

- All letters must be typed with double spacing and signed by all authors.
- No letter should be more than 400 words.
- For letters on scientific subjects we normally reserve our correspondence columns for those relating to issues discussed recently (within six weeks) in the *BMJ*.
- We do not routinely acknowledge letters. Please send a stamped addressed envelope if you would like an acknowledgment.
- Because we receive many more letters than we can publish we may shorten those we do print, particularly when we receive several on the same subject.

More day surgery

SIR,—Dr Richard Smith reported the Audit Commission's recommendation that day surgery should be increased,¹ and twice in the same week I saw the then health minister, Kenneth Clarke, on television telling us that day surgery is the answer to surgical waiting lists. It all sounds simple, logical, and a fine way of saving money. Why does it not seem quite so simple to the surgeon?

Day surgery is a prime example of the results of research not being applied. The feasibility and efficiency of day surgery within the NHS have been thoroughly proved. It is 45 years since Farquharson showed the safety and success of outpatient hernia repairs under local anaesthesia²; 30 years since Stephens *et al* described a system for organising care in the community³; and 13 years since day surgery was evaluated by clinical trials in terms of outcome⁴ and costs^{4,6} and the responses of patients and relatives,⁷ general practitioners,⁸ and district nurses.⁸ Many successful ventures in day care have been described, including objective clinical and economic evaluations.¹⁰⁻¹³ It would be interesting to know how many still thrive.

In an audit of a general surgical practice in 1981 we showed that 70% of general surgical operations could be carried out in either a day care or a short stay facility.¹⁴ With the progress in endoscopic techniques the proportion is, if anything, growing. Why does actual practice lag so far behind?

Day surgery, if it is to include fairly "major" operations, such as those for varicose veins and hernia, imposes considerable demands on a surgical and nursing unit.¹⁵ It requires more time and resources to be spent in outpatient clinics evaluating patients and their social circumstances so that safe decisions can be made.¹⁶ Properly staffed and equipped purpose designed buildings are needed. It requires far more participation from consultants as procedures that are normally safely left to the care of juniors for inpatients require close consultant supervision if the patient is to go directly home. Occupying consultants' time with numerous minor and intermediate operations is perceived in the NHS, although not elsewhere, as underusing consultant skills and detracting from the care of more seriously ill patients. If there are insufficient consultants this is an appropriate view. Day care also places greater demands on ambulance services, district nurses, general practitioners, and relatives. As good communication is essential it requires a high level of secretarial support.

Most importantly, day surgery radically changes the nature of inpatient work. Removing the fit and mobile patients means that the whole inpatient ward is occupied by elderly and seriously ill patients. So the resources, particularly nurse staffing, saved by day care need to be ploughed back into inpatient care. How often has this happened in practice?

So far the few successful examples have depended

for their success on the industry of enthusiastic individuals. There is not only little incentive to make day surgery work within the NHS but positive disincentive because of the repercussions I have outlined. Doctors and nurses cannot be expected to create more commitments and heavier workloads without proper support and without seeing compensatory benefits, including the promised increase in consultant staffing.

Of course hospital care can be more efficiently organised, and of course day care, short stay, and programmed investigation units can be made to work superbly well. But they are not a cut price alternative.

VAUGHAN RUCKLEY

Royal Infirmary,
Edinburgh EH3 9YW

- 1 Smith R. More day surgery. *BMJ* 1990;301:1009-10. (3 November.)
- 2 Farquharson EK. Early ambulation with special reference to herniorrhaphy as an outpatient procedure. *Lancet* 1955;ii: 517-9.
- 3 Stephens FO, Dudley HAF. An organisation for out-patient surgery. *Lancet* 1961;ii:1042-4.
- 4 Russell IT, Fell M, Devlin B, *et al*. Day case surgery for hernias and haemorrhoids: a clinical, social and economic evaluation. *Lancet* 1977;ii:844-5.
- 5 Ruckley CV, Cuthbertson C, Fenwick N, *et al*. Day care after operations for hernia or varicose veins: a controlled trial. *Br J Surg* 1978;65:456-9.
- 6 Prescott RJ, Cuthbertson C, Fenwick N, *et al*. Economic aspects of day care operations for hernia or varicose veins. *J Epidemiol Community Health* 1978;32:222-5.
- 7 Garraway WM, Cuthbertson C, Fenwick N, *et al*. Consumer acceptability of day care after operations for hernia or varicose veins. *J Epidemiol Community Health* 1978;32:219-21.
- 8 Garraway WM, Ruckley CV, Prescott RJ. General practitioners' response to day care surgery. *Practitioner* 1978;221:22-5.
- 9 Ruckley CV, Garraway WM, Cuthbertson C, *et al*. The community nurse and day surgery. *Nursing Times* 1980 February;255-6.
- 10 Williams JA. Outpatient operations: the surgeon's view. *BMJ* 1969;ii:174-5.
- 11 Townsend M. Major day case surgery. *District Nursing* 1970;13:188.
- 12 Calnan J, Martin P. Development and practice of an autonomous minor surgery unit in a general hospital. *BMJ* 1971;iii:92-6.
- 13 Berrill TH. A year in the life of a surgical day unit. *BMJ* 1972;iii:348-9.
- 14 Ruckley CV, Ferguson JBP, Cuthbertson C. A five day ward as part of a comprehensive surgical service. *BMJ* 1981;ii:1525-7.
- 15 Ruckley CV. Day care and short stay surgery for hernia. *Br J Surg* 1978;65:1-4.
- 16 Ruckley CV, Ferguson JBP, Cuthbertson C. Surgical decision making. *Br J Surg* 1981;68:837-9.

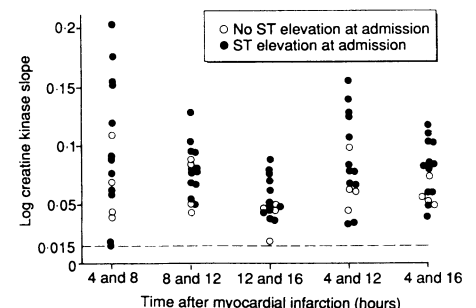
Early diagnosis of acute myocardial infarction

SIR,—Dr Adam D Timmis bemoans the lack of a diagnostic test that is "available 24 hours a day" and "rapidly interpretable and diagnostic very early after the onset of symptoms."¹ Such a test has been described.

Collinson *et al* suggest that a "log creatine kinase slope" of less than 0.015 excludes myocardial infarction as the cause of acute chest pain with

a sensitivity of 100%.^{2,3} The log creatine kinase slope refers to the rate of change per hour of the logarithmic value of serum total creatine kinase activity, calculated from sequential four hourly measurements of creatine kinase activity during the first 12 hours of admission to the coronary care unit.

In a similar study I found that none of 16 patients with myocardial infarction had a log creatine kinase slope of less than 0.015, even when values were calculated from just two measurements of creatine kinase activity, taken at least four hours apart, four to 16 hours after the onset of chest pain.⁴ A review of the electrocardiograms taken on admission to hospital of these patients showed that 12 had diagnostic regional ST elevation and that four had less specific abnormalities: left bundle branch block, widespread ST and T wave depression, ST depression with tall, peaked T waves, and regional ST and T wave depression with right bundle branch block. The figure shows the log creatine kinase slopes of patients with and without regional ST elevation on admission. There



Values for log creatine kinase slope calculated from two measurements among patients admitted to hospital within four hours after myocardial infarction

was no statistical difference between the two groups.

Measuring the log creatine kinase slope, particularly by using a bedside dry reagent strip analyser,³ is certainly worth further assessment as it has the potential to fulfil the requirements of availability, rapid interpretability, and sensitive diagnostic capability.

P J MULLEN

University Department of Medicine,
Liverpool L69 3RX

- 1 Timmis AD. Early diagnosis of acute myocardial infarction. *BMJ* 1990;301:941-2. (27 October.)
- 2 Collinson PO, Rosalki SB, Flather M, Wolman R, Evans T. Early diagnosis of myocardial infarction by timed sequential enzyme measurements. *Ann Clin Biochem* 1988;25:376-82.
- 3 Collinson PO, Ramhadany EM, Rosalki SB, *et al*. Diagnosis of acute myocardial infarction from sequential enzyme measurements obtained within 12 hours of admission to hospital. *J Clin Pathol* 1989;42:1126-31.
- 4 Mullen PJ. The diagnosis of myocardial infarction in the first 16 hours after the onset of pain by measurement of the log CK slope. *Postgrad Med J* (in press).