [4], up to 45% experience depression and social isolation [5,6], and up to 30% require reoperation for complications secondary to the ileostomy, most notably ileostomy revision and small bowel obstruction [7,8]. Furthermore, most have shown that patient outcomes or satisfaction is better after IPAA than after a Brooke ileostomy [8–10]. The IPAA, though not without morbidity, provides a near-normal life style with acceptable long-term morbidity. It was our objective in this review to demonstrate the efficacy of the J pouch and to explore factors that may contribute to the clinical and functional outcomes, with emphasis on the most important long-term morbidity, pouchitis.

In this series, the perioperative and long-term morbidity rates were comparable to those achieved in previous reviews. The most common major surgical complication of the IPAA is small bowel obstruction [9–15]. The rate of early small bowel obstruction in our series was 5%, with one of these patients requiring operative treatment. The rate of late bowel obstruction in our series, 10%, approximates rates previously reported. Anastomotic or anal stricture is also common after all pull-through procedures. The rate of anastomotic stricture in this series, 9%, is comparable to that of previous reports. Anal stenosis impairs the efficiency of pouch emptying, resulting in increased stool frequency and prolonged stasis of intraluminal contents. All of our patients have responded well to repeated dilatations with associated improved function.

All patients in this series had temporary loop ileostomies constructed at the time of IPAA. As has been reported by others, loop ileostomies are not associated with major morbidity [16,17]. Defunctionalizing the ileoanal anastomosis during the healing process prevents the serious complications of anastomotic breakdown and pelvic sepsis, which could lead ultimately to pouch failure. Although several centers have reported performing the IPAA procedure without protecting ileostomies with low rates of adverse outcomes, we believe the risk of pouch failure significantly outweighs the costs and risks of temporary loop ileostomies.

In the present series, the pelvic abscess rate was 2.7%. All three patients in this series who developed pelvic abscess underwent radiology-guided drainage; none required pouch excision. Early reports of the IPAA procedure reported a 25% incidence of pelvic abscess [18,19]. However, the experience of the surgeon, the use of closed-suction drainage in the pelvis postoperatively, and improved techniques with short muscle cuffs have decreased the incidence of fluid collections and anastomotic complications, leading to decreased rates of abscess formation and subsequent pouch failure. More recent reviews have demonstrated a much lower incidence of pelvic abscess (3–12%) [10,15,20,21]. Most series report a pouch failure rate of 6–13%, which most commonly occurs in relation to pelvic sepsis or Crohn's disease. In the present series, there were only three long-term pouch failures (2.6%): one for intractable pouchitis, one for intolerably high stool frequency, and the other for complications of Crohn's disease diagnosed postoperatively. The results in the present series suggest that results with this operation are optimized when it is performed in high volumes by surgeons using standardized operating techniques.

The average stool frequency in our series was six per day. In contrast to previous series, the stool frequency in our series did not significantly change with duration of follow-up [22, 23], and the patients with familial adenomatous polyposis (FAP) had a significantly greater stool frequency than patients with chronic ulcerative colitis. This may in part be due to our routine of complete mucosectomy in FAP patients. In our series, complete mucosectomy to the dentate line was performed only in patients with FAP and in patients with chronic ulcerative colitis with rectal mucosal dysplasia. In most patients, we preserved the transition epithelial zone covering the anorectal columns—that area within 1 cm proximal to the dentate line, which is richly supplied by the neural network necessary to maintain the afferent limb of the reflex arc of involuntary continence. These patients are able to differentiate between gas and stool and achieve more efficient emptying of their pouches. Our patients with FAP are without this transitional epithelium and may therefore have increased difficulty differentiating between gas and stool; in addition, they may be less efficient in emptying their pouches, resulting in the increased stool frequency.

Normal fecal continence was achieved in 93% of our patients. Factors contributing to continence include reservoir peristalsis [24], resting internal sphincter pressure [25], sphincter length, and the angle between the reservoir and the outlet [26, 27]. Technical aspects related to the mucosectomy greatly affect the level of continence and stool frequency [28]. A complete mucosectomy to the level of the anorectal columns must be done with care to not injure the sphincter mechanism; and leaving the transition zone may play an important role in determining the level of postoperative continence. The factors contributing to incontinence in our series are difficult to assess, as the incidence was low.

The major long-term morbidity associated with the IPAA procedure, or the Kock continent ileostomy, is pouchitis, reported in most reviews to occur in 7–26% of patients [19–27] and in two recent series to occur in about 50% of patients [29, 30]. Pouchitis produces a complex of symptoms (e.g., frequent, watery, often bloody stools; urgency; abdominal cramping) and improves with an empiric regimen of antibiotics. The etiology of pouchitis likely is due to bacterial overgrowth within the pouch, supported by the fact that most patients respond to a course of antibiotics. In previous reports, no significant predominant bacterial pathogen was identified in patients with pouchitis relative to controls [31–36], and it is uncertain whether the nonspecific inflammatory reaction within the pouch is secondary to a direct effect of bacteria, products made by the anaerobic bacteria such as volatile fatty acids, mucosal abnormalities in the pouch, or even technical aspects related to pouch construction. Although our anecdotal experience suggested that pouch ischemia might contribute to the development of pouchitis, we could not demonstrate a significant correlation between the arterial dissection needed to construct the pouch or the presence of tension at the pouch–anal anastomosis (and ischemia) and the subsequent incidence of pouchitis. However, these two technical measures are unlikely to be reliable predictors of chronic pouch ischemia.

The 59% incidence of pouchitis in our series was higher than previously reported. The explanation for this discrepancy is severalfold. First, we have 100% follow-up. Many series have incorrectly assumed that patients who do not contact their offices do not have pouchitis. Supporting this explanation, a report from the Department of Gastroenterology at Helsinki University with

100% follow-up found that at any given time 39% of patients had pouchitis and 75% of their patients had a history of pouchitis [29]. Second, the duration of follow-up is longer than in previously reported series. All of our patients with ulcerative colitis followed for more than 6 years have been treated for pouchitis at least once. Third, our definition of pouchitis is largely patient-derived. Pouchitis is a clinical syndrome based on signs and symptoms. We believe that the clinically relevant definition of pouchitis is the patient's perception of symptoms. Others have required specific prerequisite criteria to make the diagnosis, which may bear no relation to the patient's health. For example, some have advocated the routine use of endoscopy with mucosal biopsy to make the diagnosis [37]. We advocate taking a good history to diagnosis pouchitis, as the symptoms are unmistakeable. Most patients improve with a short course of antibiotics. The explanation for the significantly higher incidence of pouchitis in women in this series is unclear. It is possible that women are more likely to contact our office [37].

Conclusions

We report our experience with 114 consecutive cases of IPAA performed by a single surgeon. The IPAA procedure is a safe, efficacious surgical treatment for chronic ulcerative colitis and familial adenomatous polyposis. Pouchitis occurs more frequently than previously reported; we believe this increase is due to more complete follow-up and a clinically relevant definition of the syndrome. Nevertheless, patient satisfaction is excellent. The IPAA provides the best surgical alternative for patients with ulcerative colitis or familial adenomatous polyposis.

Résumé

Fond du problème: La colectomie totale associé à la proctectomie muqueuse, complétées par une anastomose iléo-anale avec réservoir (AIAR) est devenue le procédé de choix chez les patients ayant une recto-colite hémorragique ou une polyadénomatose familiale. Les buts de cette étude ont été de déterminer l'évolution à court et à long terme des patients ayant eu une AIAR réalisée par un seul chirurgien, en corrélant les aspects techniques peropératoires avec l'évolution et de mieux caractériser le syndrome clinique de « pouchite ». Plan de l'étude: 114 patients consécutifs ayant eu une AIAR par un seul chirurgien entre décembre 1987 et août 1996 ont fait l'objet d'une revue rétrospective. On a analysé les comptes rendus opératoires, le suivi clinique et les réponses à un questionnaire pour tous les patients. Résultats: Le suivi moyen a été de 3 ans (extrêmes 0.5–8 ans). Il y a eu 64 hommes et 50 femmes d'un âge moyen de 39 ans (extrêmes: 16–72 ans). Les indications opératoires ont été la recto-colite hémorragique (n = 101) et la polypose familiale (n = 13). La morbidité à long terme a été de 41% parmi laquelle on a noté 10% d'obstruction de l'intestin grêle et 9% de sténose anastomotique. L'excision du réservoir a été nécessaire chez seulement trois patients. La fréquence moyenne (±ES) des selles a été de 6,1 ± 0,2; cette fréquence n'a pas variée pendant la durée du suivi. Seulement 7% des patients se sont plaints de souillure fécale. L'incidence de « pouchite » a été de 59% (n = 67), avec 4,2 ± 0,3 épisodes de « pouchite » par patient. En analyse multifactorielle, les facteurs significativement associés à l'incidence de « pouchite » ont été le sexe (p = 0,008) et la durée du suivi (p = 0,02). Trente-sept des 50 femmes (74%) mais seulement 30/64 hommes (47%) ont développé une « pouchite ». L'incidence de « pouchite » a augmenté avec la durée du suivi. L'incidence de « pouchite » a été, respectivement, de 25, de 37 et de 50% chez les patients suivis pendant 6 mois, 1 an, et 3 ans. Chez les patients suivis pour plus de 6 ans, l'incidence de « pouchite » a été de 94% (15/16). On n'a pas noté de corrélation significative entre la tension de l'anastomose ou l'étendue de la dissection artérielle du mésentère pour fabriquer l'AIAR et l'incidence de « pouchite ». Le meilleur traitement antibiotique a été le métronidazole (54% des patients) et la ciprofloxacine (37%). Une antibiothérapie continue a été nécessaire chez 11 patients. Le degré de satisfaction des patients a été élevé, avec un score moyen de 8.4 (0 = non satisfaction, 10 = extrême satisfaction). Conclusions: Cette revue montre une incidence élevée de pouchite après AIAR. Cette incidence élevée est due à la fois à une définition plus libérale du syndrome, et le caractère complet du suivi achevé ici en comparaison avec d'autres séries. Cette étude est aussi unique dans l'identification d'une incidence de pouchite plus élevée chez la femme. Cependant, le degré de satisfaction globale en ce qui concerne l'évolution clinique chez le patient ayant une AIAR reste élevé.

Resumen

Antecedentes: El tratamiento quirúrgico de elección en pacientes con colitis ulcerosa o poliposis adenomatosa familiar es la colectomía total con protectomía mucosa, realizando una anastomosis del ano con una bolsa (pouch) ileal en J (IPAA). El objetivo del trabajo fue valorar los resultados a corto y largo plazo de pacientes intervenidos con la IPAA, por un mismo cirujano. Se correlacionan los aspectos técnicos intraoperatorios con los resultados alcanzados, intentándose definir mejor "el síndrome clínico de pouchitis". Casuística: Se efectúa un estudio retrospectivo de 114 enfermos a los que un mismo cirujano trató mediante IPAA, entre diciembre de 1987 y agosto de 1999. Se revisaron los informes operatorios y las revisiones clínicas, así como los cuestionarios enviados y contestados por todos los pacientes. Resultados: El seguimiento medio fue de 3 años (rango 0.5–8 años). La edad media fue de 39 años (rango 16–72 años). 64 eran hombres y 50 mujeres. La indicación operatoria vino dada por: colitis ulcerosa (n = 101) y poliposis colónica familiar (n = 13). La morbilidad a largo plazo fue del 41%, registrándose 10 casos de obstrucción de intestino delgado y, estenosis anastomótica en el 9% de los casos. La resección del "pouch" hubo de realizarse en tan sólo tres pacientes. La frecuencia media de las deposiciones fue de 6.1 ± 0.2 y se mantuvo constante durante todo el periodo de seguimiento. Sólo el 7% de los pacientes informaron sobre una incontinencia parcial, pures menchaban su ropa interior con heces. La incidencia de la "pouchitis" fue del 59% (n = 67) con 4.2 ± 0.3 episodios de "pouchitis" por paciente. Un análisis multivariante demostró que los factores significativamente relacionados con la incidencia de la "pouchitis" fueron: el sexo (p = 0.008) y la duración del seguimiento (p = 0.02). 37/50 mujeres (74%) y sólo 30/64 hombres (47%) desarrollaron una "pouchitis". La frecuencia de esta complicación crece de forma paralela a la mayor duración del seguimiento; así, a los 6 meses, 1 y 3 años, la incidencia de la "pouchitis" fue del 25, 37 y 50%. El 94% de pacientes, con seguimiento mayor a los 6 años, desarrollaron una "pouchitis"

(15/16). No se constató correlación alguna por lo que a la tensión de la anastomosis, ni por lo que a la amplitud de la disección arterial del ileo mesentérico, necessaria para efectuar la bolsa ileal y subsiguiente anastomosis anal, se refiere. Los antibióticos más efectivos en el tratamiento de la "pouchitis" fueron: el metronidazol (54%) y la ciprofloxacina (37%); 11 enfermos requirieron el uso casi continuo de antibióticos. La mayoría de los pacientes estaban satisfechos con los resultados obtenidos; la puntuación media de satisfacción fue de 8.4 (0 = insatisfecho, 10 = muy satisfecho). Conclusiones: Esta revisión muestra la gran incidencia de "pouchitis" tras IPAA, que debe atribuirse no sólo a una interpretación más liberal del síndrome sino también, a que el seguimiento de estos enfermos ha sido más prolongado que el registrado en otras series. Este trabajo es el único que señala la gran frecuencia de la "pouchitis" en la mujer; sin embargo, el grado de satisfacción de los pacientes fue muy alto.

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