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Brief Clinical Notes

Primary Resection in Perforating Diverticulitis of the Colon

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The surgical treatment of perforated diverticulitis of the colon remains a controversial issue. Since 1974 the author's surgical group has consistently utilized emergency removal of the perforated section of the colon in 37 consecutive cases. Resection with primary anastomosis was done in 6 cases, and exteriorization in the remainder (Hartmann's procedure, 26 cases; Bloch-Mikulicz, 5 cases). There were 2 postoperative deaths in elderly females. Postoperative course was uneventful in the other cases, there being no serious complications. Our conclusion is that it should be considered essential to remove a perforated colonic segment from the peritoneal cavity.

The surgical treatment of perforated diverticulitis of the colon has been the subject of much discussion during the last few years. Some surgeons continue to recommend the traditional operation with a diverting proximal colostomy combined with drainage, in spite of a high mortality rate (20–40% in most series). These surgeons reason that an emergency resection of the perforated segment of the colon might be too extensive a procedure, especially for a patient with advanced general peritonitis. Other surgeons, however, believe that the perforated part of the bowel should not be left in the abdomen but removed as an emergency procedure, by one means or another, and they maintain that this approach gives a lower mortality rate than the conventional method. Up to now, however, no large series have been published that definitely demonstrate a lower mortality rate with this more aggressive surgical approach (Table 1).

The perforated portion of the colon can be removed as an ordinary resection with primary anastomosis, combined with a protective colostomy if considered necessary. A safer procedure, however, particularly in cases with advanced peritonitis, is to avoid the anastomosis by making some kind of exteriorization. If it is possible to mobilize the perforated segment adequately, it can be put outside the abdomen easily using the Bloch-Mikulicz procedure. Otherwise, Hartmann's procedure is preferable (Fig. 1). Of course, in both cases, a reconstruction of the continuity must be done afterward.

In our surgical unit since 1974 we have applied consistently the principle of emergency removal of the perforated part of the colon. Thirty-seven consecutive patients with perforated diverticulitis have been operated on (Fig. 2). The patients were between 23 and 85 years old (median age, 67 years). Twenty-five of them had diffuse peritonitis, 7 with fecal contamination. Some of these patients were in very poor condition when admitted. Twelve patients had local peritonitis and 7 of them, large abscesses. They were all operated on with emergency removal of the perforated segment, either as resection with primary anastomosis, (6 cases) or with exteriorization (Hartmann's procedure, 26 cases; Bloch-Mikulicz' operation, 5 cases). The operations, usually performed by the senior surgeon on call, were not considered technically difficult.

There were 2 postoperative deaths. Two women, aged 83 and 85 years, died of coronary infarction on the second and fifth postoperative day, respective-

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Table 1. Mortality rate after drainage and colostomy for perforated diverticulitis with generalized peritonitis.

Author	Number of patients	Number of deaths	Mortality rate
Forster 1976 [1] (collected series)	338	88	26%
Eng et al. 1977 [2] (collected series)	86	28	33%
Brückner 1977 [3]	44	20	45%

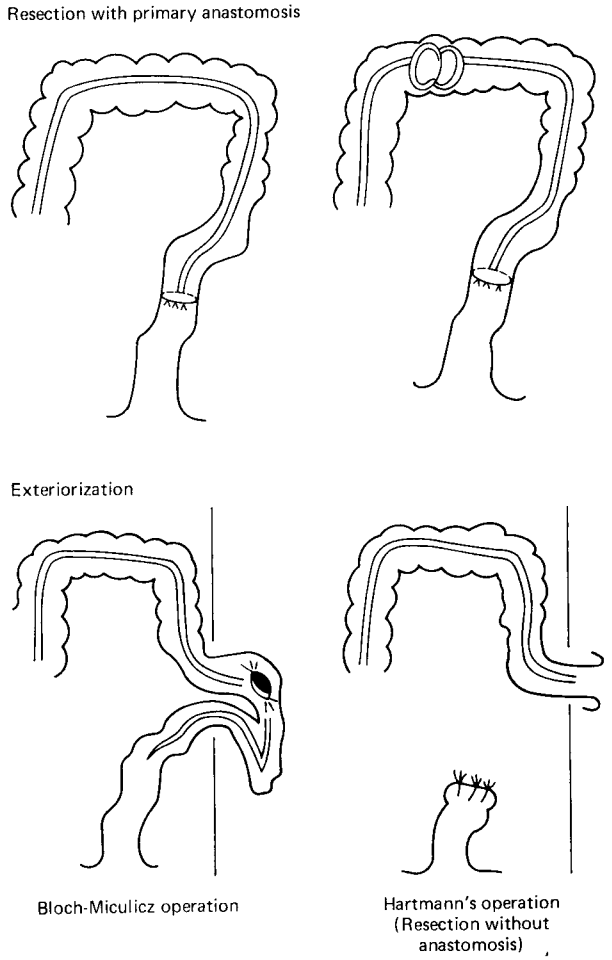

Fig. 1. Choice of operative procedures in perforating diverticulitis of the colon (see text).

ly. For the rest, the postoperative course was remarkably smooth, with a rapid recovery in most cases and a median hospitalization time of 24 days. There were a few complications, mostly superficial wound infections, but no serious ones. A detailed report on the minor complications is not considered of interest in this particular communication. Reconstruction of the continuity of the colon was usually

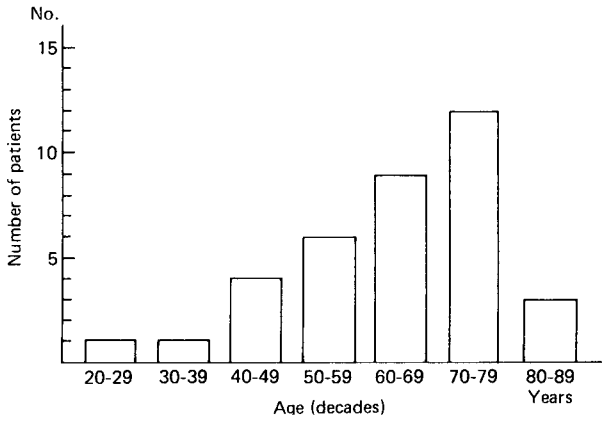

Fig. 2. Distribution of patients in our series according to age (median age, 67 years).

performed after 3–4 months without major difficulties. Two elderly patients were content with their colostomies and refused reconstruction.

We believe that the good results and the low mortality rate in this series warrant the following conclusion: It should be considered mandatory in most cases to remove a perforated segment of the colon from the peritoneal cavity. A resection with primary anastomosis can be carried out in selected cases with localized peritonitis. Exteriorization of the perforated segment is a safe method even in the most advanced cases of peritonitis.

Résumé

Le traitement chirurgical de la perforation d'un diverticule colique prête à controverse. Depuis 1974, l'auteur et ses collaborateurs ont traité 37 cas de perforation de diverticules coliques par résection colique: 6 résections suivies d'anastomose colocolique immédiate, 5 opérations de Bloch-Mikulicz, 26 opérations de Hartmann.

2 décès post opératoires de femmes âgées furent à déplorer. L'évolution post opératoire a été favorable chez les autres malades et n'a été marquée d'aucune complication sérieuse.

Nous concluons de ces faits qu'il est capital de réséquer tout segment de colon qui est le siège d'une perforation.

References

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