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SPECIAL REPORT

Organising unrestricted open access gastroscopy in South Tees

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Abstract

Increasing demand for upper gastrointestinal endoscopy has forced many clinicians to reconsider the policy of seeing all patients in a specialist clinic before gastroscopy. The following are considered essential in setting up an open access gastroscopy service. (1) Assessment of the need by examination of waiting times for the outpatient clinic and the proportion of patients requiring upper gastrointestinal endoscopy, and consultation with colleagues in general practice. During the first 2 years of the service the average waiting time for a medical gastrointestinal outpatient appointment has fallen from over 120 days to 37 days in this area. (2) An adequately staffed and equipped gastrointestinal unit with well motivated nurses (the workload will increase) and sufficient clinical support to allocate patients to the next available gastroscopy list is vital. A safe mechanism for relaying information back to the GP (including histology reports) is essential otherwise medicolegal problems could arise. Open access gastroscopy now accounts for 29% of the total endoscopy workload in South Tees. (3) Close cooperation between medical and surgical gastroenterologists must be achieved to ensure a uniform approach to the provision of this service and equal distribution of the endoscopy workload. This will require close examination of the potential numbers and may necessitate appointment of a clinical assistant or additional consultant. Clinical assistants perform just over 50% of the open access gastroscopies in South Tees and the waiting time has been kept short (average 17 days). (4) A comprehensive request form with guidelines for GPs and a specific box identifying whether the GP requires a report and brief advice only or follow up at the discretion of the endoscopist (often a clinical assistant) is required. (5) Management must be involved in identifying adequate resources. (6) Methods of monitoring requests and outcome measures to ensure effective audit must be established.

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During 1987 it became apparent that the single handed medical gastroenterologist was experiencing difficulty in coping with an increasing outpatient referral rate with many patients subsequently requiring gastroscopy for upper gastrointestinal symptoms. This position will be familiar to many consultants with an interest in gastroenterology. The concept of an open access gastroscopy service was not new[1-4] but offered the opportunity of more immediate investigation of patients' symptoms while allowing general practitioners (GP) to retain control of their patients. This may well become increasingly important as a consequence of the new GP contract and the government white paper *Working for patients*.[5] At that time the options available were to appoint an additional gastroenterologist or offer gastroscopy on an open access basis to GPs, sharing the workload among all endoscopists working in the district. A third option was to try to achieve both goals.

Fortunately, in 1987, the government was undertaking a programme of 'pump priming' 100 consultant posts as declared in *Achieving a balance*.[6] It was therefore decided that the third option offered the best possible chance of launching a successful open access gastroscopy service since the appointment of a second gastroenterologist would bring South Tees Health District (population 285 000) up to the recommended ratio of one gastroenterologist per 150 000 people.[7] Other consultants judging whether or not they could also offer this service would need to use this as a baseline. A second medical gastroenterologist was appointed and took up his appointment in December 1988. This paper details the steps we took to launch a successful open access gastroscopy service.

(1) The need

There are two types of 'need.' The first relates to 'market forces' and reflects the wishes of GPs to manage their own patients and investigate them by gastroscopy without the need to refer to a specialist. The second type of need relates to the time delay engendered by standard referral patterns to an outpatient clinic and subsequently being placed on a waiting list for gastroscopy. In South Tees both elements of need were present – especially long waiting times (3–4 months) for an appointment in the medical gastrointestinal clinic.

(2) Facilities

The authors met regularly throughout early 1989 to discuss the practical aspects of starting up this service. It was felt that this should be based at the

Referral form for open access gastroscopy

REFERRAL FOR OPEN ACCESS GASTROSCOPY - SOUTH TEES HEALTH DISTRICT

Please complete information as prompted, tick or circle boxes as appropriate
Referrals cannot be accepted unless all requested information is provided

Specific guidelines
Referral for open access gastroscopy is appropriate for patients with significant dyspeptic type symptoms in two situations:
(1) The patient is *currently symptomatic and a diagnosis is required* before treatment.
(2) *Treatment* has been given based on a *clinical diagnosis* but there has been *no response after 4 weeks or more.*

General guidelines
(1) Patients with *dysphagia, haematemesis*, or *melaena* should be referred to a consultant by telephone.
(2) Gastroscopy is more likely to contribute to diagnosis and management than barium meal. Patients found to have *gastric ulcer* or *an unusual appearance of oesophagus or stomach* on barium meal should always have further *assessment by gastroscopy.*
(3) It is advisable that all patients above the age of 45 years presenting for the first time with dyspeptic type symptoms should be investigated before given treatment.
(4) Patients who have problems which may require investigation beyond the limits of gastroscopy (eg anaemia or malabsorption) should be referred directly to a consultant.

Demographic details of patient

Name .... Telephone ....
Address .... Birth date ....
....
.... GP ....
Postcode .... Surgery ....
Hospital no ....
Previous hospital contact? | YES | NO | Consultant ....

Please return this form to:
Open Access Gastroscopy,
Gastrointestinal Unit,
Middlesbrough General Hospital,
Ayresome Green Lane,
Middlesbrough,
Cleveland TS5 5AZ.

In case of difficulty please telephone 850222 ext 295.

REFERRAL FOR OPEN ACCESS GASTROSCOPY - CLINICAL DETAILS OF PATIENT

(1) **Diagnosis expected?:** | NO - go to 3 | YES |

Duodenal ulcer	Hiatus hernia
Gastric ulcer	Gastric cancer
Gastrooesophageal reflux	
Normal gastroscopy	

(2) **History of dyspepsia?** | YES | NO |

(3) **Previous gastric surgery?** | YES | NO |

Give details ....

(4) **Current principal symptoms:** Duration? | ________yrs | ________wks | ________days |

Epigastric pain	Retrosternal pain	Heartburn	
Nausea	Vomiting	Anorexia	Weight loss

In last week? | YES | NO |

(5) **Is patient being treated for their symptoms?** | YES | NO |

Treatment? | H_2 blockade | Antacids | DeNol | Omeprazole |

Has the patient been taking *Aspirin*? | YES | NO | or *NSAIDs*? | YES | NO |

(6) **Any other problems?** | YES | NO |

Diabetes:	Diet control	Oral agents	Insulin
Cardiac:	Angina	Valvular disease	Recent MI
Chest:	COAD	Asthma	
Other (specify)			

Any other medication? ....
....
....

(7) **Smoking** | YES | NO | ....day/week. **Alcohol** | YES | NO | ....units/week

(8) **Any other relevant information** (eg haemoglobin?) ....
....

I would prefer | Report and brief advice only | Report and follow up at the discretion of endoscopist |

Patients may be asked to enter a research trial | tick this box if you object |

Signature of GP ....**Referral Date** ....

Gastrointestinal Unit (GIU) in Middlesbrough General Hospital which was already performing most of the outpatient gastroscopies in the health district. The GIU was suitably equipped for this purpose with two up and running endoscopy rooms and a patient recovery area of eight trolleys encompassing the main recommendations of the BSG working party report on endoscopy units.[8] We also invited those general surgeons who performed endoscopy at a neighbouring acute hospital 3 miles away (South Cleveland Hospital) to participate, which they agreed to do.

In 1987 the GIU employed one sister and five part-time nurses, with one auxilliary to run both the outpatient and inpatient endoscopy services. With the appointment of a second medical gastroenterologist, a further 20 hours of nursing time was required. It was clear, however, that in offering this new service a receptionist/clerk would need to be appointed to deal with completed request forms and meet patients as they entered the GIU. An extra 23 hours clerical time was funded for this purpose.

(3) Medical/surgical cooperation – a standard approach

'True' open access gastroscopy was defined as referral of a patient to hospital by the GP for gastroscopy without referral to a specific consultant and without the need to attend a hospital outpatient clinic at any time. 'Censored' open access was defined as referral to a specific consultant for investigation of upper gastrointestinal symptoms where the consultant makes the decision whether to gastroscope the patient before, or in the absence of, a hospital outpatient visit.[9] We decided to offer unrestricted true open access gastroscopy.

It was felt that the open access gastroscopy workload should be evenly spread among all the endoscopists in GIU and (when possible) including three consultants at South Cleveland Hospital. All those involved agreed to perform on average two additional gastroscopies on their individual gastroscopy lists. It was recognised, however, that this was unlikely to meet demand and therefore an additional dedicated open access gastroscopy session was created requiring an extra clinical assistant session and additional nursing time. This session would be covered by the other consultants during the clinical assistant's holidays and study leave.

(4) Histology results

Results of histology reports must also be conveyed to the GP and safeguards needed to be

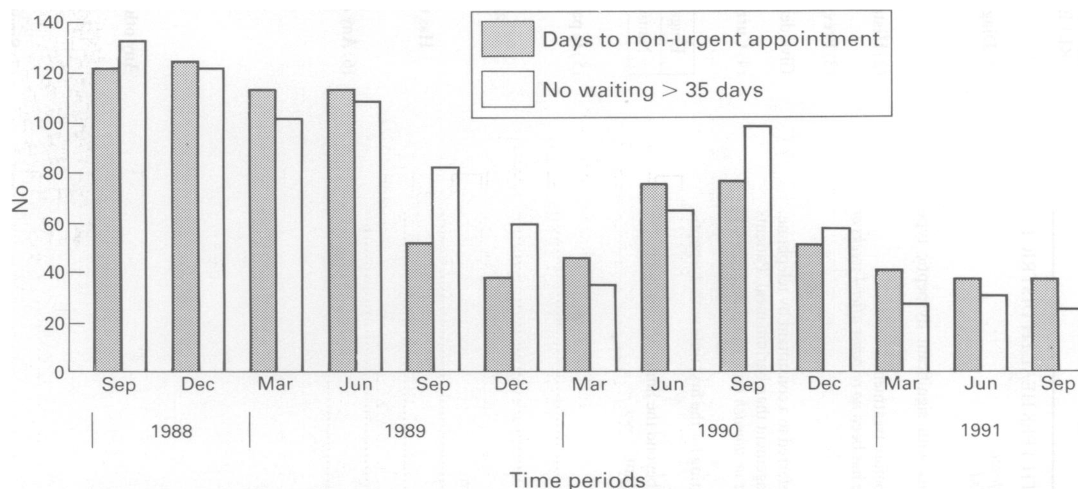

Figure 1: Average number of days non-urgent patients wait to be seen in a medical gastroenterology clinic for the quarters September 1988 to September 1991 and the number of patients waiting more than 35 days to be seen.

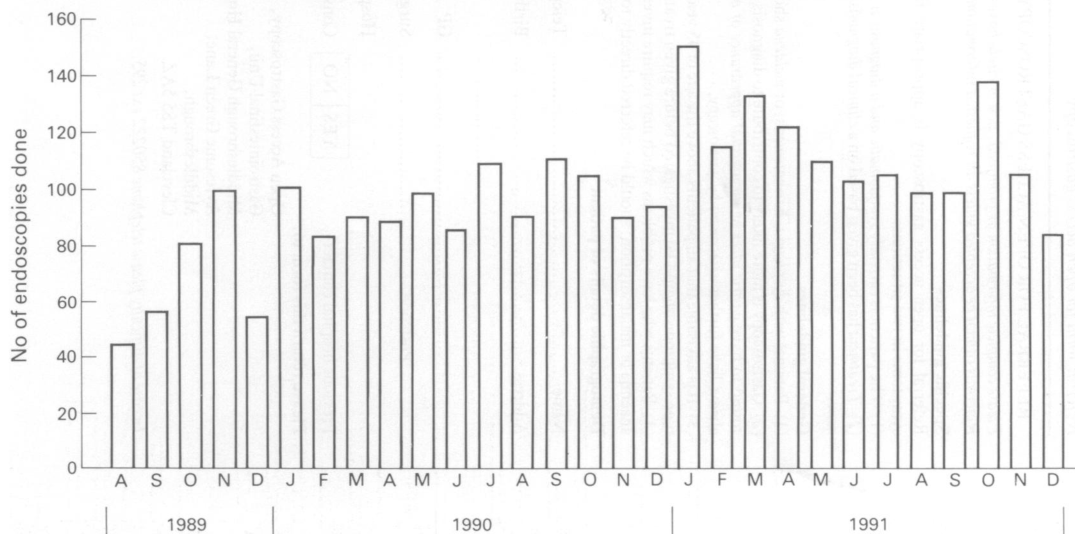

Figure 2: Number of open access gastroscopies carried out each month in South Tees Health District (population 285 000).

established to prevent results going astray. Therefore all results return to the endoscopist whose responsibility it is to inform the GP by letter with a copy for the endoscopy file. This is then checked by the clerical officer.

(5) Patient information

Before offering this new service the various consultants were using different information and instruction letters sent to patients beforehand. Agreement on a standard letter giving the patient instructions before gastroscopy was reached and the same format used for all gastroscopies irrespective of whether or not these were open access. Advice to patients during the subsequent 24 hours was also standardised.

(6) Referral form

After discussion among ourselves (including two GP clinical assistants) and GP representatives we planned for unrestricted open access gastroscopy utilising a new specific request form which would have printed guidelines for gastroscopy (both general and specific) as well as an easily completed box system for collating information on the patients referred. The form was redesigned several times before it was approved of by the whole endoscopy group (Table). All of us felt it was important for the GP to retain control of the patient and to be confident that the patient would not be siphoned off to a specific consultant should a serious abnormality be found. A decision box identified whether the GP required a report and brief advice only or follow up at the discretion of the endoscopist. This was deemed to be very important from a medicolegal point of view as many hospital specialists are worried that open access gastroscopy may blurr the margins of responsibility for patient management.[9]

(7) Audit

As open access gastroscopy requests are not targetted to a specific consultant it is essential that they are separately and clearly identified as such for the purposes of audit and contracting, especially if patients are being attracted from outside the health district. The effect of 'freeing

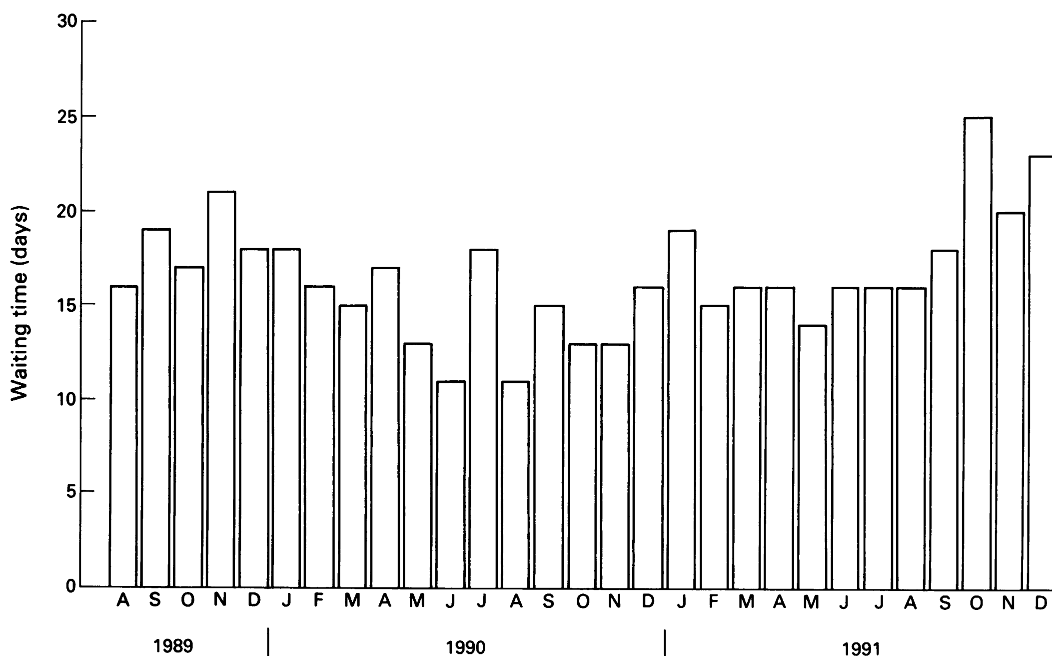

Figure 3: Average waiting time from date of referral to date of gastroscopy.

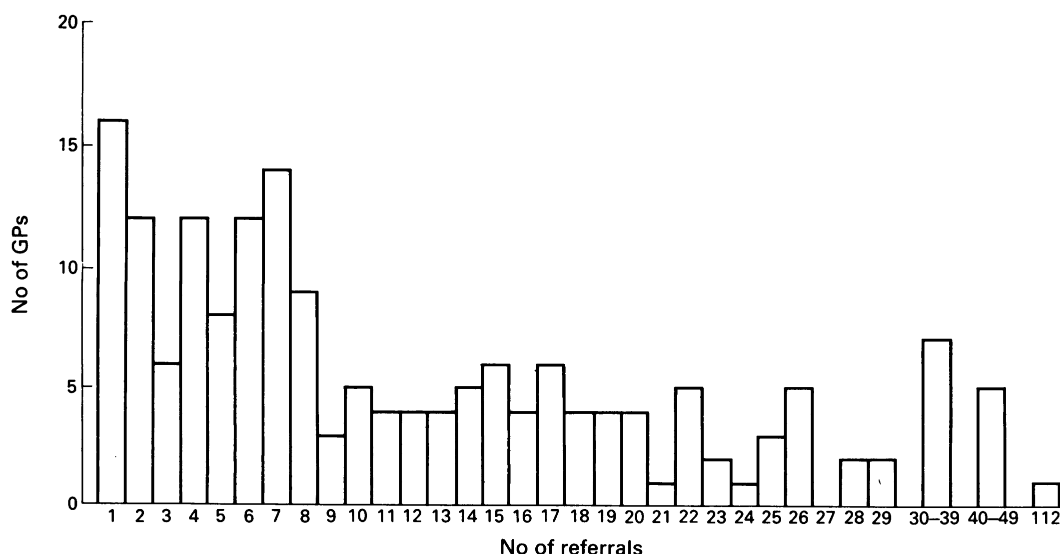

Figure 4: The number of referrals by individual general practitioners.

up' outpatient clinic time needs to be assessed and monitored. In theory, seeing fewer dyspeptic patients in the outpatient department should improve the waiting time for patients with other gastrointestinal disease.

The endoscopy group used the form to enable audit to be easily carried out and a project for quality assurance in medical and surgical gastroenterology was accepted for central government funding under the leadership of one consultant. The money for this project was not available for setting up the service, but did ensure that computerised records could readily be accessed for future analysis. Examination of waiting times for outpatient appointments shows a rapid decline after the start of the new service with a later increase which does not reach pre-open access gastroscopy levels and is followed by a further decline (Fig 1).

(8) Identifying resources

Quality assurance monies were only available for the computerisation of this service (which in our view is not an essential requirement). Discussion therefore took place with the unit general manager who agreed to fund the additional nursing sessions while the clinical assistant session was funded directly by the district health authority. In future, consultants will need to argue their case for additional resources to fund open access gastroscopy through their business plans.[5] The additional labour costs (clinical assistant sessions and nursing sessions) amounted to £22 300 (with on costs) but the true cost of this service is likely to be slightly higher as a result of increased pathology workload and increasing use of consumables.

(9) Demand

Clearly, any new service needs to be publicised to ensure that all GPs are aware of it. This was done in a variety of ways including meetings at the local postgraduate centre, discussion in the general practitioner Cogwheel division and medical advisory committee, dissemination of request forms with an explanatory letter and finally a 'grand launch' sponsored by a pharmaceutical company. We were impressed that every group practice bar one was represented at the launch confirming our impressions that this service would be in demand. All 500 request forms provided were taken. The service started on 1 August 1989. In the first 30 months of the service 2961 patients were referred for open access gastroscopy, averaging approximately 25 cases per week (Fig 2). Over half of the open access

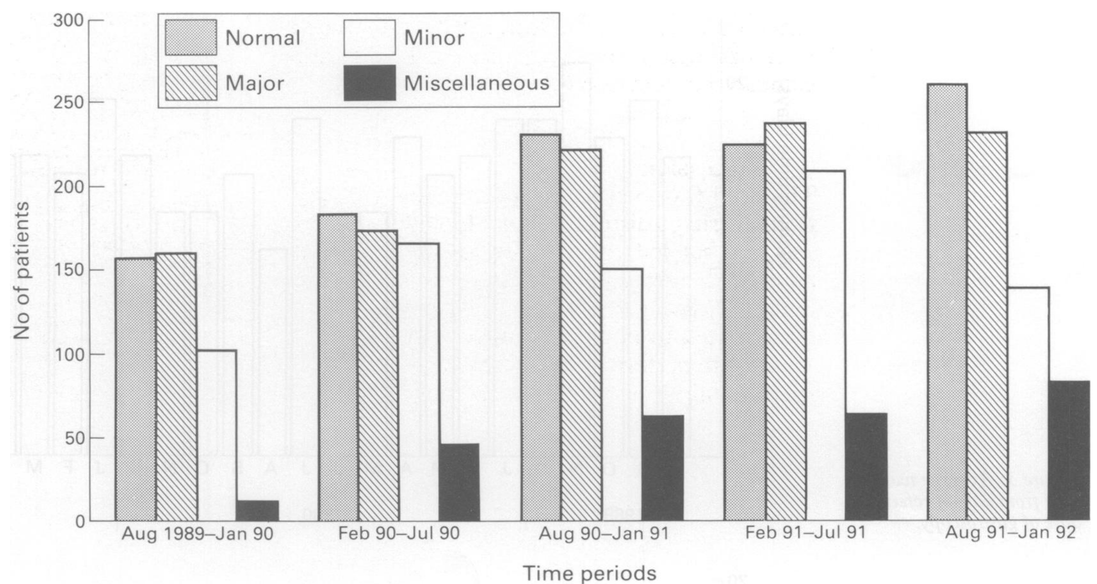

Figure 5: Results of open access gastroscopy expressed as major endoscopic abnormality (duodenal ulcer disease, gastric ulcer disease, oesophagitis, or carcinoma), minor endoscopic abnormality (hiatus hernia, endoscopic duodenitis, or gastritis), miscellaneous abnormalities (polyps, vascular abnormality, inadequate visualisation, including failed gastroscopy) and normal.

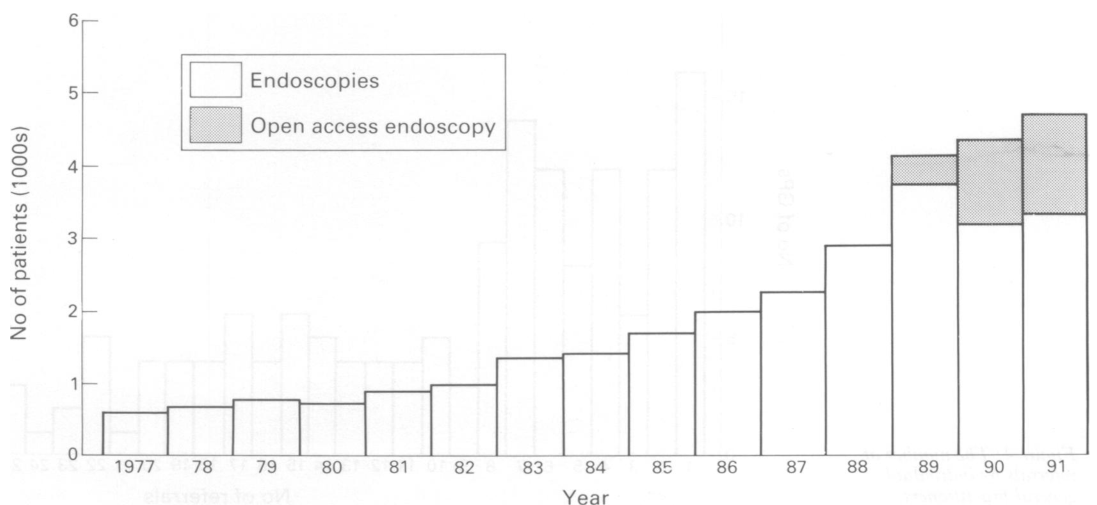

Figure 6: Open access gastroscopy in relation to the total endoscopic workload 1977–91.

gastroscopy patients were investigated in the designated clinical assistant session with an average waiting time of 17 days (Fig 3). This has meant that the consultants have had to perform the dedicated open access gastroscopy session when the clinical assistant is away on holiday, in order to keep the waiting time to a minimum. The number of times the service has been used by individual GPs during the first year is shown in Figure 4.

(10) Outcome measures

The results of gastroscopy can usefully be divided into three groups. Firstly, those where there is a definite endoscopic abnormality (ulcer, cancer, oesophagitis etc); secondly, those where no abnormality is seen (normal); and finally those where the abnormality is of an anatomical or subjective nature (hiatus hernia, endoscopically diagnosed gastritis, or duodenitis). The results of the first 30 months are shown in Figure 5. Duodenal ulcer was the commonest major endoscopic abnormality (18%) followed closely by oesophagitis (15%). The commonest minor endoscopic abnormality was hiatus hernia (without oesophagitis), accounting for 16% of patients. Altogether 35% had a normal gastroscopy. These results are not statistically different to those for patients referred from an outpatient clinic and correspond closely with results from other centres.[1-4] The effect on the endoscopy workload within the GIU is shown in Figure 6 compared to previous years.

(11) Discussion

The need for open access gastroscopy will vary from district to district. It is not feasible to expect a single handed endoscopist to offer this but additional trained clinical assistants are invaluable in helping to provide such a service. In South Tees over 50% of open access gastroscopies are performed by the two general practitioner clinical assistants. A nationwide survey has shown that significantly more clinical assistants work in units that offer open access gastroscopy.[9] In addition a coordinated approach from both medical and surgical endoscopists has made it possible to absorb the remaining 50% of gastroscopies into consultant lists – but this requires the necessary planning and back up. The effect has been to reduce the waiting time for gastroscopy down to an average of 17 days. There has been an enormous saving in terms of clinic appointments and outpatient consultation time which clearly justifies the service. Fears about being unable to cope with the numbers[9] have not materialised and the number of normal gastroscopies has remained constant at around 35%. This cannot be regarded as excessive, comparing well with other studies[2 4] and the proportion of normal results obtained when patients are referred from an outpatient clinic.[2] We believe that many more gastroenterologists should consider organising an effective open access gastroscopy service to offer their GPs a more responsive and cost effective service.

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