

Our surgical experience in treatment of ulcerative colitis

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Abstract

Objective: Ulcerative colitis is an inflammatory bowel disease with remissions and activations and symptoms of diarrhea, abdominal pain, rectal bleeding, loss of weight and tenesmus. Etiopathogenesis has not been enlightened yet. The most common location of the disease is the rectum. The treatment is medical and surgical. In this study, we analyzed surgically treated patient with ulcerative colitis in 2nd General Surgery Department (Group B) in our hospital.

Material and methods: Demographic data, the type of surgical procedures, histopathological diagnosis, complications and proportions of mortality are presented. Patients with bleeding, toxic colitis and perforation were operated urgently. Elective operations were performed due to unresponsiveness to medical treatment, complications and malignancy.

Results: From January 2000 to January 2013, surgically treated twenty cases, 7 women and 13 men, of ulcerative colitis were included in this study. Five of these cases were operated urgently whilst 15 cases were in elective conditions. The age of the cases were between 18 and 65 with a mean of 37,65. Thirteen cases were treated with total proctocolectomy plus ileal pouch anal anastomosis plus protective loop ileostomy; 2 with total colectomy plus ileorectal anastomosis protective ileostomy, 5 with total proctocolectomy plus terminal ileostomy. Three of the cases were reported as adenocarcinoma arising on ulcerative colitis histologically. Time of hospitality was ranged from 7 to 43 days with a mean of 14 days. Number of defecation ranged from 4 to 7 with a mean of 5 in patients with ileal pouch anal anastomosis. Three patients had anastomotic leakage, 1 patient had anastomotic stricture and 1 patient had acute renal failure due to fluid loss from ileostomy, and 1 patient had pulmonary embolus. Our mortality rate was found as 10%.

Conclusion: Surgical treatment of ulcerative colitis has high complication rates in especially emergency cases. But ileal pouch anal anastomosis is the most appropriate operation due to nearly normal number of defecation and anal continens.



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Introduction

Ulcerative colitis is an inflammatory bowel disease with remissions and activations and symptoms of diarrhea, abdominal pain, rectal bleeding, loss of weight, tenesmus and systemic symptoms [1, 2]. Although familial and genetic factors are interpreted as etiological reasons, the real etiopathogenesis of

the disease has not been enlightened yet. Loss of tolerance to endogen enteric flora is thought to be the main factor from the latest studies [3, 4]. Ulcerative colitis is usually known as limited to mucosa and submucosa but muscular layer or even serosa can be affected in advanced stage diseases like fulminant colitis or toxic megacolon. The average age is between 15 and 35 years [2].

Ulcerative colitis is endoscopically characterized by multiple ulcers, pseudopolyps, mucosal dysplasia, hyperemia and granularity [1, 5]. Mucosal inflammation starts from rectum and spreads to the proximal segments of the colon [6]. Rectum is affected in 95% of the cases [1, 6]. In the form of pancolitis, total colon is affected from rectum to caecum [6, 7]. This form is seen in 20% of the patients. In 10-20% of cases in which total colon is affected, inflammation spreads towards 1-2 cm of terminal ileum. Terminal ileum is rarely affected and this is called as "backwash ileitis" [1]. The localized form of ulcerative colitis is proctitis and proctosigmoiditis (distal colitis) [6, 7]. The treatment is medical and surgical. In this study, we analyzed cases operated for ulcerative colitis in our 2nd Surgery (Group B) clinic.

Materials and methods

From January 2000 to January 2013, surgically treated twenty cases, 7 women and 13 men, of ulcerative colitis were included and retrospectively evaluated in this study. Five of these cases were operated urgently whilst 15 cases were in elective conditions. Demographic data such as age and sex, the type of surgical procedures, histopathological diagnosis, complications and proportions of mortality are presented. Patients with bleeding, toxic colitis or perforation were operated urgently. Elective operations were performed due to unresponsiveness to medical treatment, complications and malignancy. The data were statistically analyzed and the average numbers, the mean and standard deviation were given with minimum and maximum values.

Results

The ages of 20 cases, 7 female and 13 male, were between 18 and 65 with a mean of 37,65. Thirteen cases were treated with total proctocolectomy plus ileal pouch anal anastomosis plus protective loop ileostomy; 2 with total colectomy plus ileorectal anastomosis protective ileostomy, 5 with total proctocolectomy plus terminal ileostomy. Three of the cases were reported as adenocarcinoma arising on ulcerative colitis histologically. Time of hospitality was ranged from 7 to 43 days with a mean of 14 days. Number of defecation ranged from 4 to 7 with a mean of 5 in patients with ileal pouch anal anastomosis. Three patients had anastomotic leakage, 1 patient had anastomotic stricture and 1 patient had acute renal failure due to fluid loss from ileostomy, and 1 patient had pulmonary embolus.

Discussion

The physical examination of patients with ulcerative colitis can be nonspecific, normal or abdominal distension and precision along colonic trace. Physical findings are usually associated with duration, spread and severity of the disease. Laboratory test results are also nonspecific [1, 2]. Bloody diarrhea, abdominal pain and fever is the major clinical symptoms. Although the disease is usually limited to rectosigmoid region at the beginning, mostly spreads to the proximal segments.

There is no certain laboratory, radiological or histological test which specifically diagnoses ulcerative colitis. Because of this, the diagnosis usually depends on exclusion of other reasons. Colonoscopy and colonoscopic biopsy is an important diagnostic and therapeutic tool which allows to see all the colonic segments directly and regular follow-up [1, 8]. It is more useful in patients with diagnostic uncertainty or doubt for malignancy for determining the diffusiveness and activity of the disease. Double contrast or barium enema colonic x-rays can be helpful in diagnosis.

The medical treatment of ulcerative colitis not curative. Controlling the disease by treating patients' symptoms and inflammatory activity is the main principle of medical treatment. The drugs of choice varies according to the extent, severity and location of the disease.

Recent studies showed total proctocolectomy becomes necessary in 40% of patients with extensive ulcerative colitis because of chronic progress, tendency of relapse and significant risk of malignancy [9, 10]. In emergency cases with life-threatening situations surgical treatment is definitely necessary. Planning of surgery depends on choice of gastroenterologist, surgeon and the patient in elective cases.

In last 50 year, significant progress is actualized in surgery. Although proctocolectomy converted to be the main procedure, many different surgical options are available depending on surgeon's choice, experience and medical conditions of the patient.

Ileoanal anastomosis was firstly made by Nissen in 1930s [11]. Parks, Nicholls, Utsonomiye et al. motivated the modern ileal pouch-anal anastomosis procedure [12]. Using of restorative proctocolectomy dramatically rised after ileal pouch is added, especially with more experienced surgeons. Most of the surgeons agreed on the certainty of restorative proctocolectomy with ileal pouch anal anastomosis in surgical treatment of ulcerative colitis. However, different arguments about some aspects of this procedure are in progress after ileal pouch

anal anastomosis are the most frequently recommended surgery. The most leading topics of discussion are the resection of rectal mucosa, selection of the technique for ileoanal anastomosis, shaping of the pouch and necessity of diversion ileostomy [10].

Conclusion

In conclusion, surgical treatment of ulcerative colitis has high complication rates in especially emergency cases. But ileal pouch anal anastomosis is the most appropriate operation due to nearly normal number of defecation and anal continence. For the success of ileal pouch anal anastomosis, the surgeon should evaluate the medical condition of the patient, the extent of the disease, and the ability of adaptation and decide the technique of the procedure.

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