### Gag and stroke

Sir—Drs Stone and Winthrop (January/February 1994, pages 52–8) perpetuate the idea, common to many doctors and medical students, that the gag reflex is in some way related to swallowing. The gag reflex is a protective mechanism preventing entry of noxious substances into the pharynx; it does not act as a protection for the swallow.

The protective mechanism for swallowing is the cough reflex. The gag reflex is frequently absent in patients with a normal swallow [1] and also absent in patients that can swallow following a stroke [2].

Swallowing is more likely to be at risk if patients are unable to or have a weak voluntary cough and/or they are unable to tolerate small volumes of water. These two points alone are more predictive of swallowing problems than the gag reflex.

#### References


1 Davies AE, Kidd D. Prevalence of the gag reflex and pharyngeal sensation in healthy elderly subjects. *Age and Ageing* 1993;**23(S1)**:p18(47).

2 Smithard DG, England R, Renwick DS, Park C, *et al.* Aspiration following acute stroke: incidence and diagnosis. *Proceedings 2nd International Conference on Stroke.* Geneva: World Federation of Neurology, 1993, p52.



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### Work experience for sixth form students

Sir—With regard to Dr Osborne's article (July/August 1994, pages 349–50), the usefulness of work experience for 6th form students was discussed at a recent meeting of the Council of Deans of Medical Schools and Faculties. The potential problems associated with the large number of 6th formers who might be interested in medicine but have no realistic prospect of gaining admission, weighed heavily in our discussion. In particular, the problems surrounding patient confidentiality were of major concern. A consensus view prevailed which held that this very short form of work experience was of little value in the medical school selection process compared to the more extended commitments undertaken by 6th formers who work with the elderly, handicapped and other disadvantaged groups. From an administrative viewpoint, medical schools cannot take the responsibility for organising such work experience placements in Trusts nor for the supervision of the 6th formers during such a placement.


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### Management of myocardial infarction

Sir—With the benefit of hindsight gained from the above audit [1], it is now possible to comment on the flawed methodology of the article outlining unsatisfactory aspects of the management of myocardial infarction (MI) in patients admitted to general medical wards [2].

The first criticism is that the authors of the latter study equated the diagnostic criteria of recent onset pathological Q waves with the electrocardiographic (ECG) indications for thrombolysis. The two do not necessarily coincide, because the ECG criteria have to be much more specific, given the fact that the risk/benefit profile of thrombolysis crucially depends on the ECG manifestations of MI [1]. The flaw in the criteria for enzymatic diagnosis of MI was the failure to specify whether or not a two-fold increase in enzyme levels referred to the upper limit of the normal range. Even if it did, such a pass/fail diagnostic approach tends to maximise specificity at the expense of sensitivity, and this error is compounded by the failure of conventional day 1–3 sampling to take cognisance of the inter-individual variability in the time course of evolution of cardiac enzyme levels in MI [3]. In the thrombolytic era, the intellectual challenge of enzymatic diagnosis of MI might well require the substitution of Bayesian logic for the relative insensitivity of the conventional pass/fail diagnostic approach, otherwise deserving patients might be denied worthwhile treatment by default.

#### References


1 De Bono DP, Hopkins A. The management of acute myocardial infarction: guidelines and audit standards. *J R Coll Physicians Lond* 1994;**28:**312–7.

2 Lawson Matthew PJ, Wilson AT, Woodmansey PA, Channer KS, *et al.* Unsatisfactory management of patients with myocardial infarction admitted to general medical wards. *J R Coll Physicians Lond* 1994;**28:**49–57.

3 Yusuf S, Collins R, Lin L, Sterry H, *et al.* Significance of elevated MB isoenzyme with normal creatine kinase in acute myocardial infarction. *Am J Cardiol* 1987;**59:**245–50.



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Sir—Since I wrote you a letter entitled 'If I were a patient' (October 1993, page 478), little progress seems to have occurred in terms of the general awareness of the value of myocardial perfusion scintigraphy. The recent guidelines and audit standards published by your *Journal* (July/August 1994, pages 312–7) reinforce my concerns.

From previous correspondence I was left with the impression that in future the British Cardiac Society and the Royal College of Physicians would take into