and as much a part of that nurse's initial assessment as deciding what observations to carry out or whether to lay the patient down.

I am also concerned about the wide discrepancies between the triage assessment of priority and that of the consultants. Either the consultants benefited from hindsight or there had been depressingly little prior communication in the department. Clear guidelines on assessing urgency were drawn up in my department by consultation between medical and nursing staff. New staff are properly trained in their use, and the accuracy is regularly monitored, consistently reaching over 90%.

The use of median waiting times is questionable; centile times convey a clearer picture. A median waiting time of 26 minutes for patients in priority category 1, however, is alarming. We define this group as patients who cannot safely wait more than 15 minutes for medical attention, and 97% of them receive attention within this time.

Triage should not be expected to cut waiting times. It does not after all reduce the amount of work to be done, it simply redistributes waiting times away from the more seriously ill towards those who will not suffer unduly from delays. A reduction in waiting times requires some patients to be treated or discharged by the assessing nurse—that is, it requires a nurse practitioner to be introduced. This is an entirely separate concept, and one of the references quoted by George and colleagues refers to a nurse practitioner system and not to triage.²

Prioritisation is clearly vital in the effective running of our seriously overloaded accident and emergency departments, and I am concerned that the often hesitant progress towards improving such prioritisation will be threatened by this well intentioned but, in my view, seriously flawed study.

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1 George S, Read S, Westlake L, Williams B, Fraser-Moodie A, Priddy P. Evaluation of nurse triage in a British accident and emergency department. *BMJ* 1992;304:876-8. (4 April.)
2 Maller J, Woolwich C. Triage in accident and emergency departments. *J Adv Nurs* 1990;15:1443-51.

SIR,—Steve George and colleagues have raised several important issues about using triage nurses in accident and emergency departments, particularly the possibility that triage might increase waiting times for all patients.¹ It is difficult, however, to determine from their paper the precise cause of the additional delays experienced by patients when triage was in use.

Only 48% of patients were actually assessed by a triage nurse during the triage periods, yet the median waiting times for all patients in the triage group were longer than those for the patients in the no triage group. Were the delays caused by the time taken for triage itself or by subsequent queuing problems as patients proceeded through the accident and emergency department? Perhaps one way of clarifying this would be to analyse further the extended waiting times during the periods when triage was being done. The waiting times of the 48% who were assessed by a triage nurse could be compared with the waiting times of the 52% of attenders during the same periods who were not. This might indicate whether the triage itself or subsequent queuing caused the delays.

The authors also analysed waiting times according to a retrospective judgment of urgency, made by a consultant in accident and emergency, rather than the prospective assessment of urgency made by the triage nurse. Given that the prospective assessment is intended to be a major determinant of waiting times (indeed, it is the whole purpose of triage), why did the authors not conduct such a prospective analysis?

The authors conclude that some form of priori-

tisation will benefit patients in most urgent need of care, but they question whether this needs to be formalised and called nurse triage. What system do they therefore recommend? Are they not simply calling for a more efficient form of nurse triage rather than none at all?

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AUTHORS' REPLY.—Jeremy Dale and John Bache note that only 48% of patients attending during a triage period saw a triage nurse and conclude that outcome measurements for our triage group cannot be used to deduce the effects of triage itself and that our study is invalid. They misunderstand the principle of intention to treat trials. We made the decisions to redesignate shifts at the beginning of each day, not at a moment's notice, and we ensured that triage ran during each session designated. The periods in which nurse triage ran and did not run were entirely comparable and were not dictated by workload. In real life triage nurses may leave their stations to undertake clinical duties elsewhere, but this applied equally to both arms of our study. Ours is a valid study of the effectiveness of nurse triage in real life, whereas Dale and Bache propose a study of the efficacy of nurse triage under ideal circumstances.

John Heyworth and M Pledge suggest that urgency should be assessed retrospectively by nurses rather than doctors. This is irrelevant. So long as both groups are judged by the same assessors the assessors may be nurses, doctors, or, indeed, others. All have equal validity.

J E Porter questions the nature of the difference between formal triage and informal prioritisation in our study. Formal triage is a documented assessment governed by strict protocols, whereas the informal assessment is undocumented, intuitive, and dynamic and fits well with Porter's description of what happens in her department.

Triage ran for five years preceding our study. All triage nurses attend six lectures, are tested on theory, and undertake supervised practice before starting triage. Their collective skills and experience are considerable. Dale and Porter are correct, therefore, when they state that informal assessment was performed by nurses familiar with triage. But the question "Does prioritisation of patients by degree of urgency produce benefits compared with their being seen in strict order of arrival?" is artificial. It is nonsense to suggest that any accident and emergency department in the United Kingdom functions entirely in this fashion. At its simplest level, the urgent attention awarded a patient arriving by emergency ambulance is prioritisation, and the relevant question is "Does formal nurse triage produce benefits when compared with an existing scheme of informal prioritisation?" This was our question.

David St George requests an analysis of waiting times by prospective urgency. This would be ethically unacceptable as it would entail every patient being assessed for triage and then the

decision being ignored in half the cases. To answer his question regarding the cause of delays, however, we reanalysed waiting times, deducting the time taken for patients to see the triage nurse before booking in at reception. The results are essentially unchanged, showing that queuing problems after triage cause delays, rather than the triage process itself (table). Our and other studies show that nurses consistently give patients a higher priority than do clinicians.^{1,5} We must consider whether this benefits patients and, if not, how best it can be modified.

Our conclusion is to make triage more efficient rather than abandon it. Prioritisation by degree of urgency obviously benefits patients whose condition is most urgent, and this principle should be instilled in all who work in accident and emergency departments. It is the method by which that prioritisation is to be accomplished that is for debate.

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In search of the unknown primary

SIR,—Christopher Bradley and Peter Selby succinctly identify the dilemmas that challenge all clinicians who must decide how best to manage patients presenting with metastases from an unknown primary.¹ An exhaustive search for the primary is clearly clinically unjustifiable once malignancies that can be therapeutically influenced have been excluded. While such possibilities are being investigated, however, the time required for imaging and to obtain specialised histopathological results and measurements of serum markers should not be allowed to delay adequate palliation in symptomatic patients.

Many patients labelled as having an unknown primary present with pain from bone metastases. Palliative radiotherapy given in one day or over one week will relieve pain promptly in over 80% of patients without either delaying any essential investigation or compromising the ability to give adequate cytotoxic chemotherapy subsequently.

Patients with disseminated malignancy from an unknown primary are stressed by uncertainty

Median waiting time by study group and retrospective priority category. Figures given for triage group are exclusive (and inclusive) of time taken to see triage nurse

Retrospective priority category	Median waiting time (minutes)			
	Triage group (n=2515)	No triage group (n=2522)	Difference (triage minus no triage)	95% Confidence interval for difference*
1 (Most urgent)	26 (26.5)	16	10	1.5 to 13
2	44 (46)	37.5	6.5	1 to 11
3	56 (58)	55	1	0 to 2
4 (Least urgent)	62.5 (66)	62	0.5	-4 to 4

*Calculated using method described by J P Nicholl, meeting of International Society of Clinical Biostatistics, Maastricht, September 1989.

and, frequently, by severe symptoms. Their uncertainty is not alleviated by prolonged investigations that delay palliation and generally fail to answer their questions about the origin of the tumour and the prognosis. Patients deserve prompt palliation, appropriate investigation, and adequate support and counselling through what is too often a terminal illness.

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1 Bradley C, Selby P. In search of the unknown primary. *BMJ* 1992;304:1065-6. (25 April.)

SIR,—We were dismayed by Christopher Bradley and Peter Selby's implication that, in the search for an unknown primary, a biopsy specimen of a cervical node should be obtained, and if it is found to contain squamous cell carcinoma an otolaryngologist should be requested to evaluate the upper aerodigestive tract.¹

It has long been taught in ear, nose, and throat surgery that a diligent search for a possible primary tumour should be undertaken when a patient presents with a neck mass thought to be metastatic in origin. Martin and Romieu wrote 30 years ago: "The immediate removal of a lymph node for diagnosis is never in the best interests of the patient."²

Premature open biopsy of a cervical lymph node leads to increased morbidity with a higher rate of fungation and wound sepsis³ and may even result in reduced life expectancy.⁴ Incisions used for open lymph node biopsy may compromise subsequent radical surgical excision if not planned to be readily incorporated into an incision suitable for radical neck dissection. Cytological examination of fine needle aspirates, on the other hand, can provide useful histological information and is free of the complications associated with open lymph node biopsy.⁵

We believe that lymph node biopsy (excluding cytological examination of fine needle aspirates) should be undertaken only after the aerodigestive tract has been examined thoroughly, including by rigid endoscopy and "blind biopsies," by an ear, nose, and throat surgeon. If this fails to detect a primary focus of carcinoma an open biopsy of the neck mass may be undertaken, but only by a surgeon who is able subsequently to perform a radical neck dissection if indicated.

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Oesophageal cancer in Britain

SIR,—We fully support the letter from K K Cheng and N E Day drawing attention to the increase in oesophageal cancer, particularly in Britain.¹ We recently showed that this increase is almost entirely due to an increase in adenocarcinoma since, in the west midlands, there has been little, if any, increase in squamous cell carcinoma (figure).² This analysis was based on cases registered in the west midlands regional cancer registry during 1962-86. Incidence data of this type include much more detailed information than is available from death certi-

Incidence of squamous cell carcinoma and adenocarcinoma per 100 000 in west midlands, 1962-86

cates. In particular, we could examine trends by both histology and subsite.

Subsite analysis suggests that cancers of the lower third of the oesophagus increased fivefold from 1982 to 1986. Furthermore, the increase in oesophageal adenocarcinoma is paralleled by an increase in adenocarcinoma of the gastric cardia, which contrasts with a decrease in pyloric antral cancers.³ Similar aetiological factors may therefore be operating for these two sites. Dietary factors reflecting socioeconomic factors may be important, as the west midlands data showed a relatively higher risk of adenocarcinoma of both the oesophagus and the cardia in social classes 1 and 2 compared with classes 3 and 4.

Mortality data are invaluable in comparing overall rates between countries. They can rarely, however, be analysed for subsites and almost never for histology. It is therefore vitally important that case-control and incidence studies include information on both histology and subsite. Only then can the differing aetiological factors be fully evaluated.

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1 Cheng KK, Day NE. Oesophageal cancer in Britain. *BMJ* 1992;304:711. (14 March.)

2 Powell J, McConkey CC. The rising trend in oesophageal adenocarcinoma and gastric cardia. *European Journal of Cancer Prevention* 1992;1:265-9.

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Medical abortion

SIR,—R C Henshaw and colleagues claim to have costed surgical abortion in the NHS at £480 and medical abortion at £400.¹ For the past decade a day care surgical abortion unit has been operating in the Women's Hospital in Liverpool; it performed 1798 procedures in the year ended 31 March 1991 at a cost of £206 per procedure, which is similar to that charged for abortion by the charitable sector. This service includes specialised counselling and dedicated social work and is rapid and efficient, currently averaging 10 days between the first contact with the patient and the procedure. All women are under 12 weeks pregnant at the time of the procedure. Two per cent of the patients stay in overnight, not always for medical reasons; this is similar to the figure that I would estimate for those who fail to abort or have incomplete abortions with medical techniques.

Where an efficient and properly organised surgical abortion service is available, mifepristone can only add to the costs. When costing medical abortion account must be taken of the two additional visits required, although there has been

some suggestion that mifepristone can be given on the day of counselling. At the Women's Hospital, however, 11.5% of women either cancel their appointment for the procedure or fail to attend for operation, and we regard this as a positive aspect of our counselling service. There is also the requirement for a follow up visit after a medical termination, and these visits I cost together at £35. In addition, the costs of mifepristone and the gemeprost vaginal pessary amount to £65.

The only saving that will be made with mifepristone is that of theatre time, which for a dedicated theatre using safe but low technology I cost at £55. Obviously the costs of counselling, laboratory tests, and nursing time for both types of procedure remain similar. Therefore, I estimate that abortion with mifepristone, rather than costing less than surgical abortion, will cost £45-50 more. This takes no cognisance of an increased requirement for ultrasound scanning, currently running at 19.8%, which will almost certainly occur owing to the constraints imposed on use of mifepristone.

I suggest that the issue of provision of abortion is being side tracked and that those districts that do not provide a dedicated service should consider this alternative rather than seeing medical abortion as a panacea for their problems.

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1 Henshaw RC, Templeton AA, Naji SA, Russell IT. Medical abortion. *BMJ* 1992;302:914. (4 April.)

Treatment of depression in primary care

SIR,—Allan I F Scott and Christopher P L Freeman¹ quote our controlled trial of amitriptyline versus placebo in general practice as having shown amitriptyline to be no better than placebo in milder forms of depression in primary care.² In doing so they omit the more important positive finding. What the study showed was highly significant superiority of the antidepressant over placebo in most cases of depression in primary care, extending well into the mild range but with a clear threshold in the mildest. Only patients scoring below 13 on the Hamilton scale or failing to satisfy criteria for probable major depression (a threshold well below that for major depression in the *Diagnostic and Statistical Manual of Mental Disorders Third Edition, Revised*) failed to show benefit. An American study in patients with mild depression treated by psychiatrists has given similar findings.³

Scott and Freeman found that patients with depression who received amitriptyline from the psychiatrist had improved significantly more at four weeks than those receiving antidepressant as part of routine general practitioner care. The distinguishing feature was the dose: the group treated by the psychiatrist received at least 150 mg daily while the group treated in general practice received a lower dose. Several studies in general practice have found antidepressant in the standard dose range of 125-150 mg daily for six weeks to be superior to placebo,^{4,5} and several studies of doses of 50-75 mg daily⁶ or a short treatment period⁷ have not done so.

The conclusion is clear. Tricyclic antidepressants should be used in standard rather than low doses in general practice. They will then produce worthwhile benefit, at least in terms of more rapid emission, in patients with moderate to mild depression but not those with the mildest forms. Such treatment is entirely suitable for general practitioners and does not require psychiatric referral. The general practitioner, of course, must see the patient regularly during treatment.

The design of Scott and Freeman's study did not permit measurement of the benefits of combining