

招待講演

A New Look At Operations For Ulcerative and Granulomatous Colitis

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INTRODUCTION

The evolution of granulomatous colitis as a separate entity began in 1938 when Dr. Crohn described a peculiar type of colitis which involved only the right side of the colon.-- Between 1952 and 1959, other investigators described the occurrence of granulomas in specimens removed from many of the patients with this disease.----- Finally, in 1960, Lockhart-Mummery and his associates-- established guidelines for the clinical and pathological differentiation of granulomatous colitis (Crohn's colitis, transmural colitis) from ulcerative colitis. These differential criteria have been accepted slowly and today there is still debate about the two diseases. However, the diagnosis has been more frequently confirmed in the years since 1960 than before.

MATERIALS AND METHODS

The present study was designed to evaluate the patients operated upon for colitis in the years just after 1960 and to re-assess their diagnoses in terms of modern pathologic criteria. It was also intended to evaluate the fate of the rectal segment which had been left in place in a large proportion of patients who had been operated upon during that time period. It was hoped that information could be gained which would allow prediction of which patients might safely have the rectum left in place during operations for colitis.

The hospital records of 111 patients operated upon between 1960 and 1965 at UCLA Hospital were reviewed. These patients all had major procedures performed for their colitis at this hospital. The tissue slides on all patients were pulled from the files and given in a "double-blind" fashion to an outside histologist who categorized them according to Lockhart-Mummery-- and Turnbull's-- classification criteria (Figure 1). This histological re-classification was then compared to the original medical record diagnosis for the purposes of this study.

RESULTS

The median age of the group was 35 years with an equal male to female ratio. Ten percent of the patients had a family history of colitis and 6% had associated carcinoma of the colon at the time they presented for treatment. Over one-fifth of the patients required emergency operative procedures to treat the complications of colitis, such as bleeding, megacolon or perforation. The overall mortality after operation was 13.5% (Figure 2).

Eighty percent of the patients had had no operative procedures prior to being admitted to UCLA and another 14% had had only one previous procedure. Failure of medical management was an indication for operation in 94% of the patients. Abscess and/or peritonitis and bleeding or obstruction

Fig. 1. Pathologic Criteria*

	ULCERATIVE	GRANULOMATOUS
Inflammation	Mucosa & submucosa	Transmural
Vascularity	Intense	Normal
Granulomas	Absent	Frequent
Mesenteric nodes	Normal	Enlarged
Fissuring	None	Frequent
Mucosal ulceration	Diffuse	Occasional
Pseudopolyps	Frequent	Rare

* Farmer, Hawk & Turnbull
Lennard-Jones, Lockhart-Mummery & Morson

Fig. 2. Patient Population (111 Patients).

Median age 35 years
 Male:female 1:1
 Family history of colitis . 10%
 Emergency operations . . 22%
 Associated carcinoma . . 6%
 Overall mortality 13.5%

Fig. 3. Types of Colitis UCLA 1960-65.

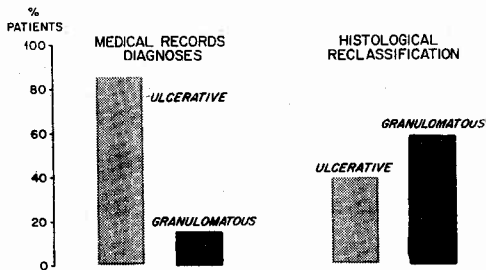
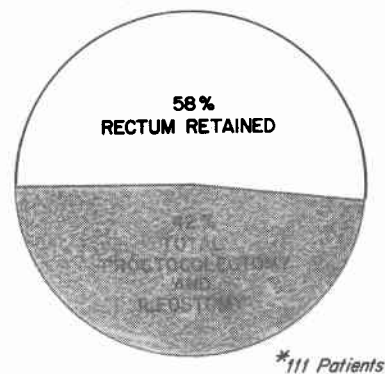


Fig. 4. After Histological Reclassification (107 Patients)*.

	Ulcerative	Granulomatous
Patients	42%	58%
Abscess/peritonitis . .	16%	30%
Enteric fistulae	12%	36%
Carcinoma	4	3
Peri-anal disease	47%	50%

* 4 patients could not be classified

Fig. 5. Operations for Colitis UCLA* 1960-65.



was an additional indication in one-third of the patients respectively.

When the medical records diagnosis alone was used, it was seen that 84% of the patients had been classified as ulcerative colitis. However, the histological re-classification indicated that 58% of the patients actually had granulomatous colitis. Four patients' slides could not be classified by the histologist and they were excluded from further study. (Figure 3).

After re-classification, it was observed that the presence of abscess and/or peritonitis was twice as frequent in patients with granulomatous colitis compared to ulcerative colitis. Enteric fistulae were found in three times as many of the patients with granulomatous colitis as those with ulcerative colitis. Surprisingly, the incidence of associated carcinoma was about the same for the two groups of patients as was the presence of peri-anal disease. (Figure 4).

Over half of the patients (58%) had operations which left the rectal segment in place. These operations included ileoproctostomy after subtotal colectomy, right colectomy only and subtotal colectomy with ileostomy and defunctionalization of the rectal segment. Diverting colostomy was performed in only one patient.

The remainder of the patients (42%) had total proctocolectomy and ileostomy for treatment of their disease. (Figure 5).

The reasons given for leaving the rectum in place were: surgeon's preference in about 1/3 of the cases; patient too ill in 22% and anticipated reconnection later in 18%. Other reasons quoted were

Fig. 6. Reasons for Retaining Rectum at Primary Operation (65 Patients).

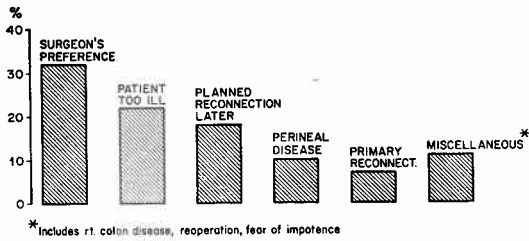


Fig. 7. Fate of Rectum in Primary Operations for Colitis UCLA 1960-65.

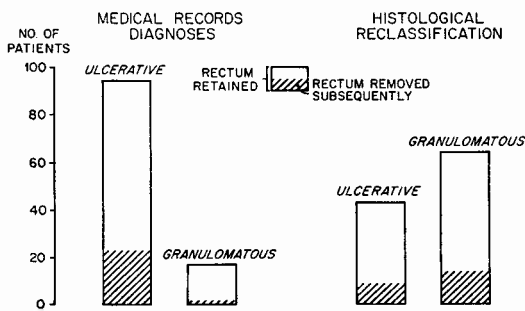


Fig. 8. Relationship of Retained Rectum to Fecal Stream.

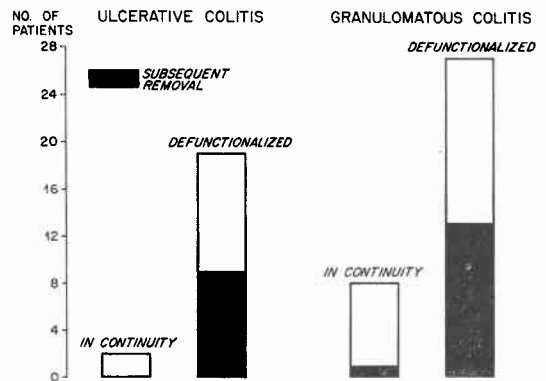


Fig. 9. Follow-Up of Rectum-Retaining Operations (After Histological Reclassification).

	Ulcerative	Granulomatous
Rectum subsequently removed . . .	9 (36%)	14 (38%)
Rectal anastomosis FUNCTIONED . . .	1	5*
at 1st operation: FAILED . . .	1	3
Rectal anastomosis FUNCTIONED . . .	2	2
at later operation: FAILED . . .	0	1
Rectum never anastomosed	7	8
Died after 1st operation	4	6
	24	39

* 4 patients with right colon disease only

severe perineal disease, fear of impotence and disease limited to right colon only. (Figure 6).

If the medical record diagnosis was used as the only criterion, then one would say that granulomatous colitis patients had more success in retaining their rectal segments than ulcerative colitis patients. However, when histological reclassification was completed, it was seen that the percentage of rectal segments left in place at original operation and the rate of subsequent removal of these same rectal segments was almost identical. (Figure 7). It was observed that the vast majority of rectal segments removed had not been in continuity with the rest of the alimentary canal following the original operation. (Figure 8).

When the data were reviewed with respect to the 65 patients with retained rectal segments, it was found that 38% had had subsequent rectum removal. An additional 22% had never had the rectum connected to the alimentary tract although it remained in place. Only 15% of the patients had functioning rectal segments at the time of follow-up. Half of this latter group had had a primary reconnection at the time of original operation and half had required a later operation for rectal anastomosis. In 9% of the 65 patients the rectal anastomosis had failed and required subsequent rectal removal or defunctionalization.

The only patients who were able to retain the rectum successfully were the four patients with granulomatous colitis limited to the right colon. These patients were able to keep their left colon and rectum in continuity with the intestinal tract successfully. (Figure 9).

Thus, it becomes obvious that the diagnosis alone will not give a clue as to whether the rectum may be safely retained by a colitis patient. In searching for other indicators, it was seen that in both granulomatous and ulcerative colitis, the duration of disease prior to operation correlated inversely with the length of time the rectal segment was subsequently retained. That is to say, the longer the patient was ill before the first operation, the shorter was the period between first operation and subsequent rectal removal.

DISCUSSION AND CONCLUSIONS

The finding that a large majority of patients previously diagnosed as having ulcerative colitis must now be considered to have granulomatous colitis is in agreement with the experience of others. This fact casts doubts upon previous retrospective studies of these two diseases which do not include a reappraisal of older diagnoses by current pathological criteria. To avoid drawing erroneous conclusions from such retrospective studies, a new look at the diagnoses is necessary.

The results of this study indicate that there is no difference between ulcerative and granulomatous colitis in the ability to retain a functioning rectal segment after operation. It is suggested that other factors, such as localized disease in the right colon and duration of symptoms prior to operation are more valuable predictors.

It is also seen that the incidence of granulomatous colitis in older series is higher than has been previously reported and that similarities between the two diseases are more apparent.

At this time, it is our policy to perform total proctocolectomy and ileostomy in all colitis patients unless there is severe peri-anal disease, the patient has a localized disease in the right colon or the patient is being operated as an emergency for complications of colitis in poor medical condition.--

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