

# Timing of ileocolonic resection for symptomatic Crohn's disease – the patient's view

N A Scott, L E Hughes

## Abstract

**Eighty patients were asked if they would have preferred their ileocolonic resection and anastomosis for Crohn's disease, to have been carried out sooner, later or at the same time as it was done. Seventy of the patients replied (88%). No patient would have preferred their operation to have been later, while 74% thought it should have been earlier. A preferred operation time was given for 69 resections, between 0 months – that is, at the same time – and 15 years earlier. The median preferred operation time was 12 months earlier (95% confidence intervals 18 months earlier to 7 months earlier). The remaining 18 patients were satisfied with the timing of their operation. Reasons given for earlier surgery in 58 resections included the severity of Crohn's symptoms preoperatively (97%), the ability to eat normally after resection (86%), feeling of well being after the resection (62%), and abolishing the need for drugs (43%). Patients preferring an earlier operation time were less likely to have had a previous resection (13/58) than patients in the 'same time' group (10/21,  $\chi^2=4.746$ ;  $p<0.05$ ).**

(Gut 1994; 35: 656-657)

While the aetiology and cure for Crohn's disease remains unknown,<sup>1</sup> medical and surgical treatment can offer only symptomatic relief. Both modalities are used when symptoms become too disruptive and disabling. Conventionally, medical treatment is used first, followed by surgical resection if disabling symptoms persist.<sup>2-5</sup>

The perceived costs and risks of surgical resection include postoperative pain, surgical scars, anastomotic complications, the short bowel syndrome, and the recrudescence of Crohn's disease despite resection. Therefore the timing of the decision for surgery in Crohn's disease is based on an evaluation of the symptom severity of the disease, medical treatment failure or side effects, and perceptions of surgical risk. Optimal evaluation of these competing factors should result in surgery timed to the patient's best advantage achieving maximal relief of symptoms with minimal surgical disadvantage.

The timing of the decision to perform intestinal resection for Crohn's disease is strongly influenced by the patient's medical advisers. It is the patient, however, after resection, with personal experience of both disease symptoms and surgery, who is in the best position to judge whether or not the timing of surgery was ideal. Surgery too early may not produce symptom relief that outweighs postoperative discomforts,

surgery too late might prolong disabling and disruptive Crohn's disease symptoms.

To determine the patient's view of timing of resection for intestinal Crohn's disease we sent a postal questionnaire to 80 such patients. Each patient was asked if their resection should have been carried out earlier, later or at the same time.

## Patients and methods

Between 1972 and 1991 a total of 92 consecutive patients had 102 elective ileocolonic resections with anastomosis for Crohn's disease by a single surgeon (LEH). There were no anastomotic complications and no postoperative deaths. Twelve of the original 92 patients considered eligible for study were excluded, six patients had died and four patients could not be traced. In addition one patient could not recall her first resection for Crohn's disease and another patient had a resection after a laparotomy for trauma.

A postal questionnaire was sent to the remaining 80 patients in October 1991. Patients that failed to respond were sent the same questionnaire for a second time in April 1992. For each resection, identified by the date of surgery, patients were asked whether or not they would have preferred the Crohn's disease resection to have been done earlier, at the same time or later than it was done. Those patients that showed a preference for an earlier or later operation were asked how many months or weeks later or earlier they would have wanted their intestinal resection. The reasons for an earlier or later preferred resection date were also sought.

## STATISTICAL METHODS

Statistical analysis was performed using the Minitab Data Analysis software (release 7.1). The median and 95% confidence intervals were calculated for the preferred operation time in months given for 69 resections. The  $\chi^2$  test was used to compare the number of patients that had had a previous resection among the group preferring an earlier operation, with the number of patients that had had a previous resection in the same time group.

## Results

Of the 80 patients sent questionnaires, 70 (88%) replied to give their views on the timing of 79 elective ileocolonic resections for Crohn's disease. Not one of these 70 patients would have wanted their ileocolonic resection performed later than it was done. By contrast 52 (74%) patients thought that 58 resections should have been carried out earlier. The remaining 18 (26%)

Hope Hospital, Salford  
N A Scott

University Hospital of  
Wales, Cardiff  
L E Hughes

Correspondence to:  
Mr N A Scott, Department of  
Surgery, Clinical Sciences  
Building, Hope Hospital, Stott  
Lane, Salford M6 8HD.

Accepted for publication  
20 September 1993

patients wanted 21 resections carried out at the same time as they were done.

A clear indication of the preferred operation time was given for 69 resections. This varied between 0 months – that is, at the same time, and 180 months earlier – that is, 15 years before the resection was done. The median preferred operation time was 12 months earlier (95% confidence limits, 18 months to 7 months). Factors cited in favour of earlier surgery for 58 resections included the severity of symptoms preoperatively (97%), the ability to eat normally after resection (86%), feeling of well being after the resection (62%), and abolishing the need for drugs (43%).

Patients preferring an earlier operation time were less likely to have had a previous resection (13/58) than patients in the 'same time' group (10/21,  $\chi^2=4.746$ ;  $p<0.05$ ). Follow up was available for all 79 resections with 30 subsequently showing radiological or surgical recurrence, or both. A greater proportion of the resections that would have been preferred earlier were followed by recurrence (24/58) than was seen after resections that would have been preferred at the same time (6/21). The time to recurrence in the 'earlier' group (median 3.8 years; range 1.2–16.2 years) was not significantly different to the time to recurrence in the 'same time' group (median 4.5 years; range 0.44–18.2 years;  $p=0.89$ ).

### Discussion

The main aim of management for the patient with Crohn's disease is to maintain a normal quality of life against the ravages of primary bowel symptoms and fatigue.<sup>6</sup> Surgery for Crohn's disease is currently reserved for those patients whose symptoms cannot be controlled with medical treatment. The difficulty is to identify the patient who is not benefiting from medical treatment so that expeditious resection can be carried out. This dilemma can be compounded by the patient's fear of surgery<sup>6</sup> and the tendency of some physicians to see surgical resection as a 'failure'.

Our practice has been to use surgery simply as a treatment for suitable Crohn's disease patients within the setting of a joint medical and surgical gastroenterology clinic. Despite this collaborative approach, most of our patients felt that they had tolerated one year of symptoms more than they would have wished, before having their Crohn's disease resected. The severity of the symptoms and the inability to eat normally were the main reasons that most patients would have preferred earlier surgery. The 'extra' period of symptoms was borne well by most patients but in some these symptoms had a significant deleterious effect on marriage, education, and

employment.<sup>7</sup> There was no evidence that either frequency or timing of Crohn's disease recurrence influenced the patients' replies. The timing of recurrence in both the 'earlier' and the 'same time' group was similar with the patient's preferring earlier resection having the higher rate of recurrence.

In a retrospective study it is not possible to accurately quantify the causes of delay, but the greater part occurred before referral to the joint medical/surgical gastroenterology clinic. Three elements in this delay can be recognised – delay at general practitioner level, usually associated with failure to recognise the extent of morbidity suffered; delay by gastroenterologists resistant to surgery; delay by surgeons without a specific interest in inflammatory bowel disease. This last group tends to include patients that have severe and complicated disease considered 'inoperable'. There is a need, however, for a prospective study to examine delays at all levels for patients requiring resection for ileocolonic Crohn's disease.

Patients that had one or more previous resections for Crohn's disease were more likely to be satisfied with the timing of their surgery than patients having their first resection. It is tempting to speculate that patients who required multiple resections and are familiar with surgery, are more likely to participate in decisions of surgical timing.

The timing of the decision for surgery in Crohn's disease patients, not responding to medical treatment, is complex. Despite a joint medical and surgical approach to our patients most felt that their resection should have been done earlier. In units that do not have this degree of medical and surgical integration, the decision to operate may be even further delayed. Patients with appropriate Crohn's disease complications who are not benefiting from medical treatment should be referred for early operation to a specialised surgical service, with a low complication rate.

- 1 Levine J. Exogenous factors in Crohn's disease. A critical review. *J Clin Gastroenterol* 1992; 14: 216–26.
- 2 Cole AT, Hawkey CJ. New treatments in inflammatory bowel disease. *Br J Hosp Med* 1992; 47: 581–90.
- 3 Salomon P, Kornbluth A, Aisenberg J, Janowitz HD. How effective are current drugs for Crohn's disease? A meta-analysis. *J Clin Gastroenterol* 1992; 14: 211–5.
- 4 Hulten L. Surgical management and strategy in classical Crohn's disease. *Int Surg* 1992; 77: 2–8.
- 5 Olaison G, Smedh K, Sjobahl R. Natural course of Crohn's disease after ileocolic resection: endoscopically visualised ileal ulcers preceding symptoms. *Gut* 1992; 33: 331–5.
- 6 Mitchell A, Guyatt G, Singer J, Irvine EJ, Goodacre R, Tompkins C, *et al.* Quality of life in patients with inflammatory bowel disease. *J Clin Gastroenterol* 1988; 10: 306–10.
- 7 Mayberry MK, Probert C, Srivastava E, Rhodes J, Mayberry JF. Perceived discrimination in education and employment by people with Crohn's disease: a case control study of educational achievement and employment. *Gut* 1992; 33: 312–4.