

Events mentioned by at least two patients while taking zimelidine and placebo

Symptom or ailment	No of patients		No of discordant pairs	
	Zimelidine period (Z)	Placebo period (P)	Z positive, P negative*	Z negative, P positive†
Headache	7	6	5	4
Tiredness or sleepiness	7	5	3	1
Constipation	7	4	4	1
Dry mouth	8	2	7	1
Nausea	7	3	6	2
Dizziness or fainting	5	4	3	2
Insomnia	7	1	6	0†
Depression	2	5	0	3
Diarrhoea	4	3	2	1
Swelling of hands and feet	4	3	2	1
Common cold	2	3	2	3
Itching or irritation of skin	3	2	3	2
Urinary frequency (including nocturia) ..	1	4	0	3
Painful joints	1	3	0	2
Rash	2	2	1	1
Agitation or tenseness	2	1	1	0
Dry skin	2	1	2	1
Indigestion	1	2	0	1
Influenza	3	0	3	0
Tingling in hands	2	1	2	1
Vomiting	2	1	1	0
Aggressiveness	1	1	1	1
Backache	1	1	1	1
Bad taste in mouth	2	0	2	0
Excessive sweating	1	1	1	1
Trembling	2	0	2	0

*Symptom occurred while patient taking zimelidine but not placebo.

†Symptom occurred while patient taking placebo but not zimelidine.

‡Significance of result: $p < 0.05$.

Discussion

The nature and variety of symptoms recorded suggest that our method was successful in eliciting complaints other than those that patients or doctors might expect to be side effects of treatment. Thus, despite the small number of patients included in this trial, event recording yielded interesting findings.

Randomised controlled trials comparing the effects of zimelidine and amitriptyline in depressed patients have confirmed the prediction from animal experiments that zimelidine

would produce fewer symptoms of anticholinergic activity than amitriptyline.^{5,6} The present study may indicate a weak anticholinergic effect of zimelidine, although the differences found were not statistically significant.

Because so many events were elicited in this study the excess of insomnia during treatment with zimelidine might be a chance finding. The main purpose of event recording, however, is to identify areas for further investigation, and it clearly did this. Insomnia was not included in our checklist of symptoms, so attention would not have been drawn to it as a possible adverse effect without the recording of events. Two objections that have been advanced against adopting event recording as a routine procedure are that the numbers of patients included in clinical trials are too small to yield useful results and that the method is too cumbersome. Our experience does not support these objections. While larger numbers would be more conclusive, analysing data from only 19 patients was clearly worth while. Moreover, the method was so convenient that it will probably be included in the expanded clinical trials that will be carried out when zimelidine is marketed.

Copies of the form used for recording events may be obtained from Dr Brian Tiplady.

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SHORT REPORTS

Advice about driving after herniorrhaphy

The increasing use of day care and short-stay surgery in the management of groin hernias has raised many questions. One common query by patients is "When may I drive?" We have previously asked patients about the length of time before they drove and the answers ranged from four days to eight weeks. General practitioners give widely differing advice.¹ We therefore carried out a study to try to answer the question "When may I drive?"

Subjects, methods, and results

The ability to perform an emergency stop in a car simulator before operation and on the third, seventh, and tenth postoperative days in 25 men who had right inguinal hernias was measured and compared with that of 20 normal subjects picked at random from the hospital staff. The car simulator consisted of a car seat and the usual three control pedals, above which were two lights, one green, one red. In addition a press button was held in the left hand. All were instructed to respond to the illumination of the green light by pressing the button and to the illumination of the red light by fully depressing the brake pedal as quickly as possible, as though performing an emergency stop. When the participant was seated comfortably he was asked to depress the accelerator pedal fully until one or other light came on and then respond appropriately. The delay between illumination of the light and the appropriate response was timed electronically. On each occasion the two

responses were each tested 20 times in random order. Our intention was to measure and compare hand and foot reaction times and to see whether both were prolonged in the postoperative period or only the foot reaction time because of the presence of the groin incision.

The mean reaction time for each response on each test day was calculated. The hand reaction (button pressing) time was similar in both groups on each occasion (table). The foot (emergency stop) reaction time was also similar in the two groups preoperatively. On the third and seventh postoperative days the patients had significantly prolonged foot reaction times (paired *t* test). The patients' foot reaction had returned to its preoperative time by the tenth postoperative day.

Mean (\pm SD) hand and foot reaction times (seconds) in a group of patients before and after herniorrhaphy and a group of normal subjects

Preoperative and postoperative (days)	Hand reaction time		Foot reaction time	
	Normal subjects (n=20)	Patients (n=25)	Normal subjects (n=20)	Patients (n=25)
Preoperative	0.51 \pm 0.1	0.54 \pm 0.11	0.72 \pm 0.15	0.71 \pm 0.12
Day 3	0.46 \pm 0.09	0.51 \pm 0.11	0.70 \pm 0.10	0.84 \pm 0.16*
Day 7	0.46 \pm 0.09	0.47 \pm 0.09	0.72 \pm 0.10	0.77 \pm 0.14†
Day 10	0.49 \pm 0.13	0.50 \pm 0.12	0.70 \pm 0.12	0.71 \pm 0.15

*Significant $p < 0.001$.

†Significant $p < 0.01$.

Comment

Driving a motor car is a complex but normally semi-automatic skill requiring mental alertness but little physical effort except when making an emergency stop. The physical stress of such a movement is unlikely to disrupt a hernia repair but fear of pain or discomfort could impair efficiency. Ten hours after a short general anaesthetic the recovery of mental efficiency has been shown to be at least 60%.² The recovery of physical co-ordination in a limb has not been measured, but the time lapse in a simulated emergency stop must give an indication of fitness for driving a car and could thus be used as a guide in advising patients. Our study shows that the emergency stop time is increased significantly on the third and seventh postoperative days but returns to preoperative levels by the tenth day.

Interestingly, there was no significant difference between our two groups in the preoperative foot reaction time, indicating that an untreated right inguinal hernia has no effect on the emergency stop time. In comparison, a blood alcohol concentration of 80 mg/100 ml (17.4 mmol/l), the current legal limit, reduced steering efficiency in a simulated driving test by 11%.³ An increase of 0.1 s in the emergency stop time increases the stopping distance at 30 miles (48 km) per hour by 4 ft 5 in (1.35 m), and at greater speeds the effect becomes increasingly important. We therefore think that after inguinal herniorrhaphy patients should be advised not to drive for 10 days.

We thank the staff and pupils of Archbishop Holgate's Grammar School, York, who built the simulator and electronic timer.

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² Simpson EP, Glynn CJ, Folkard S. Comparative study of short-term recovery of mental efficiency after anaesthesia. *Br Med J* 1976;i:1560-2.

³ Drew GC, Colquhoun WP, Long HA. *Medical Research Council memorandum*. No 38. London: HMSO, 1959.

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Endoscopic studies of dyspepsia in the community: an "open-access" service

Endoscopy gives a more accurate diagnosis of the upper gastrointestinal tract than barium studies. General practitioners investigating upper gastrointestinal symptoms should be able to request endoscopy as an alternative to a barium study. Because of conflicting reports¹⁻³ about the value of such a service we reviewed the diagnostic yield for the first two years that the Gloucester endoscopy unit received referrals.

Patients, methods, and results

Most patients were examined in the endoscopy department at the Gloucester Royal Hospital and a few at Stroud Hospital. There were no specific criteria for referral except in one practice studying patients with dyspepsia.³ Patients with a serious coincident disease (for example, severe cardio-respiratory symptoms) often were not examined or endoscopy was deferred. Endoscopic findings and cytological and histological reports were sent to the referring doctors, who continued to look after their own patients. However, a follow-up endoscopic examination was always done when a gastric ulcer was found because of the risk of misdiagnosing an ulcerating malignancy. All patients were also screened for biliary tract disease.

There are 302 000 patients in the Gloucester Health District; 968 patients were referred for endoscopy in the first two years of the service (629 men and 339 women). Thirty per cent had definite disease of the upper gastrointestinal tract, including 16.5% with active peptic ulceration, 9.3% with pyloro-duodenal disease (defined as pyloric or duodenal scarring with or without inflammation indicating previous ulceration), 2.2% with carcinoma, and 2.6% with benign oesophageal stricture (table). Hiatus hernia and evidence of mucosal disease were also found.

Of 610 patients who had a cholecystogram taken, 55 had gall stones or a non-functioning gall bladder. The incidence of biliary tract disease was similar to that found in the general population at necropsy.⁴ One elderly patient died from an oesophageal tear complicated by a perforated duodenal ulcer.

Endoscopic findings

	Males		Females		Combined		Summary of main findings	
	No	%	No	%	No	%	No	%
Normal	152	24.0	120	35.0	272	28.0	272	28.0
Peptic ulcer disease:							251	26.0
Duodenal ulcer	94	15.0	14	4.0	108	11.0		
Pyloro-duodenal disease	72	11.0	18	5.3	90	9.3		
Gastric ulcer	31	5.0	22	6.5	53	5.5		
Carcinoma:							22	2.2
Gastric	4	0.6	5	1.5	9	0.9		
Oesophageal	5	0.8	8	2.4	13	1.3		
Benign oesophageal stricture	14	2.2	11	3.2	25	2.6	25	2.6
Other conditions:							398	41.0
Hiatus hernia	35	5.6	38	11.0	73	7.5		
Oesophagitis	18	2.9	8	2.4	26	2.7		
Visual evidence of gastric or duodenal mucosal disease	196	31.0	92	27.0	288	30.0		
Other	8	1.3	3	0.9	11	1.0		

The principal diagnosis in each case is recorded. 21 patients with hiatus hernia also had oesophagitis.

Comment

The distribution of disease in this large survey is similar to that found in a small, well-documented population (see page 1136). Men outnumbered women by 2:1, confirming that dyspepsia is more common in men. Many of the patients seen in outpatient clinics had received long or repeated courses of drugs, such as cimetidine, without endoscopic examination. Having an "open-access" service for rapid diagnosis should ensure that patients with dyspepsia are not treated empirically with expensive drugs and that patients with carcinoma or ulcer receive prompt and appropriate treatment. We emphasise too that finding a normal upper gastrointestinal tract may be as helpful as finding a specific lesion.

In over 6000 endoscopies performed on outpatients here, there have been two deaths (one during this study). Endoscopy is considered a safe procedure,⁵ but is not without hazard.

There is no waiting list for endoscopy. The maximum delay between referral and examination was six weeks. Referrals for barium-meal examinations, however, had not fallen appreciably. Holdstock and colleagues reported a similar finding.²

The endoscopy units in Gloucester and Stroud are staffed by two consultant surgeons; three general practitioners, who work four sessions between them; and two junior hospital doctors in training. Five part-time senior nurses work a total of 100 hours per week. Two endoscopists can work at the same time. In the first two years 2465 endoscopic procedures were performed. We expect the number of referrals to increase, however. If 71 patients a year presented with dyspepsia to a single general practice from a population of 7800,³ then we should expect about 3000 referrals a year from a population of 300 000, more than doubling the number of examinations now carried out. We expect to increase both nursing and medical staff slightly.

We thank Sister Downie and staff in the endoscopy department, and the staff of the department of radiology.

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⁵ Schiller KFR, Cotton PB, Salmon PR. The hazards of digestive endoscopy: a survey of British experience. *Gut* 1972;13:1027.

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