

## **Endoscopic Evaluation of Gastric Tolerance to Fenclofenac**

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### Abstract

Gastrointestinal irritation is a common consequence of treatment with many non-steroidal anti-inflammatory agents. An open tolerance study with endoscopic control employing fenclofenac in doses of 900 or 1200 mg daily in ten patients with osteoarthritis, was carried out over an eight week period. The principal aim of the study was to evaluate the effect of fenclofenac on the gastroduodenal mucosa in a selected group of patients with osteoarthritis and with a history of gastric intolerance to other non-steroidal anti-inflammatory agents. All patients tolerated fenclofenac well and showed clinical improvement.

### Introduction

Gastrointestinal irritation is a common and most serious consequence of treatment with non-steroidal anti-inflammatory drugs. Despite several attempts to develop new drugs with low gastrointestinal toxicity there are many patients with osteoarthritis or rheumatoid arthritis who have great difficulty in taking non-steroidal anti-inflammatory agents, particularly when these are given by mouth. Fenclofenac is a new non-steroidal anti-inflammatory agent recently introduced into clinical practice, and several previous clinical trials have indicated that it is very effective in both rheumatoid arthritis and osteoarthritis (2, 4). It has also been suggested that its use is associated with a very low incidence of gastrointestinal side-effects. The chemical structure of fenclofenac is shown in Fig 1.

The principal aim of this open tolerance assessment therefore, was to evaluate endoscopically the effect of fenclofenac on the gastroduodenal mucosa in a selected group of patients with osteoarthritis.

## Material and Methods

Ten patients (two males and eight females) with an average age of 55.7 years (range 36-67 years) were included in the study. The mean duration of the disease was 11.8 years (2-30 years). All patients had chronic osteoarthritis with constant pain. They had failed to respond to or had shown previous intolerance to treatment with various non-steroidal anti-inflammatory drugs. All patients gave written informed consent prior to admission to the study, and all completed the full eight-week treatment period successfully. The daily dose of fenclufenac was 900 or 1200 mg and no other analgesic or anti-inflammatory drugs were permitted during the treatment period. Endoscopy including photographic documentation was performed prior to and following the treatment period while clinical assessment and patients subjective opinion of their condition were recorded at two-weekly intervals throughout the study. All patients were examined in the left lateral position with an GIF-P2 or FG-QBF fiberscope. The patients were premedicated with rectal instillation of 5- 10 mg diazepam and xylocaine spray.

## Results

Table 1.

Patient No	Age	Dose Mg	Endoscopy				Symptoms
			Stomach		Duodenum		
			Before	After	Before	After	
1	55	900	0	0	0	0	0
2	63	1200	0	0	0	0	0
3	59	900	0	0	0	0	0
4	57	1200	0	0	0	0	0
5	67	900	0	0	0	0	0
6	35	900	erosions	0	0	0	0
7	59	900	erosions	0	0	0	0
8	66	1200	erosions	0	0	0	0
9	51	1200	erosions	erosions	0	0	0
10	45	900	erosions	erosions	0	0	0

The results of endoscopic and photographic evaluation are shown in Table 1. As will be seen from the table five patients had no pre-or post-study pathology. The next five patients showed superficial erosions in the gastric antrum at endoscopy prior to the study, but no pathological changes were seen in the duodenum. Post-study endoscopy showed that of the five patients with the pre-study gastric erosions three had improved, becoming completely normal : the remaining two patients were unchanged. None of the patients had any dyspeptic symptoms throughout the treatment period. No significant changes occurred in haematological tests and no biochemical abnormalities were noted. All patients

tolerated fenclofenac well and all demonstrated clinical improvement.

#### Discussion

One of the main problem with anti-inflammatory drugs is their capacity to produce gastrointestinal irritation as shown endoscopically by other authors (3,7, 8,9,10,12 ). In a previous study (5) we had shown that gastrointestinal tolerance to azapropazon given in a daily dose of 1200 mg for a period of 31 days was good. Minor incomplete erosions were observed in only two out of fourteen subjects. It has been shown that ibuprofen has a very good gastrointestinal tolerance compared to naproxen and micro-encapsulated aspirin (reumyl). The most severe abnormalities were observed (6) with reumyl, both in the stomach and duodenum, while those with naproxen were much less marked and limited to the gastric antrum. The results of this open tolerance study have shown quite clearly that fenclofenac was well tolerated by the gastrointestinal tract in a selected group of patients who had previously reported unwanted gastric effects with other non-steroidal anti-inflammatory agents. In no instance did any patient experience dyspeptic symptoms while on fenclofenac.

The fact that three patients with pre-study gastric pathology had improved, during treatment with the mucosa becoming completely normal indicates that fenclofenac is a very useful drug in treatment of patients with chronic rheumatological conditions, associated with constant pain and a history of gastrointestinal intolerance to other non-steroidal anti-inflammatory agents.

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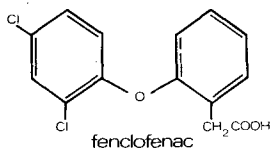


Fig. 1. Structure of fenclofenac  
(2-/2,4-dichlorophenoxy/phenylacetic acid)

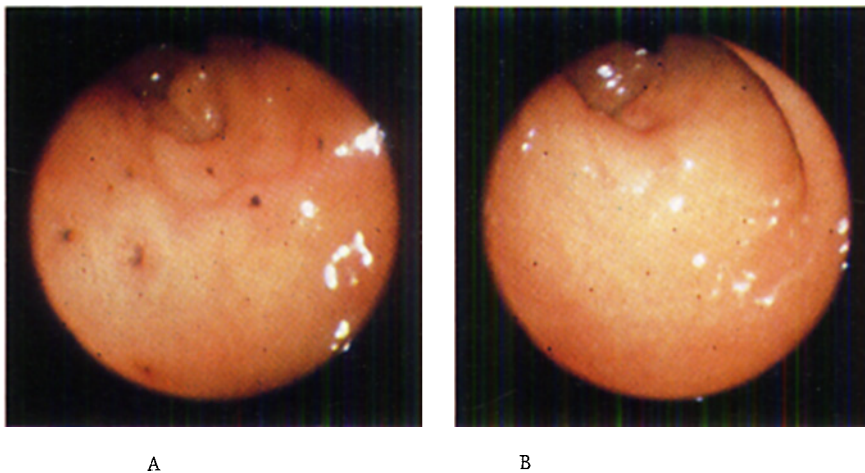


Fig. 2. A 66-year-old male with long history of osteoarthritis and severe gastrointestinal intolerance to many anti-inflammatory agents. A= pre-treatment endoscopy showing several erosions in the gastric antrum. He was able to tolerate 1200 mg of fenclofenac. B= post-treatment endoscopy showed no evidence of erosions.