A profile of District Hospital gastroenterology

K. M. HOLMES, MB, MRCP, *Clinical Assistant*
R. H. SALTER, MB, FRCP, *Consultant Physician**
T. P. COLE, MB, FRCS, *Consultant Surgeon*
T. G. GIRDWOOD, MB, FRCR, *Consultant Radiologist*
Gastroenterology Clinic, Cumberland Infirmary, Carlisle

It is accepted that gastroenterology is a speciality which is best practised from a multi-disciplinary base [1]. The approach which most suited our local situation was a combined consultative out-patient clinic for gastroenterological problems with medical, surgical and radiological input. This clinic started in 1972 and an analysis of the first year's workload was reported in 1975 [2]. Unlike many reported innovations, the combined Gastroenterology Clinic did not prove to be a nine-day wonder but continues to flourish.

We were concerned that our preliminary conclusions based on the first year's workload might have been premature and have subsequently analysed the data collected over a 12-year period to check whether the first year's experience was representative and what additional conclusions could be drawn from the material.

Patients and methods

All new referrals seen in the combined Gastroenterology Clinic for the 12-year period 1973–1984 have been included. There has been no significant change in the population size served by the District (190,000) and no major alteration in referral pattern during this time. Details of the patients' age, sex, diagnoses and whether or not surgical intervention was required have been obtained from the diagnostic index which has been maintained since the Clinic's inception. The final diagnosis has been taken as that made after appropriate investigations and follow-up have been completed.

Multiple pathology was common and when this occurred all the diagnoses were recorded.

The category of functional gut disorders includes functional dyspepsia, irritable bowel syndrome, simple constipation, psychiatric disorders and gastrointestinal symptoms related to drug therapy or alcohol abuse.

Results

A total of 4,362 patients have been seen during the 12-year period, 2,016 males and 2,346 females. The average age of the patients was 52 years (range 10 years to 95 years).

The number of patients in each diagnostic category for successive years is shown in Table 1. Because more than one diagnosis was recorded when a patient with multiple pathology was encountered, the total number of patients with each diagnosis seen during a 12-month period is greater than the number of patients referred.

It can be seen that the number of patients in each of the major diagnostic categories over the 12-year period has remained remarkably constant. The largest single diagnostic group continues to be disturbances of gastrointestinal function with approximately 33 per cent of all patients having non-organic disease. Of all the patients aged 40 years or less, 50 per cent were shown to have no organic explanation for their complaints (Fig. 1).

Peptic ulceration accounted for 17.4 per cent of all patients, gastro-oesophageal reflux for 11.5 per cent, biliary tract disease for 9.8 per cent and diverticular disease of the colon for 8.2 per cent. The number of patients with duodenal ulceration subjected to surgery has fallen during the 12-year period and there has also been a reduction in the number of patients with this problem referred to the Clinic (Fig. 2).

The number of patients referred with carcinoma of the stomach or colorectum remained constant over the 12-year period.

The operation rate was 27.8 per cent of the total number of referrals which corresponds remarkably closely with the figure of 28 per cent for the total referrals during the first year.

There has continued to be a significant percentage of patients referred to the Clinic with non-gastroenterological disease (5 per cent) with little variation from year to year. A very wide spectrum of disorders has been encountered [3].

Discussion

This survey has shown that our first year's experience was a remarkably reliable predictor of the workload of a

*Address for correspondence: Dr R. H. Salter, Consultant Physician, Gastroenterology Clinic, Cumberland Infirmary, Carlisle, Cumbria CA2 7HY.

Table 1. Diagnostic breakdown for each year of clinic operation and grand total.

Year	1973		1974		1975		1976		1977		1978		1979		1980		1981		1982		1983		1984		GRAND TOTAL	
Total number of patients	483		390		324		349		323		321		311		342		403		332		394		390		4362	
Diagnostic category	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention	No. of referrals	Surgical intervention
Oesophageal																										
Gastro-oesophageal reflux	43	16	41	9	20	4	38	12	33	6	36	6	47	6	61	16	48	9	38	10	49	6	48	5	502	105
Carcinoma	5	1	1	1	0	0	3	3	5	5	1	1	1	0	2	1	1	0	5	3	1	1	5	2	30	18
Achalasia	1	1	0	0	0	0	1	1	1	1	0	0	1	1	0	0	0	0	1	1	0	0	0	0	5	5
Gastric lesions																										
Benign ulcer	18	5	11	3	9	2	9	3	7	4	11	3	15	6	19	7	12	4	15	3	11	1	11	3	148	44
Carcinoma (including lymphomas)	7	6	7	6	6	5	11	10	3	3	7	6	4	4	6	3	7	7	1	0	8	4	7	5	74	59
Combined gastric & duodenal ulcer	7	4	3	3	2	1	5	5	3	3	5	2	3	1	2	0	4	2	2	1	3	2	3	2	42	26
Duodenal ulcer	96	59	67	43	45	28	45	18	44	15	45	17	38	18	29	15	56	17	40	22	35	8	28	8	568	268
Dyspepsia after previous gastric surgery	20	2	14	1	8	2	13	3	11	1	10	2	10	3	13	0	23	3	14	1	10	1	15	0	161	19
Functional dyspepsia	53	1	63	0	41	0	44	1	49	0	43	1	39	0	42	0	50	0	26	0	43	0	38	0	531	3
Biliary tract disease	50	44	47	40	39	36	34	31	42	36	29	25	22	19	24	21	29	20	40	33	40	33	32	26	428	364
Pancreatic disease																										
Chronic pancreatitis	4	1	2	2	3	0	0	0	0	0	3	3	2	1	0	0	3	2	1	0	0	0	1	0	19	9
Carcinoma	2	2	1	1	2	1	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	1	8	6
Coeliac disease	2	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	7	0
Crohn's disease																										
Small gut	2	2	1	1	1	1	0	0	0	0	0	0	0	0	2	0	4	2	2	0	1	1	0	0	13	7
Colonic	4	4	3	3	1	0	0	0	0	0	4	1	1	0	1	0	0	0	0	0	0	0	0	0	14	8
Combined	1	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	2	1	1	0	0	0	9	5
Colo-rectal disorders																										
Carcinoma	8	8	5	5	10	9	15	14	12	12	7	6	6	6	5	4	10	9	11	11	12	10	15	15	116	109
Diverticular disease	24	5	20	3	19	2	38	6	23	2	32	0	32	5	28	5	41	2	26	1	40	1	37	1	360	33
Proctocolitis	17	3	13	0	7	1	15	0	9	1	8	0	12	1	15	0	10	0	7	0	14	0	13	0	140	6
Irritable bowel syndrome	58	1	51	1	52	1	53	1	52	1	42	0	42	0	53	1	64	0	42	0	70	0	65	0	644	6
Simple constipation	15	0	6	0	10	0	12	1	8	0	7	0	21	0	8	0	5	0	7	0	7	0	8	0	114	1
Anal lesions	6	0	4	1	8	3	8	0	6	0	16	5	14	1	19	4	21	6	16	2	22	4	14	4	154	30
Psychiatric disorders	34	0	31	0	27	0	19	0	14	0	8	0	21	0	11	0	5	0	8	0	9	0	11	0	198	0
Miscellaneous																										
Gastroenterological	17	0	28	1	31	5	20	4	26	4	19	4	17	4	38	3	31	7	38	10	33	5	40	8	338	55
Non-gastroenterological	20	3	19	2	19	2	12	1	13	1	12	0	10	3	17	2	11	2	18	4	22	5	24	3	197	28
Drugs	7	0	2	0	1	0	2	0	2	0	2	1	7	0	0	0	3	0	2	0	4	0	6	0	38	0
Alcohol	11	0	8	0	5	0	4	0	2	0	9	0	10	0	5	0	9	0	7	0	7	0	5	0	82	0

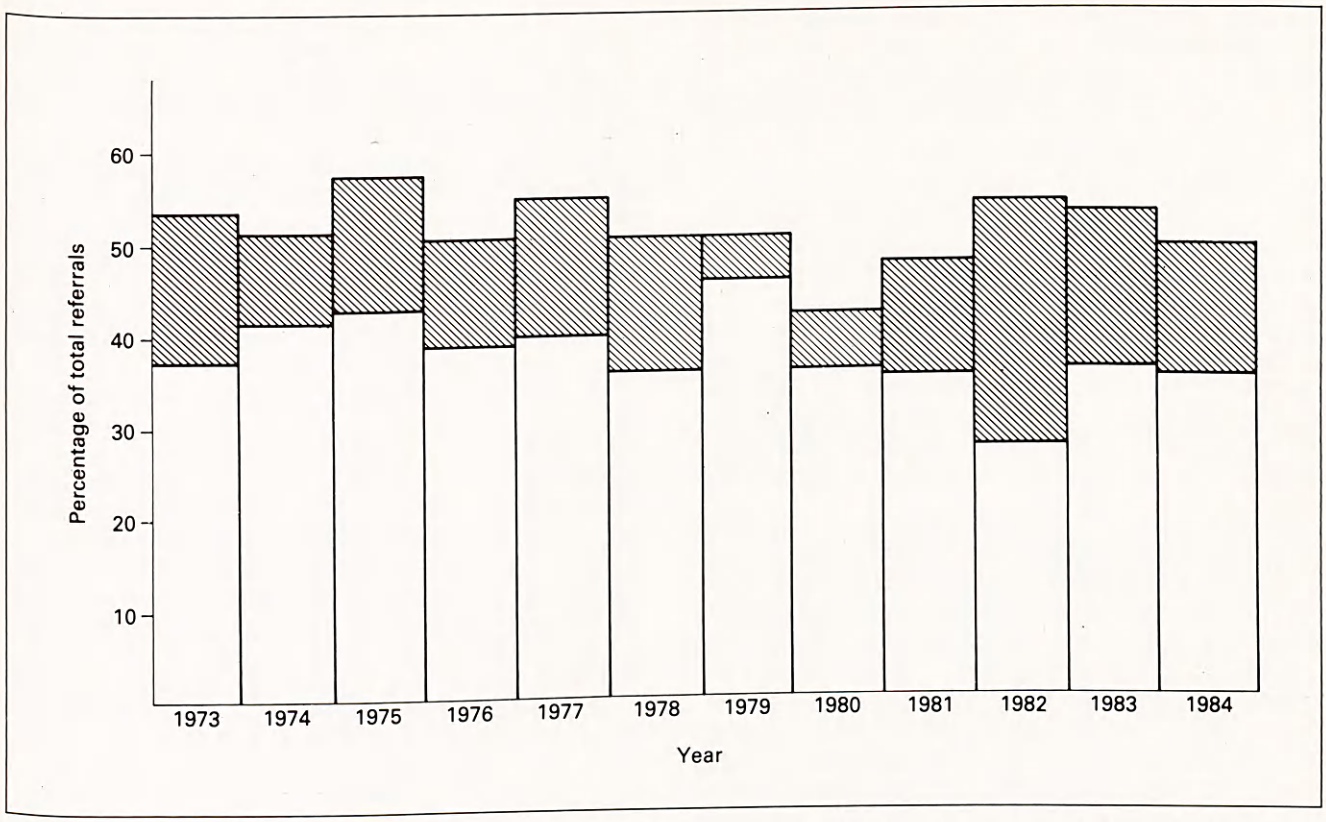

Fig. 1. *Functional gastrointestinal disturbances as percentage of total referrals (unshaded) and percentage of referrals under 40 years (unshaded and shaded areas).*

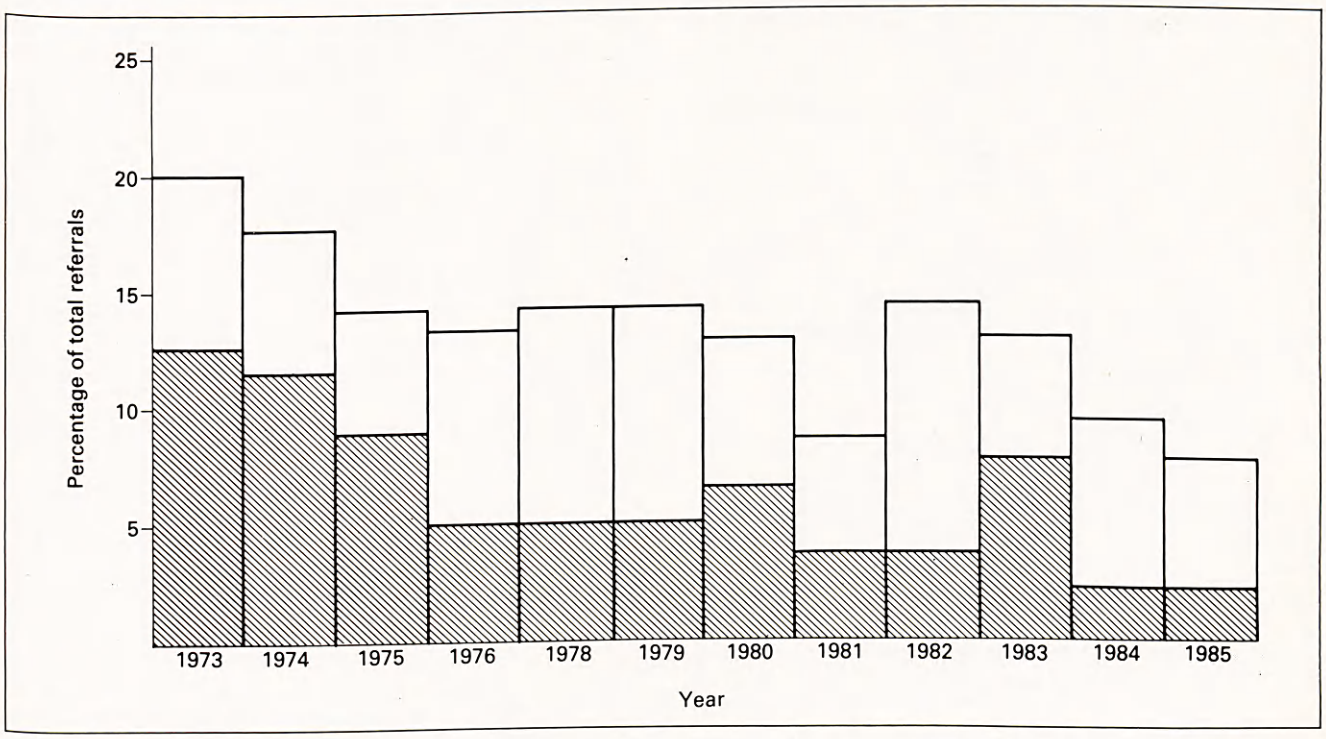

Fig. 2. *Duodenal ulceration as percentage of total referrals (unshaded and shaded areas) and percentage subjected to operation (shaded areas).*

combined consultative out-patient clinic for gastroenterological problems over the succeeding 11 years.

By far the largest diagnostic group was that of functional disorders of the gastrointestinal tract, which accounted for 33 per cent of all referrals and 50 per cent of all patients referred aged 40 years or less. This confirms the finding of Harvey *et al.* [4] and, since the diagnosis is essentially one of exclusion, this group of patients has continued to be a considerable strain on clinic time and investigational facilities. The age of the patient is clearly of fundamental importance in this respect. There is a 50 per cent chance that a patient aged 40 years or less referred to the clinic will have no organic explanation discovered for his or her gastrointestinal complaints and during the period of this survey only four patients below the age of 40 were shown to have gastrointestinal malignancy.

As might have been expected, apart from the functional group, the commonest gastroenterological disorders encountered were gastro-oesophageal reflux, peptic ulceration, biliary tract disease and diverticular disease of the colon. Malignancy was less common but significantly represented.

This diagnostic breakdown clearly has implications for undergraduate and postgraduate teaching and perhaps more time should be allocated to dealing with bread and butter gastroenterological disorders rather than the less frequently encountered but albeit fascinating problems. Gastroenterologists in training, armed with all the latest technological aids, should also be aware of the spectrum of District Hospital gastroenterology to avoid the risk of subsequent job dissatisfaction. We do, of course, continue to see the less common gastroenterological conditions from time to time and, in particular, the local incidence of coeliac disease is much higher than suggested by this breakdown; by far the commonest source of referral now being the haematology clinic. We also suspect that patients who prove to have drug-induced gastrointestinal symptoms or complaints related to alcohol abuse are under-represented in our survey as such details were not always available from the diagnostic index.

The fall-off in the operation rate for patients referred with duodenal ulcer is almost certainly associated with the introduction of H_2-receptor antagonists and has been a common experience. Likewise, the reduction in the number of patients with duodenal ulcer referred to the Clinic probably coincides with the introduction of effective anti-ulcer therapy and also the fact that the local GPs have open access to the radiology department.

The continued referral of a constant and significant number of patients who prove to have non-gastroenterological disease emphasises the need for specialists to retain a general outlook. Failure to suspect that the cause of a patient's alimentary symptoms may originate from organic disease outside the gastrointestinal tract may result in prolonged, unnecessary, expensive, time-wasting and unpleasant investigations. We found that the diagnosis could usually be made after a thorough clinical assessment and a minimum of investigations, but the most important factors were an open mind, a high degree of clinical suspicion and wide-ranging general in addition to gastroenterological experience [3].

Acknowledgement

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