Letters to the Editor

Thrombolytic therapy in the elderly

Sir,

The section regarding thrombolytic therapy in the elderly in the review article by Diggory *et al.*¹ would appear to show a lack of attention to detail of the 'icing' with regards to the issue of age and the risks/benefits of thrombolysis. The evidence presented does not support their statement that 'It may be reasonable not to treat patients aged 75 or older with intravenous streptokinase'. Although Lew's paper² (which incorporates data from Ganz's³ paper) showed a two-fold increase in the incidence of major haemorrhagic complications in patients over 75 compared with younger patients, 50% of these were related to invasive procedures such as cardiac catheterization or endotracheal intubation. Furthermore, although 5 of 17 patients with major haemorrhagic complications died, none of the 4 deaths in the patients over 75 was directly related to haemorrhage (deaths were identified as being due to cardiogenic shock on day one of the study, pneumonia on day 14, cardiac rupture on day 5, and cardiogenic shock from papillary muscle rupture on day 20). What the studies of Ganz, Lew, and Chaitman highlight is the increased risk of major haemorrhagic complications following invasive procedures in elderly patients who have recently had thrombolytic treatment. In Chaitman's study, 54% of haemorrhagic complications in patients aged over 70 were directly related to cardiac catheterization.⁴

The benefits of thrombolysis in the elderly are clear. ISIS-2, which included 3411 patients aged 70 and over (401 of whom were aged 80 or more) and which did not involve routine cardiac catheterization, demonstrated a significant reduction in mortality in patients aged 70 and over and, equally importantly, showed 'no evidence that the risks of treatment, in particular cerebral haemorrhage or other bleeding, were related to age'.⁵ The preliminary results from ISIS-3 would support the use of thrombolytic drugs in the elderly as do the guidelines on thrombolysis recently jointly produced by the American College of Cardiology and American Heart Association.⁶

It took cardiologists almost 20 years to realise the benefits of streptokinase for their patients.⁷ Hopefully geriatricians will improve significantly on that!

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Analgesic nitrous oxide: rapid, safe therapy for addictive withdrawal

Sir,

I read with interest the papers by Gillman and Lichtigfeld recently published in the *Journal*^{1,2} and would like to confirm the observations of these workers.

This treatment has been extremely well tested¹ in many thousands of cases and provides the most rapid method of detoxification presently available. Since last year I have treated over 400 cases of alcohol and opioid withdrawal in Helsinki, and have confirmed that the therapeutic response occurs within minutes of the beginning of inhalation, with lasting benefit, as measured by the almost complete lack of sedative medication needed following the inhalation. The gases are given on one occasion only in most cases, as follows: 20 minutes oxygen; 20 minutes carefully titrated analgesic nitrous oxide which is then followed by a 20 minute oxygen washout period.¹ It should be emphasized that the correct method of titration, using equipment especially designed for this technique, ensures that the patient is co-operative and fully conscious throughout the entire nitrous oxide administration.¹ As stated by Gillman and Lichtigfeld¹ this is not an anaesthetic technique but does require training to ensure that both the patient and the therapist derive maximum benefit.¹

The effects of the gas on craving some weeks after the initial withdrawal are striking and in my experience appear to prevent relapse in certain individuals.

The value of this approach for screening those patients requiring intensive in-patient therapy and those who can safely be treated on an out-patient basis² has also been of considerable help to me.

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Resident recognition and treatment of hypercholesterolaemic patients

Sir,

Effective treatment of hypercholesterolaemia reduces the risk of coronary heart disease (CHD). Even after the National Institutes of Health (NIH) Consensus Conference of 1985, studies reported that hypercholesterolaemia was recognized in only 47% to 66% of in-patients.^{1–4} In 1988, a nationwide physician education program was initiated by the release of the National Cholesterol Education Program Committee (NCEP) guidelines.⁵ One study suggests that family practitioners' recognition of hypercholesterolaemia has increased since then.⁶ However, the effect of the guidelines on resident physician recognition and treatment of hypercholesterolaemia is unknown. This study was performed to assess the frequency of recognition and treatment of hypercholesterolaemia by resident physicians in the in-patient setting after the publication of the NCEP guidelines.

Records of all admissions to the medical service at the Medical College of Georgia (MCG) from August 1988 to February 1989 were screened. Patients whose cholesterol was not measured, who died during the admission, or whose chart was unavailable for review were excluded. Other exclusion criteria were admission to the intensive care unit or from the emergency room, dialysis, and diagnosis of malignancy or HIV disease. Charts of the 320 patients not excluded were reviewed. Laboratory printouts were examined to determine if serum cholesterol was greater than 240 mg/dl (6.24 mmol/l). Twenty-five per cent (50) of 203 general medicine patients and 40% (47) cardiac catheterization patients had an elevated serum cholesterol. These 97 patients comprised the study group. Their charts were reviewed to determine if elevated cholesterol was recognized and if a diagnostic or therapeutic action was undertaken.

Patients were then classified as general medicine or cardiac catheterization admissions. The age, sex, serum cholesterol level, and prior history of hyperlipidaemia or coronary heart disease were recorded. The number of risk factors, including male sex, diabetes mellitus, hypertension, family history of CHD, tobacco use, and obesity was tallied. Chi-square analysis between the groups was computed for frequency of recognition, diagnostic and therapeutic actions, sex and history of hyperlipidaemia. Student's *t*-tests were computed between the groups for mean differences in age, cholesterol level, and number of risk factors.

Sixty per cent of the hypercholesterolaemic patients were recognized and 57% underwent a diagnostic or therapeutic action. Comparisons between general medicine and cardiac catheterization patients for mean age,

cholesterol level, male sex, and history of hyperlipidaemia or CHD were nonsignificant. General medicine patients had significantly fewer risk factors than cardiac catheterization patients (2.2 vs 2.7, $P < 0.05$). Hypercholesterolaemia was recognized in 38% of patients admitted to general medicine services and 83% of those admitted for cardiac catheterization ($P < 0.01$). No action was undertaken in 66% of general medicine and 19% of cardiac catheterization patients ($P < 0.01$). Cholesterol lowering diet was ordered significantly more often for cardiac catheterization patients.

We conclude that many residents often do not recognize or treat hypercholesterolaemia in the in-patient setting at the Medical College of Georgia despite publication and dissemination of the NCEP guidelines. Hypercholesterolaemia is recognized and treated significantly more often if the patient is admitted for cardiac catheterization than to a general medicine service.

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Spontaneous hepatic rupture due to metastatic malignant melanoma

Sir,

The liver is a common site for the growth of metastatic deposits of malignant melanoma. The following case report demonstrates a rare complication of this condition.