reduced to 3 μg min, and blood sugar two hours later was 8.9 mmol/l, and 10 hours later 4.5 mmol/l. Urine tests returned to normal four hours after the reduction and remained normal despite continued high doses of corticosteroids. A later glucose tolerance test while 15 mg day of prednisone was being taken was normal.

The ketosis and hyperglycaemia only during the period of high salbutamol dosage suggests this as the cause, rather than corticosteroids. The case of Drs Leslie and Coats required as much as 32 U/h of insulin to prevent ketosis with 10 μg /min of salbutamol, and we speculate that a rise in plasma glucagon with beta-stimulation³ may perhaps contribute to this "insulin resistance,"⁴ though is unlikely to be the only factor involved.

The dose of salbutamol we used was higher than that usually recommended for asthma, but the use of such doses in many very ill patients has been permitted by the remarkable freedom from serious (particularly cardiac) toxicity to date. We think that regular monitoring of blood glucose is now indicated if high doses of salbutamol are used, at least until the frequency of the hyperglycaemic reaction can be assessed.

D LEOPOLD
ANN McEVOY

Asthma Research Unit,
Sully Hospital,
Penarth, Glam

¹ Thomas, D J B, *et al*, *British Medical Journal*, 1977, **2**, 438.

² Leslie, D, Coates, P M, *British Medical Journal*, 1977, **2**, 768.

³ Kaneto, A, *et al*, *Endocrinology*, 1975, **97**, 1166.

⁴ Müller, W A, *et al*, *American Journal of Medicine*, 1973, **54**, 52.

Seat belt legislation

SIR,—Like Mr P A M Weston and Dr D J Paynton (8 October, p 955) I work in a casualty department, but I cannot support their contention concerning seatbelts. I am opposed to any legislation for the following reasons. Firstly, any reasonable concept of freedom includes the ability to hazard your own health. If this is denied, then legislation must also be passed forbidding smoking, cream cakes, and sexual promiscuity, as respiratory disease, obesity, and venereal disease also cause much distress and suffering. Yet no one has, as yet, advocated these measures on the grounds of health. Humanity is entitled to live in such a way as to hazard its own welfare without interfering legislation based on somebody's opinion of what is "good for you." Secondly, freedom cannot be measured in purely economic terms. To argue that legislation is good and necessary because it saves the NHS money has an unpleasant dictatorial tang, out of place in a society that values individual freedom. But this is part of a larger issue. Coercion has no place in health care.

J C ALLEN

Dryburn Hospital,
Durham

SIR,—The letter from Mr P A M Weston and Dr D J Paynton (8 October, p 955) has again raised, possibly unintentionally, another issue where the politicians could assist in reducing accident and emergency departments' work loads. In their first paragraph they suggest those persons opposed to the compulsory wearing of seat belts should attend accident and emergency departments late at night and

at weekends. In the rest of the letter they do not confirm whether these were the times when the majority of the 41 patients attended. If indeed they have found that many of the patients attended at these times, then their recent alcohol consumption would be of interest. As presumably some of the patients were passengers, it is not simply a question of fitness to drive. It could be that attitudes to wearing seat belts are affected by blood alcohol levels.

There are, possibly, ethical and legal problems in measuring blood alcohol levels as a routine in all such patients, but ways must be found of doing so. Then the evidence to politicians and other interested parties could be so presented that legislation would follow to reduce the heavy morbidity in all its forms that is caused unnecessarily by road accidents.

S M LORD

Liverpool

Acute gastric dilatation in anorexia nervosa

SIR,—In reply to Dr O P N Grüner (17 September, p 774), mesenteric obstruction was considered as a cause for acute gastric dilatation but was not discussed because of space limitations. Mesenteric obstruction seems to be recognised more commonly in the USA than in the UK. The anatomical structure causing the obstruction remains in doubt, though more authors agree that it is due to a loss of fat padding. The case for mesenteric obstruction is supported by Dr Grüner's references and by the common finding of duodenal ileus in anorectic patients without gastric dilatation,¹ and by the association of duodenal dilatation with acute gastric dilatation from a variety of aetiologies.^{1 2}

I dispute, however, Dr Grüner's claim that the obstruction is cause rather than effect of the psychological illness. Our patient had severe psychological problems before organic symptoms and the dilatation occurred during the recovery phase of her illness.

G BROOK

Airedale General Hospital,
Keighley,
West Yorkshire

¹ Scobie, B A, *Medical Journal of Australia*, 1973, **2**, 932.

² Makkowski, B, *British Medical Journal*, 1947, **2**, 128.

³ Wallace, R G, and Howard, W B, *Radiology*, 1970, **94**, 307.

⁴ Berk, R N, and Coulson, D B, *Radiology*, 1970, **94**, 303.

⁵ Paul, J G, *et al*, *American Journal of Surgery*, 1973, **126**, 658.

Medical hazards of air travel

SIR,—The cardiovascular emergencies with which Dr I Drummond Rennie (20 August, p 515) had to deal while travelling on various air routes in the USA leads one to consider whether the illnesses were merely untimely exacerbations of pre-existing disease or were actually related to air travel itself. Many individuals with extensive health problems are safely transported by air lines without incident and the value of screening such travellers must remain doubtful. It is to be expected, however, that the stresses of even a relatively short flight, coupled with minor hypoxia, immobility, and not inconsiderable fluid loss, could at times affect even healthy passengers.

Our recent report¹ of eight passengers who developed features of pulmonary thromboembolism after travel draws attention to this problem. All had been in normal health before their journeys, which were made by aircraft (3), car (3), rail alone (1), and rail/ship combined (1). Six of this group had a previous history of venous disorders in the legs and by the time of presentation three had clinical evidence of calf vein thrombosis and one of active superficial thrombophlebitis. The term "economy class syndrome" has been coined to describe the venous problems which develop as a consequence of the relative immobility associated with air travel. The velocity of venous blood flow in the lower limbs in the recumbent position is reduced by half when standing and by two thirds when sitting.² It seems probable, therefore, that the somewhat cramped seating conditions of modern aircraft can reduce blood flow further, making the risk of venous thrombosis and its thromboembolic sequelae more likely.

Whether or not the patients in Dr Rennie's experience were suffering from such thromboembolic complications as a direct result of air travel will presumably remain unresolved but it would seem prudent that intending travellers, and particularly those with pre-existing venous disease, should be advised to take appropriate exercise during the course of their journey.

IAN S SYMINGTON

Wolfson Institute of
Occupational Health,
Medical School,
Dundee

¹ Symington, I S, and Stack, B H R, *British Journal of Diseases of the Chest*, 1977, **71**, 138.

² Wright, H P, and Osborne, S B, *British Heart Journal*, 1952, **14**, 325.

Population control

SIR,—Dr A T Coleman (24 September, p 835) asks why chastity is not discussed as an important means of population control. I think the answer is three fold. Firstly, no sensible person could believe that chastity could ethically be required in marriage: it cannot, therefore, make a large contribution to the population control. Secondly, Kinsey showed what every person of common sense knows—namely, that the realities of human life have always included sexual activity far beyond the hypocritical malaise of puritan society. Finally, "the value of chastity" is a false value. It is not ethical to support a "value" that is wasteful, destructive, and blasphemous.

KEITH NORCROSS

Dudley Road Hospital,
Birmingham

Surgical treatment of trigeminal neuralgia

SIR,—Your otherwise admirable leading article (17 September, p 718) on the treatment of trigeminal neuralgia ends on a probably false note of optimism. When new avenues open up faster than opportunities to assess their merits the choice of treatment is best determined by a few simple principles, adapted to individual circumstances, as you yourself have indicated. The mortality of treatment must not be higher than that in the natural history of the disease and not even a single death is acceptable. There should be no morbidity beyond the inevitable