

The one-stop dyspepsia clinic—an alternative to open-access endoscopy for patients with dyspepsia

M D Rutter MRCP A F Michie MB P N Trewby FRCP

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SUMMARY

The most sensitive investigative tool for the upper gastrointestinal tract is endoscopy, and many gastroenterologists offer an open-access endoscopy service to general practitioners. However, for patients with dyspepsia, endoscopy is not always the most appropriate initial investigation, and the one-stop dyspepsia clinic allows for different approaches. We have audited, over one year, the management and outcomes of patients attending a one-stop dyspepsia clinic. All patients seen in the clinic were included, and for those not endoscoped the notes were reviewed one year after the end of the study to check for reattendances and diagnoses originally missed. Patients' and general practitioners' views of the service were assessed by questionnaire.

485 patients were seen, of whom 301 (62%) were endoscoped at first attendance. In 66 patients (14%), endoscopy was deemed inappropriate and only one of these returned subsequently for endoscopy. 118 patients (24%) were symptom-free when seen in the clinic and were asked to telephone for an appointment if and when symptoms recurred; half of these returned and were endoscoped. Oesophagitis and duodenal ulcer were significantly more common in this 'telephone endoscopy' group than in those endoscoped straight from the clinic. Overall, 25% of patients referred were not endoscoped. Important additional diagnoses were made from the clinic consultation. General practitioners and patients valued the system, in particular the telephone endoscopy service. 84% of general practitioners said they would prefer the one-stop dyspepsia clinic to open-access endoscopy.

INTRODUCTION

Dyspepsia is common: recorded prevalences range from 23% to 41%, and a quarter of sufferers seek help from doctors^{1,2}. Open-access endoscopy (defined as the provision of diagnostic endoscopy by direct request of general practitioners without previous hospital consultation) has been used increasingly to cope with the hospital workload. 74% of gastroenterologists surveyed in 1996 were offering some form of OAE (41% 'true' uncensored open access) compared with 47% (10% uncensored) in 1990^{3,4}. Endoscopy is the most sensitive investigative tool of the upper gastrointestinal tract, but may not always be the most appropriate initial investigation in view of its expense, inconvenience and risk^{5,6}. The disadvantages of OAE are that some patients may be denied effective treatment while waiting for endoscopy for fear of masking endoscopic findings, while others may have been started on treatment by their general practitioner (GP) and may already be free of symptoms when they attend for endoscopy. In addition, important diagnoses may be delayed by missing the chance to take a further history; and an opportunity over and above that afforded to the GP is

missed for counselling dyspeptic patients, most of whom will be without serious organic disease.

We have previously shown that many patients thought suitable for OAE by their general practitioner gained tangible benefit from attending an outpatient clinic⁷, and in 1992 we established a one-stop dyspepsia clinic (Figure 1). All patients referred for endoscopy were seen in this clinic. The clinic services a population of about 180 000. 60 general practitioners are regular users and a further 33 are occasional users. Waiting time from referral to consultation is 2–6 weeks. Patients attend starving and undergo a full

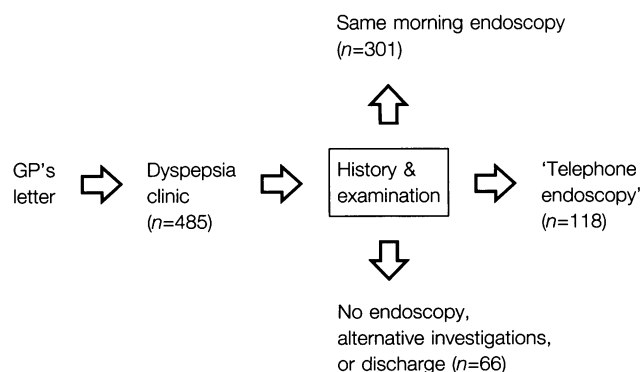


Figure 1 Flow diagram and numbers of patients seen in one year

Department of Medicine, Darlington Memorial Hospital, Darlington, Co Durham DL3 6HX, UK
Correspondence to: Dr P N Trewby

history and examination. Where appropriate, patients are endoscoped during the same session, with or without additional investigations. Symptom-free patients in whom an ulcer is suspected (often already on anti-ulcer treatment) are asked to complete their course of treatment and to telephone the endoscopy unit if and when their symptoms next occur ('telephone endoscopy'). These patients are endoscoped before restarting treatment, normally within three days of telephoning. All patients receive verbal and written advice about diagnosis and management.

To assess the effectiveness of this system, we have audited patient outcomes and diagnoses, and patient and GP satisfaction.

METHODS

All patients seen in the dyspepsia clinic in one year were included. Endoscopic diagnoses were recorded for patients endoscoped, whether immediately from the clinic or after telephoning themselves in for endoscopy. A case note review of those not endoscoped was undertaken one year after the end of the study. The diagnoses made in the clinic were recorded and any additional diagnoses or endoscopies were noted. An anonymous questionnaire asking for their perception of the service was given to 50 consecutive patients endoscoped the same day, 50 patients not endoscoped, and 50 'telephone endoscopy' patients. A separate anonymous questionnaire asking for views on the service was circulated to all GPs who had used the service.

RESULTS

602 clinic appointments were made. 50 patients did not attend for 117 appointments, so there were 485 patient consultations during the study year. 301 patients (62% of those seen) underwent same-day endoscopy. 118 patients (24%) were already symptom-free when seen in the clinic and were asked to telephone themselves in for endoscopy when next symptomatic. Of these, 57 did not reattend for endoscopy within the study period. Of the 61 patients who returned, median time between consultation and endoscopy was 39 days (range 5–330 days). Endoscopic diagnoses in these groups are shown in Table 1.

In a further 66 cases (14% of total) endoscopy was not thought to be the correct initial investigation. Table 2 shows the clinical diagnoses and reasons for not endoscoping these patients. Non-ulcer dyspepsia was the commonest clinical diagnosis. Other important diagnoses made from the clinic included angina (4 cases), pneumonia, liver metastases, and chronic pancreatitis. If we include 'telephone endoscopy' patients not returning, endoscopy was avoided in 123 patients (25% of the total). The prevalence of duodenal ulcer and oesophagitis was significantly higher in 'telephone endoscopy' patients than

in those endoscoped the same day (oesophagitis 31% vs 18%, $P < 0.05$; duodenal ulcer 26% vs 9%, $P < 0.001$).

Case note review one year after the end of the study showed that only one patient in whom endoscopy was deemed inappropriate later had an endoscopy. This was done during admission for another condition and was normal. The 12 patients with oesophageal or gastric cancer referred to the dyspepsia clinic were all endoscoped the same day.

GENERAL PRACTITIONER QUESTIONNAIRE

57 replies were received from two mailings to 93 general practitioners. 30% described the service as very good, 61% as good, 9% average, none as bad. When asked whether they would prefer the present system or OAE for management of patients with dyspepsia, 84% favoured the one-stop dyspepsia clinic, 11% would prefer OAE and 5% did not comment. Feedback from patients to GPs was favourable although 2 remarked to their GP on the unpleasantness of the endoscopy procedure.

PATIENT QUESTIONNAIRES

The following percentages refer to the three sample groups of 50 patients each. Of the two groups not endoscoped, 59% were expecting to be endoscoped on the first visit (despite advice in the leaflet sent with the booking letter); however, 87% were pleased that no endoscopy had been necessary. 84% of 'telephone endoscopy' patients were pleased endoscopy had been delayed until symptomatic. Of those in whom endoscopy was deemed inappropriate, 2% were upset that they had not been endoscoped that day, 94% were pleased and 4% were not sure or did not answer. Overall 89% of patients felt the consultation had been helpful. When asked whether they would have preferred endoscopy without previous clinic consultation, 25% of those who were endoscoped the same day answered yes, compared with 2% of those not endoscoped the same day. Of those endoscoped, 67% found the procedure pleasanter than expected or as expected, 21% worse and 12% did not know or did not answer (79% of patients received no sedation or only lignocaine throat spray; the remaining 21% received sedation with diazepam). Where patients made additional comments, they were generally to express satisfaction with the reassurance, advice and explanations offered during the consultation. The negative comments concerned anxiety associated with waiting on the day, and having to omit a meal before attending.

DISCUSSION

A successful dyspepsia service should allow accurate diagnosis of organic disorders as well as treatment and counselling of patients with functional upper gastrointestinal disorders. Non-ulcer dyspepsia is the principal diagnosis in

Table 1 Endoscopic diagnoses as % of each group

Diagnosis	Same day endoscopy % (n=301)	Telephone endoscopy % (n=61)	
Oesophagitis	18	31	$P < 0.05$
Duodenal ulcer disease	9	26	$P < 0.001$
Gastric ulcer	3	3	
Gastric cancer	2	0	
Oesophageal cancer	2	0	
Miscellaneous diagnoses	7	3	
Normal	60	43	$P < 0.02$

P values refer to differences between patients endoscoped straight away and those telephoning themselves in for endoscopy when symptomatic

Table 2 Clinical diagnoses in patients not endoscoped and reasons for not endoscopying

Clinical diagnoses	No.
Non-ulcer dyspepsia	24
Angina	4
Musculoskeletal pain	4
Gastroenteritis	3
Mild reflux symptoms	3
Functional dysphagia	2
Gallstone colic	1
Mallory-Weiss tear	1
Pneumonia	1
Hepatitis	1
Liver metastases	1
Chronic pancreatitis	1
Drug-induced symptoms	1
Depression	1
Other reasons for not performing endoscopy	
Lower gastrointestinal investigations more appropriate	6
Recent endoscopy for same symptoms	5
Barium swallow/meal more appropriate	5
Urea breath test for <i>Helicobacter pylori</i> more appropriate	2

patients referred to hospital for endoscopy and by far the commonest diagnosis in patients presenting to general practitioners. The numerical prevalence and resistance to treatment of many patients with functional dyspepsia is not always reflected in the time apportioned to patients with these conditions in clinics, where the emphasis tends to be on the easier-to-manage organic disorders.

Our one-stop dyspepsia clinic builds on the experience of others (particularly Lobo and Dickinson, and Beavis and Misiewicz^{8,9}) but differs in two important ways. First the

clinic is geographically removed from the endoscopy suite, to emphasize the importance of the consultation and reduce the sense of inevitability of endoscopy. Second, we have established a telephone endoscopy service for patients who are symptom-free when seen in the clinic. The GP may be faced with a difficult decision when an ulcer is suspected: to treat the patient may mask endoscopic findings and prevent detection of *Helicobacter pylori*¹⁰, but to withhold treatment results in unnecessary symptoms and risks ulcer complications. A patient-initiated telephone endoscopy service allows GPs to treat patients as clinically indicated and still allows patients to be endoscoped without delay if symptoms return when they are off treatment. Our study shows that timing the endoscopy to the patient's symptoms increases the detection of oesophagitis and duodenal ulcer, and since 50% of patients do not return within one year, unnecessary endoscopies are avoided. Duodenal ulcer disease is a relapsing and remitting condition and a single endoscopy should not be considered the gold standard for investigation¹¹.

We were concerned that some cases of gastric and oesophageal cancers might be missed; but this was not the case, and the clinic consultation before endoscopy in patients with malignant disease proved useful for counselling, arranging further investigations and assessment of home circumstance. We were also concerned that GPs might see the dyspepsia clinic as an erosion of their control over the patient when compared with OAE, but this was not borne out by the response to our questionnaire.

Increased waiting times have been the major stimulus for OAE^{3,12} and we offer no solution to the rising demand for hospital-based dyspepsia services. However, a saving of 25% of endoscopies could partly offset the additional clinic time needed for patients attending a dyspepsia clinic. It is unlikely, even in the long term, that treatment of *H. pylori* in patients with ulcer disease will reduce the need for endoscopy since patients with ulcers represent only a small minority of the patients referred for consideration of

endoscopy and constituted only 8.5% of patients referred to our clinic.

This study has attempted to address the tangible benefits of the one-stop dyspepsia clinic. The intangible benefits may be even greater. An outpatient clinic allows time to question and advise patients on eating patterns, gastric function, smoking and alcohol consumption. Detailed history-taking may be an important factor in reducing malpractice claims in gastroenterological practice¹³. When endoscopy is necessary, patients' anxieties about the procedure can often be allayed; and for the majority without organic disease, the clinic gives an opportunity over and above that afforded by the GP to tease out the anxieties, depression and social factors that underlie dyspeptic symptoms in many patients.

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