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Complications and Function of the Continent Ileostomy at the Cleveland Clinic

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We have reviewed the results of continent ileostomy management in 168 patients treated from 1977 to 1985: 83 men and 85 women ranging from 16 to 69 years of age (median, 35 yr). One hundred fifty patients were diagnosed as having ulcerative colitis originally (14 later manifested Crohn's disease), 7 had familial polyposis coli, 1 Crohn's disease, and 10 continent urostomies. Twenty-four patients were referred with pouches made elsewhere. A total of 252 operations were undertaken to construct or reconstruct the ileostomies, with a postoperative mortality rate of 0.04% (1 case). Postoperative complications following pouch construction or revision included bowel obstruction (5.2%), hemorrhage (2.8%), and sepsis (4.8%), while valve necrosis occurred in 4 patients and there were 5 fistulas. Twenty-nine percent of patients developed pouchitis, all treated medically. Valve extrusion occurred in 17% of cases, late fistulas in 7.1%, valve prolapse in 3%, and peristomal sepsis in 11%. Reoperation rates were 42.5% in the first 3 years of the series, 38.5% in the next 5 years, and 6.5% in the last year. The use of Marlex® mesh in pouch construction was effective in stabilizing the valve, but led to a prohibitively high incidence of late complications and was abandoned in 1984. Ten pouches have been excised (8 of 15 done for Crohn's disease) and a total of 6 patients have died. Of the 152 patients alive with a pouch, 91% were continent. Results are encouraging and support the use of the continent ileostomy in patients unsuited for ileoanal pouch procedures.

In the 1960's, the standard operation for mucosal ulcerative colitis (MUC) was total proctocolectomy with end ileostomy. Although this procedure was, and still is, the most certain and least complicated route to a cure, the disadvantages inherent in an incontinent stoma with an external bag have stimulated a search for alternatives. The concept of a low-pressure, high-volume internal reservoir emptied by intubation of a flush stoma was attractive. After Professor Kock developed such a reservoir as a bladder substitute, he was able to apply it to the control of defecation [1]. The continent ileostomy did not become really practical, however, until 1972, when a continence-producing intussusception valve was added to the exit conduit. This combination was the formula that has since been adopted worldwide to improve the life-style of many ileostomy patients. Several technical modifications have been introduced during the last 15 years, mostly to improve stability of the valve. Recently, the continent ileostomy has started to be used more frequently, the history of the procedure thus turning full circle [2].

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The current role of the continent ileostomy in the management of colonic disease has been affected by the growing popularity of ileoanal pouch operations. Although preservation of per-anal defecation has obvious attractions, it is not feasible for all patients. In the interests of those to whom it has to be denied, maintenance of enthusiasm for, and expertise in, alternative procedures is important. To this end, we have reviewed our experience in the construction and management of the continent ileostomy.

Technique of Ileostomy Construction

Patient Selection

All patients requiring proctocolectomy for MUC or familial polyposis coli (FPC) are potential candidates for a continent ileostomy. Its advantages and disadvantages, and the three main alternatives—end ileostomy, ileoanal pouch, and ileorectal anastomosis—are discussed with each patient. In most cases, an ileoanal or ileorectal anastomosis will be preferred. Where this is impossible or inadvisable, a continent ileostomy is offered. Such situations include patients with rectal cancer, perianal fistulas, poor sphincter function, or occupations that preclude frequent visits to the toilet. Some patients, such as 2 treated here with severe abdominal psoriasis, are medically unsuited for a Brooke ileostomy. At present, most candidates for a continent ileostomy will be those wishing to convert from such an end stoma. Relative contraindications to the continent pouch include acute colitis (because the patients are usually on high doses of steroids and it is difficult to exclude Crohn's disease), obesity, and age over 40 years. Both of these last 2 factors have been shown to be associated with an increased risk of valve dysfunction [3], although we have offered the pouch to many patients over 40 years of age. Patients should have adequate reserves of small bowel, should be well motivated, psychologically stable, and reasonably intelligent. Preoperative interviews with the surgeon, a stoma therapist, and a patient with a continent ileostomy will help toward an understanding of the sequelae and possible complications in store.

Surgical Technique

We have recently described our technique in detail [4], but have since stopped using Marlex® mesh. Preoperative preparation

Table 1. Operative procedures associated with construction of continent ileostomy.

Procedure	n	Postoperative days in hospital Median (range)
Total proctocolectomy and continent ileostomy	37	13 (8–28)
Completion colectomy and continent ileostomy	1	9
Completion proctectomy and continent ileostomy	26	13 (8–19)
Conversion of end ileostomy to continent ileostomy	68	10 (6–65)
Conversion of ileoanal pouch to continent ileostomy	2	10
Continent ileostomy made elsewhere (revised)	24	11 (7–18)
Cystectomy and continent urostomy	10	16 (9–21)
Total	168	

[a]Three patients of the 168 had no operation at The Cleveland Clinic Foundation, but were managed nonoperatively after referral.

Table 2. Major postoperative complications of Kock pouch construction or revision (n = 252 operations).

Complication	n
Bowel obstruction	
Resolved	9
Resolved with total parenteral nutrition	3
Laparotomy required	1
Hemorrhage	
Intraabdominal	5
Stomal	2
Sepsis	
Intraabdominal	3
Peristomal	1
Wound	6
Central venous line	1
Pneumonia	1
Deep vein thrombosis	1
Pouch perforation	3
Stoma necrosis	1
Valve necrosis	4
Enterocutaneous fistula	5
Postoperative psychosis	2
Total	48 (19%)

includes the work-up and treatment of coincidental morbidity, and the use of standard regimens of bowel lavage and antibiotic prophylaxis. Stoma marking can be placed lower than for a conventional stoma, as long as it is medial to the lateral border of the rectus abdominus.

The pouch is made from three 15-cm loops of terminal ileum, using a hand suture technique. Twelve centimeters are devoted to the valve, and 8 cm to the exit conduit and stoma. The valve is created by intussuscepting the efferent loop to provide a 5-cm nipple. Where necessary, the mesentery of the valve is first carefully stripped of fat. The valve is stabilized by 3 or 4 applications of the TA-55 stapler, one application being placed squarely along the mesentery. The fundus of the pouch is sewn up onto the base of the exit conduit to strengthen the intussusception. Before the pouch is closed completely, several anchoring sutures of 1-0 Ethibond® are placed in the fundus of the pouch circumferentially around the exit conduit. Their insertion is aided by a finger within the pouch. The sutures on the mesenteric side of the fundus are most important since this is where the pouch is likely to pull away from the abdominal wall. The pouch is then closed and tested for integrity and continence. The exit conduit is brought through the abdominal wall and the anchoring sutures are completed by being inserted through the posterior rectus sheath and tied. The lateral paraileostomy space is closed and a drainage catheter secured safely in the pouch before the abdomen is closed.

Postoperative Management

Long-term postoperative drainage of the pouch is crucial [5] since this effectively defunctions it. The catheter is left in situ for 3–4 weeks, using frequent small-volume irrigations to ensure patency. At the first outpatient visit the pouch is tested and, if all is well, a schedule of intermittent catheterization is begun. Intubation ad libitum is usually achieved within a further 4 weeks. Routine follow-up occurs at 3 months and then every year.

Patients

The charts of 168 patients managed in the department of colorectal surgery at The Cleveland Clinic Foundation from 1977 to 1985 were reviewed. There were 83 men and 85 women, and the group had a median age of 35 years (range, 16–69 yr). Included are 10 patients with a continent urostomy and 24 referred with problems relating to a continent ileostomy made elsewhere. We have retained the urostomy cases in the series since they are liable to develop the same postoperative valve problems as patients with fecal ileostomies.

The operations associated with pouch construction are listed in Table 1. Conversion of a Brooke's ileostomy to a continent one involved a shorter postoperative hospital stay than did other procedures. Diagnoses of chronic disease at the time of colectomy in 158 patients included MUC in 150 (95%), FPC in 7 (4%), and Crohn's disease in one. Later developments showed that 14 patients originally diagnosed with MUC actually had Crohn's disease. One patient with MUC and 4 with FPC also had invasive colorectal carcinomas.

Patients referred from elsewhere presented with incontinence due to valve extrusion (17 cases), fistulas (6 cases) and Crohn's disease (1 case). Twenty-one of these patients were treated surgically.

Results

There was a total of 252 operations involving laparotomy, including construction and revision of the continent ileostomy but excluding surgery for bowel obstruction or conditions unrelated to the pouch. One postoperative death occurred as a result of hemorrhage. A further 5 patients died later from unrelated causes. The median period of follow-up was 3 years (range, 3 mo–10 yr).

The major postoperative complications of all procedures can be seen in Table 2. Long-term problems specifically attributed to the pouch are shown in Table 3. Pouchitis was defined using

Table 3. Late complications of the continent ileostomy (n = 252 operations).

Complication	n	Treated medically	Treated Surgically		Months from surgery Median (range)
			With laparotomy	Without laparotomy	
Pouchitis					
One episode	32	31	1[a]	0	18 (2–48)
Multiple episodes	16	14	2[a]	–	
Inability to intubate[b]	34	4	30	–	[c]
Incontinence[b]	19	3	16	–	[c]
Peristomal sepsis	25	2	5	18 (incision and drainage)	14 (1–43)
Fistula					
Pouch-to-valve	8	–	6	2	11 (1–50)
Enterocutaneous	12	5	7	–	2 (1–28)
Recurrent	3	–	3	–	–
Anemia	10	7	3	–	18 (3–44)
Stomal stenosis	17	–	1	16	12 (3–39)
Valve prolapse	5	–	2	3	Not assessed
Parastomal hernia	9	4 (asymptomatic)	–	5	Not assessed
Redundant stoma	2	–	–	2	Not assessed
Skin-level stricture	17	–	–	17	Not assessed

[a]All 3 cases had pouch excision for Crohn's disease.
[b]Most of the 19 patients with incontinence are also in the group of 34 patients with difficult intubation.
[c]Patient response to question was not assessable.

Table 4. Indications for surgical revision of continent ileostomy requiring laparotomy.

Indication	First revision		Second revision	
	n	Months from pouch construction Median (range)	n	Months from pouch construction Median (range)
Slipped valve	32	6 (2–108)	9	7 (4–54)
Fistula	12	24 (4–50)	4	20 (2–39)
Mesh erosion	8	17 (3–41)	3	19 (15–21)
Valve prolapse	1	16	1	1
To lengthen efferent limb	0	–	1	12
To resect pouch	8	14 (5–120)	2	15
Total	61		20	

clinical criteria of diarrhea, pain, bleeding, urgency, bloating, and malaise. Endoscopic features of pouch and valve complications have been described in detail elsewhere [6].

The various indications for revisionary surgery are listed in Table 4. A further 6 patients required 3 revisions while 1 patient had a total of 7. The procedures used in revising the pouch included: restapling the valve and/or refixation of the pouch to the internal ileostomy aperture (43%), excision of the valve and rotation of the pouch (34%), and repair of a fistula, with or without removal of mesh (16%). Four laparotomies discovered no abnormality, in 2 a completely new pouch was made, and in 1 the exit conduit was lengthened. Table 5 highlights the effect of experience and change in technique on reoperation rates. Before 1980, no fundal or mesenteric mesh slings were employed. They were used, alone or together, during the next 5 years and then abandoned in 1985. The low reoperation rate in that year is likely to be due, in part, to a limited period of follow-up.

The problems associated with Marlex® mesh are shown in detail in Table 6. Cases where the mesh was seen include both endoscopic and gross visualization. Mesh removal includes both laparotomy and minor office procedures.

Overall results of the series are encouraging (Table 7). Of the 152 patients who are using their pouch, 91% are fully continent. Pouch size increased from a mean of 174 cc ± 79 SD (measured as the smallest tolerable volume of water) at the first postoperative visit to 402 cc ± 146 at the second visit. No further significant increase in pouch volume occurred thereafter—4–5 months following operation. Frequency of emptying averaged 6 times a day after 2 months and 5 times a day after 5 months. Patient satisfaction has not been specifically considered in this retrospective review, but a comprehensive study of a smaller group of patients has shown that their expectations were fully met or exceeded in 93% of cases. All of them would be prepared to have the operation again, while 97% would undergo revision if necessary [7].

In addition to these general considerations, 2 specific issues call for discussion. The first is trauma to the pouch. Five patients presented in this way with symptoms of valve extrusion temporarily related to sneezing, lifting, and a direct blow. Hemorrhage followed a car accident and a fall, respectively. The first 3 cases required revision of the valve.

The second issue is that of Crohn's disease in the pouch, a complication which occurred in 15 (9%) patients, the diagnosis being made histologically in 8, endoscopically in 7, and radiologically in 5. Eleven of the patients were referred after

Table 5. Reoperation rate by indication and year of previous pouch surgery.[a]

Indication	1977–79	1980–84	1985	1977–85
Valve slippage	14	26	3	43
Mesh associated complications	0	27[b]	0	27[b]
Other	3	9	0	12
Subtotal	17	62	3	82
Total pouches made or revised	40	161	46	247[c]
Reoperation rate	42.5%	38.5%	6.5%	33.2%

[a]Includes all reoperations.
[b]80 patients had mesh inserted at pouch construction.
[c]10 pouches excised.

Table 6. The use of mesh and its complications.[a]

Complication	n	Mesh seen	Mesh removed
Nil	29	3	0
Pouchitis	26	9	3
Peristomal sepsis	13	9	11
Enterocutaneous fistula	7	1	7
Pouch/valve fistula	8	6	8
"Catch" on intubation	5	4	4
Anemia	5	3	2
Mucus discharge	2	1	1
Blood discharge	1	1	1
Peristomal pain	1	1	1

[a] Twenty-seven of 80 patients having mesh inserted had reoperation for mesh complications.

proctocolectomy or continent ileostomy construction had been performed elsewhere, while 3 of the remaining 4 had originally presented with toxic megacolon. The Crohn's disease manifested itself as pouchitis in 11 patients (recurrent in 6) and fistulas in 4. Treatment included removal of the pouch in 8 cases, and systemic and topical steroids in 6.

Discussion

In the 18 years since it was first described, the Kock continent ileostomy has struggled to win acceptance as a viable option in the surgical treatment of colonic disease. The initial skepticism of many surgeons was reinforced by early results which showed high rates of complications and reoperation [8, 9]. During the last 5 years, several authors have reported more encouraging experience, with results similar to ours. Surgeons in the United States [10–12], Canada [13], Sweden [14, 15], Australia [16], and Finland [17] have amassed over 1,600 cases in individual series ranging in size from 75 [17] to 447 patients [10]. Such an intensity of experience is unlikely to be repeated.

Patient Selection

The patient selection policy of the various authors whose series have been reviewed are similar. The average age of patients has varied from 33 to 37 years and 78–95% of them have been treated for MUC. Most series excluded patients with Crohn's disease, except those by Kock et al. [14] and Gerber et al. [12], of which 15–16% had this condition. Our own experience of a relatively high percentage (9%) of Crohn's cases was due to mistaken diagnoses at the time of colectomy.

Table 7. Overall results.

Result	No.
Deaths	
Postoperative	1
Late	5
Pouch excised	10
Alive, continent	147 (91%)
Alive, incontinent of gas	2
Alive, incontinent of feces	3

In most reports, the majority of patients underwent conversion of a conventional stoma to a continent one. These are usually the best motivated and most grateful patients. Poor results due to lack of patient motivation are rare, although the 2 cases in our series who elected to have their pouch removed without clinical reason are examples of such lack of determination. Most series exclude obese patients from consideration for this procedure. Certainly, we have found postoperative gain of weight difficult to control in such cases, and this may cause stoma recession and valve instability.

Technical Considerations

The surgical techniques used in construction of the pouch and particularly the valve differ both within and between series. Kock et al. [14], Dozois et al. [10], and Keller et al. [11] favor 2-loop pouches, while our own practice and that of Gerber et al. [12], Failes [16], and Goligher [18] is to use 3 loops. The most important stage of the procedure is construction and stabilization of the valve. As in our experience, most centers describe evolving techniques with time [12–14, 16]. By 1985, most authors were using stapling instruments (TA-55 or GIA) to fix the valve. Three series also report the limited use of through-and-through sutures [5, 14, 16]. To promote fibrous union between the layers of the valve, several authors scarify the ileal serosa and external muscle coats, while Gelernt [5] has added a submucosal injection of tetracycline. "Defatting" of the mesentery to the valve is also performed routinely by some [5, 10, 16, 18], although we, and Schrock [19], use this only when the amount of mesenteric fat makes intussusception difficult.

Marlex® mesh and/or fascia has been in common use, either as a mesenteric sling to stabilize the valve, or as a fundal wrap to prevent valve prolapse and increase fixation of the pouch to the abdominal wall. Our experience has led us to abandon its use. Others who caution against it are Cohen [13], Hultén [15], and Dozois et al. [10], although some surgeons use slings of softer material such as polypropylene [18] and polyglycolic acid [10]. Schrock [19] still uses Marlex® mesh as a fundal ring, but does not suture it to bowel or fascia.

Complications

Most series report results in 2 phases: early experience and late experience. Invariably there has been a significant reduction in the rate of complications and reoperation with time, although these reductions may be partially exaggerated by differences in the length of follow-up. Most recent reoperation rates vary from 22% [10] to 21% [16], and 11% [14] to 8% [13].

The immediate postoperative complications of continent

Table 8. Natural history and treatment of enterocutaneous fistulas associated with the continent ileostomy.

Months from last pouch surgery to onset of fistula	Associated predisposing factors	Initial treatment	Results
5 (referred)	Crohn's disease	Repair	Recurrence
6	Crohn's disease	TPN	Recurrence
15	Crohn's disease	Pouch decompression	Recurrence
28	Crohn's disease	TPN	Recurrence
Postoperative	Nil	TPN	Healed
Postoperative	Valve necrosis	TPN + repair	Healed
Postoperative (referred)	Nil	Pouch retention	Healed
2	Nil	TPN + repair	Healed
12	Nil	Repair	Healed
12	Nil	Rotate pouch	Healed
19	Nil	Repair	Healed
22	Mesh	Repair	Healed
6	From exit conduit	Rotate	Healed
14	From exit conduit	Repair, remove mesh	Healed
18	From exit conduit	Rotate	Recurrence (mesh)
2	Mesh	Pouch decompression antibiotics	Healed
48	Mesh	Repair, remove mesh	Healed after surgery for recurrence

TPN = total parenteral nutrition.

ileostomy surgery are a combination of those associated with any major bowel operation, and of those peculiar to the pouch. In groups of such young patients, complications affecting other major organ systems would be predicted to be low. Rates of bowel obstruction (2–17%), hemorrhage (0.5–5%), sepsis (2–11%), and fistulas (1–7%) are acceptable given the magnitude of the surgery. Long-term drainage of the pouch effectively defunctions it, reducing the likelihood of major sepsis. Although some have advised the use of a defunctioning loop ileostomy above the pouch [15], we have performed this in only 3 cases in which complications forced a second laparotomy. Pouch-specific problems in the postoperative period include perforation and valve necrosis. These decrease with increasing experience, although most valves that are securely fixed do look somewhat "beaten up." The value of experience is in deciding when the benefits of the stabilization maneuver are outweighed by the dangers of ischemia. The operative mortality of continent ileostomy surgery is low, 0% in many series.

Long-term complications are chiefly associated with the pouch and its valve. Valve extrusion, or slippage, is the most common and occurs earliest. It can be partial, leading to valve angulation and difficulty in intubation, or complete, leading to incontinence. The inability to intubate the valve creates an emergency and is a good reason for patients with a continent pouch to live within easy access of a physician who has expertise in the management of this condition. Valve extrusion does not automatically require surgery, and several of our patients were treated successfully by splinting the valve for 2–3 weeks. Likewise, difficulty with intubation does not always signify impending extrusion, since minor kinks in the exit conduit can be created as it traverses the layers of the abdominal wall. Valve splinting is also effective in many of these cases. One patient with incontinence due to complete extrusion and another with a valve-pouch fistula were treated temporarily with an indwelling continence device [18]. Both elected later to have a reoperation. Valve prolapse can occur through an over-large fascial aperture in the abdominal wall; we have treated 3 of 5 such cases by narrowing this aperture in the anterior rectus sheath under local anesthesia.

Fistulas can occur internally or externally. Internal fistulas between pouch and valve are likely to be caused by mesh or suture material. Such fistulas bypass the valve and cause incontinence. External or enterocutaneous fistulas can arise from the exit conduit, the pouch, or its afferent loop of ileum. These fistulas may arise from technical errors, or have mesh at their base, or be associated with Crohn's disease. In our experience, as in that of others [12], Crohn's-related fistulas tend to recur and may require pouch excision. Our experience with enterocutaneous fistulas is summarized in Table 8.

Pouch ileitis is the other major complication of the continent ileostomy. It occurs in 7–30% of patients with a continent ileostomy and is frequently recurrent. The clinical presentation can vary from a minor flu-like illness to severe ileitis with general toxicity. Treatment with antibiotics (usually metronidazole) and constant drainage is usually rapidly effective, although a minority of patients will need topical or systemic steroids. Occasionally, pouchitis necessitates pouch excision [16, 20, 21]. Interestingly, no patient presenting with FPC has developed pouchitis in this series, an observation made by others [14, 21]. This would suggest that the causation of the condition is only partly related to stasis and bacterial overgrowth, and also associated with some inherent quality of the ileum in colitis patients.

The construction of a continent ileostomy in a patient with Crohn's ileocolitis is a risky undertaking as Gerber et al. [12] have shown, for 5 of 5 such patients in their experience developed fistulas. Fistulas were also common in patients with Crohn's disease in Kock's series [14], and we, ourselves, have shown a poor prognosis for the pouch operation in such patients. Bloom and his colleagues [22], however, have carefully selected for the operation patients with quiescent Crohn's disease who have been off medication for 5 years and have produced good results. We still feel that a continent ileostomy is contraindicated in the presence of small bowel Crohn's disease but concede that it may have a role in selected patients

with colonic Crohn's disease, under appropriately controlled conditions. In these circumstances, the Kock pouch would appear a more attractive proposition than the ileoanal pouch.

There are other minor and uncommon complications of the Kock ileostomy [23]. The most important in our series was skin-level stenosis of the stoma, but all 17 patients with this problem could be managed by local revision.

Comparison of Alternatives

When judging the merits of the continent ileostomy, one must compare its results with those of alternative operations, as has been done by Hultén [15]. The major factor in favor of the pelvic pouch procedure is its avoidance of a permanent stoma and maintenance of the natural route for defecation. Its major disadvantages are the need for a temporary ileostomy and its related problems. In other respects, the 2 pouch procedures are similar, including current complication and reoperation rates, as well as functional results and patient satisfaction. The value of having the continent ileostomy available as an option is shown by our experience with 4 patients, 2 of whom had an unsatisfactory pelvic pouch converted to a Kock pouch and 2 of whom received a Kock pouch because a pelvic pouch was found at operation to be technically impractical.

The Future

It is ironic that the culmination of 15 years' experience with the continent ileostomy, at last leading to acceptably low complication rates, has coincided with the establishment of the ileoanal pouch as the procedure of choice in the treatment of MUC. Although the 2 operations are equivalent in terms of complications and reoperation rates, it is likely that the pelvic pouch, with its preservation of the anal sphincters, will remain the favorite. But for those patients whose sphincters could not or should not be spared, or have already been removed, the continent ileostomy remains an important alternative method for maintaining control over defecation. For such patients—and also for patients who may wish a full range of options in bladder substitution—it is essential that centers of skill and experience in the construction and management of the continent ileostomy be maintained.

Résumé

Les auteurs ont étudié les résultats de l'iléostomie continente établie chez 168 malades de 1977 à 1985: 83 hommes et 85 femmes d'un âge médian de 35 ans (16 à 69 ans). L'intervention fut pratiquée 150 fois pour une colite ulcéreuse (14 fois il s'agissait en réalité d'une maladie de Crohn), 7 fois pour une polypose familiale, 1 fois pour une maladie de Crohn, 10 fois pour urostomie continente. Chez 24 des malades, une iléostomie avec poche avait été réalisée dans une autre formation chirurgicale. Au total 252 opérations furent pratiquées pour construire une iléostomie ou reconstruire une iléostomie préexistente. Un malade décéda après l'intervention (0.04%). Les complications post-opératoires furent les suivantes: obstruction intestinale (5.2%), hémorragie (2.8%), infection (4.8%) cependant que la nécrose de la valve fut observée chez 4 opérés et que 5 fistules se développèrent. Chez 29% des opérés une inflammation de la poche fut constatée et toujours traitée médicalement, se manifestèrent dans 17% des cas une expulsion de la valve, dans 7.1% une fistule tardive, dans 3% un prolapsus de la valve, dans 11% une inflammation péri-orificielle. Le taux des réinterventions fut de 42.5% dans les 3 premières années de la pratique, de 38.5% les 5 années suivantes, et de 6.5% la dernière année. L'emploi d'une mèche de Marlex® dans la construction de la poche fut efficace en stabilisant la valve mais la méthode aboutit à un taux excessif de complications tardives et de ce fait fut abandonnée en 1984. Dix poches furent extirpées (8 des 15 établies pour maladie de Crohn) et 6 malades au total sont morts. Des 152 survivants, 91% sont continents. Ces résultats sont donc encourageants et permettent de considérer que l'iléostomie continente est indiquée quand il est impossible d'établir un réservoir iléo-anal.

Resumen

Hemos revisado los resultados con el manejo de la ileostomía continente en 168 pacientes tratados entre 1977 y 1985: 83 hombres y 85 mujeres con una edad media de 35 años (rango 16–69). Ciento cincuenta pacientes fueron diagnosticados originalmente como colitis ulcerosa (14 posteriormente manifestaron enfermedad de Crohn), 7 tenían poliposis familiar, uno enfermedad de Crohn, y 10 urostomías continentes. Veinticuatro pacientes nos fueron referidos ya con bolsas ileales construídas en otras instituciones. Un total de 252 operaciones fue requerido para construir o reconstruir las ileostomías, con una mortalidad postoperatoria de 0.04% (1 caso). Las complicaciones postoperatorias que se presentaron después de la construcción o revisión de la bolsa incluyen obstrucción intestinal (5.2%), hemorragia (2.8%), y sepsis (4.8%); necrosis de la válvula ocurrió en 4 pacientes y hubo 5 fístulas. Veintinueve por ciento de los pacientes desarrollaron "bolsitis"; todos recibieron tratamiento médico. La extrusión de la válvula se presentó en 17% de los casos, fístula tardía en 7.1%, prolapso de la válvula en 3%, y sepsis periostomal en 11%. Las tasas de reoperación han sido de 42.5% en los primeros 3 años de la serie, 38.5% en los 5 años siguientes, y 6.5% en el último año. El uso de la malla de Marlex® durante la construcción de la bolsa resultó efectivo en cuanto a la estabilización de la válvula pero dió lugar a una incidencia prohibitiva de complicaciones tardías, por lo cual fue abandonado en 1984. Diez bolsas han sido resecadas (en 8 de 15 pacientes con enfermedad de Crohn) y ha fallecido un total de 6 pacientes. De los 152 pacientes vivos y con bolsa, 91% están continentes. Los resultados son halagadores y dan apoyo al uso de la ileostomía continente en pacientes que no son candidatos para los procedimientos de bolsa con anastomosis ileoanal.

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