the general practitioner to drive the patient to hospital in his own car? This would get the patient to the coronary care unit earlier, ensure that the doctor stays with the patient, and free the busy general practitioner sooner. Certainly the ambulance carries resuscitation equipment, but should cardiac arrest occur while waiting for it the patient is probably no better off than if it occurred en route to hospital in the doctor's car.

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¹ Colling, A, *British Medical Journal*, 1974, 1, 559.

Diagnosis of breast tumours

SIR,—It was encouraging to read the recent paper by Mr J Meiron Thomas and others (21 October, p 1139) on the diagnostic accuracy of clinical examination, xeromammography, and fine-needle aspiration cytology in the diagnosis of breast tumours because it is important to work out an optimal batch of diagnostic tests to be carried out in outpatient breast clinics. As they emphasised, there is little point in carrying out on a routine basis tests which are unlikely to affect the management of the patient. This is especially true if a particular test (xeromammography in this case) is not completely safe.

However, one additional important factor which the paper ignored is the costs of the various tests. An estimate has been made of these at the surgical unit breast clinic for new patients at University College Hospital. Some of these are as follows: clinical examination, £13; xeromammography, £16; aspiration cytology, £5. This information on costs adds support to the authors' conclusion that the value of routine xeromammography is questionable when an efficient cytological service is available.

We are fortunate at UCH in having an efficient and economic cytology service. It appears to us that the development of aspiration cytology in the preoperative diagnosis of breast tumours is called for on a national basis.

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Terminal symptoms in children dying suddenly and unexpectedly

SIR,—The article by Dr A N Stanton and others (4 November, p 1249) gives timely warning of terminal symptoms in children dying suddenly but does not provide enough information. They imply that earlier diagnosis would prevent some of these deaths. No list of final diagnoses is provided by which we could judge this claim. Too often the pathologist's report in such cases gives a vague diagnosis such as "respiratory infection," with death an unexpected event despite adequate care. Even early diagnosis of some cases of meningitis cannot prevent an overwhelming septicaemia.

The authors also list 18 common symptoms in such children. These include drowsiness, irritability, cough, snuffles, and "off feeds." No indication is given of how common these complaints are in general practice. In my

experience only the first is a potentially ominous symptom. The others are almost daily met with and are usually due to trivial childhood ailments. The "controls" are not adequately described, but we are left to assume that they are otherwise healthy—in which case their incidence of minor symptoms is understandably low: less than half of them had any symptoms at all.

I would agree with the authors' advice to review any child who fails to improve or shows evident deterioration. This, in my view, is a more reliable guide to severity of illness in small children, and any doctor should be prepared to revisit a patient if the parents are still concerned.

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SIR,—I read the preliminary report of the DHSS multicentre study of postneonatal mortality (4 November, p 1249) with considerable interest. The authors define "major symptoms" occurring in the infants studied and state that only 12% of the controls compared with 48% of those who died exhibited them in the week before death or interview. This may be a significant epidemiological finding but hardly helps the general practitioner on the lookout for potential victims of this devastating but, in practice terms, rare event.

To a GP with a list of 3000 patients, of whom 70-80 will be under 2 years old, "only 12%" means that about 10 infants per week will exhibit a major symptom—or around 500 per year. Fortunately only one or at the most two of these should end as unexpected deaths. How then should the GP manage them all? As the authors acknowledge, it would not be possible to despatch them all to hospital, and to manage them intensively at home—with presumably two or more daily visits by the practice team members—would stretch resources uncomfortably. Instructing parents to sit up all night with their sick child would create much anxiety.

The authors conclude that a large proportion of deaths might be prevented by appropriate action, but the figures quoted do not altogether support that conclusion in that there was no group studied of children with major symptoms admitted to hospital; roughly equivalent proportions of cases and controls were seen by the doctor at home and none in the control group was admitted to hospital. The numbers are admittedly small and the benefits of medical intervention seem inconclusive.

It is the GP who will usually be the doctor first called to see the child with a major symptom, and he would welcome more guidance on estimating the seriousness of the symptom and on appropriate action. At present this is asking the impossible, but then so it is, perhaps, to pick out the one child in 400-500 seen each year with serious symptoms who will be the one to deteriorate rapidly and die unexpectedly. I look forward to further help from the study group.

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SIR,—I hesitate to criticise such erudite and well-intentioned authors as those of the report of the DHSS multicentre study of postneonatal mortality (4 November, p 1249), but it seems to me that they have omitted an important

piece of arithmetic—that relating their findings to the community at large. This mistake is made in *BMJ* articles with lamentable frequency and was also well exemplified only four weeks earlier by Dr Peter Tyrer's article (7 October, p 1008), in which he generalised about the prescribing habits of a number of general practitioners after having only seen an average of one patient a year from each of them.

In the article on postneonatal mortality the controls were taken as representative of the children under 2 in a population of up to 5 million, or, in round figures, 100 000 children. The one case of diarrhoea among the 154 controls represents perhaps 600 children, of whom 12 died unexpectedly—2%. Similarly the five children "off feeds" represent 3000, of whom 26 died unexpectedly—1%. To suggest that the "primary care team" can "keep under close supervision" all children who have "non-specific symptoms" in the knowledge that 98 or 99% of them will come to no serious harm seems to ask for a wave of alarm among parents that would swamp primary care.

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Maprotiline hydrochloride and grand-mal seizures

SIR,—You have recently published two independent reports (10 June, p 1523; 30 September, p 961) of grand-mal seizures being associated with maprotiline hydrochloride. While seizures clearly are a side effect of this drug, the reports may have misled some who are unaware that they are a side effect of the majority of non-monoamine-oxidase-inhibiting antidepressant drugs. A recent review of the experimental and clinical literature reveals a spectrum of potential for lowering of seizure threshold by such compounds. For example, chlorimipramine and amitriptyline appear more epileptogenic than drugs such as maprotiline and nomifensine, and the latter may even be anticonvulsant.¹

The fact that seizures can be precipitated by antidepressants highlights the importance of careful selection of psychotropic drugs for all patients, but in particular for those who may have a lowered seizure threshold for whatever reason. If such is suspected, to advocate a tricyclic drug is probably illogical. Whichever antidepressant is chosen the dose should be increased slowly and polypharmacy avoided. The situation in patients with epilepsy is no exception here; the fact that the antidepressants can interfere with serum anticonvulsant levels is an additional complication that has to be considered.

In that many of the clinical reports of seizures following antidepressant drugs indicate that the fits occur within a few days of starting the drug, and in particular following recent change of dose, it is difficult to relate cases 1 and 2 reported by Drs G A A Shepherd and F Kerr directly to the maprotiline. Other factors perhaps should be considered. It is interesting that three of the four reported patients were taking the contraceptive pill.

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¹ Trimble, M R, *Epilepsia*, 1978, 19, 241.