

# Review: One tenth of patients with Crohn disease have prolonged remission

Loftus EV, Jr, Schoenfeld P, Sandborn WJ. The epidemiology and natural history of Crohn's disease in population-based patient cohorts from North America: a systematic review. *Aliment Pharmacol Ther.* 2002 Jan;16:51-60.

## QUESTION

In patients with Crohn disease, what is the natural history of the disease?

## DATA SOURCES

Studies were identified by searching MEDLINE, Current Contents (1966 to September 2000), and bibliographies of relevant studies.

## STUDY SELECTION

2 reviewers independently selected fully published English language trials that were population-based studies of patients followed from the time of initial diagnosis; used appropriate and objective criteria for disease; had sufficiently long and complete follow-up; and quantified disease activity, medication use, and surgery.

## DATA EXTRACTION

2 reviewers independently and blindly extracted data on disease severity or activity,

use of medication, and surgical resection rates. Disagreements were resolved by consensus.

## MAIN RESULTS

3 studies of 1 population-based cohort (225 persons followed from 1940 to 1993) met the selection criteria for natural history studies. 1 study showed that a representative patient spent 24% of the lifetime disease course in medical remission, 27% with mild disease, 1% with severe drug-responsive disease, 4% with severe drug-dependent disease, 2% with severe drug-refractory disease, 1% in surgery, and 41% in postsurgical remission. Few patients had prolonged remission: 10% of patients were cured, 73% had a chronic intermittent disease course, and 13% had an unremitting disease course. Data were insufficient to determine which prognostic factors predicted prolonged remission. 43% of patients received treatment with conventional corticosteroids at some time in the dis-

ease course. In any given year, approximately 10% of patients were treated with conventional corticosteroids or other immune-modifier agents, and approximately 30% of patients were treated with 5-aminosalicylate agents. 41% of patients had  $\geq 1$  resection, and 57% had  $\geq 1$  operative procedure.

## CONCLUSIONS

In patients with Crohn disease, one tenth of patients have prolonged remission. Almost three quarters of patients have a chronic intermittent disease course, and about one eighth have an unremitting disease course. Less than one half of patients receive corticosteroids, and more than one half have at least 1 operative procedure.

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## COMMENTARY

The review by Loftus and colleagues summarizes data from 3 previously published studies that describe the natural history of Crohn disease in Olmsted County, Minnesota, USA. Since only 2 well-characterized, population-based, cohort studies have been done (Copenhagen [1] and Olmsted counties), this report provides valuable prognostic information. From a clinical perspective, the most important message is that most patients with Crohn disease have a relatively benign clinical course. At any given time, most patients are in remission; moreover, less than half of the patients in this cohort required corticosteroid therapy during their lifetime experience with the disease. Accordingly, physicians who manage these patients should be aware that much of the literature describing the prognosis of Crohn disease has originated from tertiary care centers and thus overstates the disease severity. Certainly this is reassuring news for most patients.

However, Loftus and colleagues also note that a few patients have aggressive disease. Moreover, most patients require surgery at some time. Although disease recurrence after surgery is usually inevitable, surgically induced remission is more durable than medically induced remission, and most patients enjoy good quality of life following an operation. Thus, surgery plays an important role in overall manage-

ment. This review also underscores the point that the greatest challenge for medical therapy is to modify the clinical course of patients with aggressive disease. Since it would be a great advantage to identify this subgroup on the basis of clinical characteristics, the authors' unsuccessful search for prognostic markers is disappointing. The only characteristic that seems to predict poor prognosis is the initiation of corticosteroid therapy. On the basis of this observation, most opinion leaders now advocate the use of immunosuppressives for patients in whom a course of induction therapy with corticosteroids has failed. This strategy was relatively uncommon in Olmsted County during this period of observation; thus, further updates of these data should provide insight into whether more aggressive therapy will modify the natural history of the disease.

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## Reference

1. Binder V, Hendriksen C, Kreiner S. Prognosis in Crohn's disease-based on results from a regional patient group from the county of Copenhagen. *Gut.* 1985;26:146-50.