Long Term Treatment of Duodenal Ulcer
A Review of Management Options

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Summary

Duodenal ulcer is a chronic disease characterised by remission and relapses. The duration of this relapsing tendency is unpredictable for the individual patient, but in most cases it lasts for many years and perhaps the entire lifetime. Various therapeutic strategies have been suggested to maintain the disease in remission: continuous, intermittent and on-demand treatment with H2-antagonists, or surgery. Continuous maintenance treatment with the currently available H2-blockers has proved to be superior to all the other strategies in terms of efficacy, and should therefore be regarded as the long term treatment of choice for duodenal ulcer patients. The duration of maintenance treatment is still uncertain, but probably it should not be less than a few years. Intermittent treatment or surgery could be proposed to patients unsuitable for continuous maintenance, depending on whether they have mild or aggressive disease, respectively.

The ideal treatment for any medical disorder is that capable of curing the patients affected by eliminating the cause of the disease. However, in most illnesses which are not self-limiting and whose aetiology remains uncertain, the physician cannot produce a real cure; in such cases, the main aims of therapy are to control symptoms, prevent complications and, as far as possible, favourably influence the natural course of the disease. In this respect, duodenal ulcer disease constitutes one of the most paradigmatic examples: it is a chronic illness which tends to recur frequently, and may present...
potentially lethal complications, such as haemorrhage and perforation, during the patient's lifetime. This necessarily implies that duodenal ulcer patients require long term, if not lifelong, treatment for their disease.

The aim of this paper is to critically review the problem of long term management of duodenal ulcer disease with particular reference to the efficacy of continuous medical therapy in the prevention of recurrences and complications.

Firstly, however, the following important questions concerning a number of clinical aspects of the disease require clarification:
1. What is the natural history of duodenal ulcer?
2. Which factors are responsible for relapse?
3. Can a specific therapy during the acute phase alter the subsequent behaviour of the disease?

1. Natural History of Duodenal Ulcer

'Once an ulcer, always an ulcer' is an old adage that clearly still summarises the clinical course of duodenal ulcer disease. Indeed, if we exclude subjects with acute ulcerations developing during 'stress conditions' or induced by drugs, virtually all patients with duodenal ulcer will experience recurrences after the first episode of the disease, unless treatment capable of altering its natural behaviour is given. This was first shown in pre-endoscopic studies based on symptomatic diagnosis of ulcer recurrences and confirmed more recently by the endoscopic follow-up of patients on long term placebo therapy or without active treatment after documented initial healing.

Over 40 years ago, Malmros and Hierton (1949) concluded that peptic ulcer symptoms tend to recur frequently in most patients, with fairly short intervals of remission. Indeed, in a follow-up of more than 600 medically treated cases of peptic ulcer, they observed that only 13% of patients with duodenal lesions and 22% of patients with gastric lesions were free of symptoms after a period of 7 to 10 years.

More detailed information about the tendency towards ulcer recurrence over the years prior to the introduction of H2-blockers was provided by the follow-up studies conducted in patients selected from general and hospital practice, respectively. The first study, by Fry (1964) [fig. 1], was based on a population of 265 ulcer patients from suburban London, who were followed up for periods of up to 15 years. The author observed that the severity of ulcer symptoms was maximal over a period of approximately 8 years from onset of the disease and the tendency to recurrence declined thereafter: after 10 years 59% of patients still being followed up were symptom-free, whereas after 15 years the percentage rose to 76%. These data were supported in the study of Greibe et al. (1977), who followed up 227 duodenal ulcer patients for 13 years after the initial diagnosis. They showed that at the end of follow-up 37% of surviving patients had no symptoms, 29% had mild symptoms and 12% severe symptoms. On the basis of these results it was concluded that duodenal ulcer has a definite natural course lasting 15 to 25 years, after which the disease tends to resolve spontaneously. However, during this period, from 16 to 22% of patients require surgical therapy for clinically severe disease.

Very different conclusions on the duration of duodenal ulcer disease emerged in another study (Viskum 1976). As many as 50% of male and one-