28% oxygen, her PaO_2 was 20.22 kPa and PaCO_2 4.5 kPa. Prior to her return to the ward she was started on aminophylline suppositories 360 mg twice daily, prednisolone 20 mg twice daily, salbutamol, and becotide inhalers. Three days later she had three grand mal seizures within one hour, commencing on the right side of her body. Intravenous diazepam (10 mg) given after the first seizure did not prevent the two further attacks. Treatment with aminophylline suppositories was stopped and no further fits occurred. An electroencephalogram on the following day was normal.

In children, convulsions have followed the rectal administration of aminophylline,¹ but this effect has rarely been described in adults. Absorption from suppositories is unpredictable.² In adults convulsions have occurred following intravenous administration.³ The patient described above was given 720 mg/day = 0.8 mg aminophylline/kg/h for three days. It has been recommended that adults with severe asthma should be given no more than 1 g/day of aminophylline intravenously,⁴ or no more than 0.9 mg/kg/h.⁵ This case illustrates the danger of aminophylline suppositories and prolonged treatment at high doses. We suggest that this drug should be prescribed by weight at specified intervals rather than in terms of the number of tablets or suppositories, particularly in small adults.

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¹ Bacal, H L, *et al*, *Canadian Medical Association Journal*, 1959, **80**, 6.

² Martindale, *The Extra Pharmacopoeia*, 27th edn, ed A Wade, p 279. London, the Pharmaceutical Press, 1977.

³ Zwillich, C W, *et al*, *Annals of Internal Medicine*, 1975, **82**, 784.

⁴ *British Medical Journal*, 1975, **4**, 65.

⁵ Mitenko, P A, and Ogilvie, R I, *New England Journal of Medicine*, 1973, **289**, 600.

Management of maternal phenylketonuria

SIR,—In a recent article Dr G M Komrower and others (26 May, p 1383) report their experiences with phenylketonuria in pregnancy and quote a case of ours.¹ Unfortunately in his table III, owing possibly to a transcription error, the final IQ of our patient's child was given as 65. This child's latest IQ, at the age of 9 in 1976, was: WISC verbal 86; performance 90; full scale 87.

The IQ figure in the last column should therefore read 87. This is of some importance in supporting the conclusion of Dr Komrower's article that a low-phenylalanine diet provides some protection to the fetus in maternal phenylketonuria.

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¹ Arthur, L J H, and Hulme, J D, *Pediatrics*, 1970, **46**, 235.

Pressure in cuffed tubes

SIR,—Dr T H S Burns (21 July, p 212) is quite correct in drawing attention to the rise in pressure if the cuff is inflated with air when nitrous oxide is the anaesthetic used. This is due to permeation of the cuff membrane by the nitrous oxide. The rate of permeation depends on a variety of factors—for example, the nature of the respective gases, their partial

pressure, the thickness of the membrane, and the nature of the membrane. The last factor is by far the most important, and it has been found that plasticised polyvinyl chloride (the material used in Portex tubes) has a very much lower permeability coefficient than either natural rubber or silicone rubber, the other materials commonly used.

For maximum safety, however, it is nevertheless advisable to inflate the cuffs with the anaesthetic mixture and not air, to inflate only to the minimum pressure needed, to use release valves, and to release at least every hour any excess build-up of pressure that may have occurred.

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Management of self-poisoned patients

SIR,—Drs D R Blake and M G Bramble (30 June, p 1763) raise the question of whether self-poisoning patients need to be admitted to hospital to await psychiatric assessment. Dr E J Salter (21 July, p 205) is right in assuming that in some parts of the country the number of patients being discharged either from casualty or before psychiatric assessment takes place is larger than in the Newcastle survey (13.5%).

I recently surveyed patients falling into this category at a local general hospital over a six-month period. One-hundred and eighty-one patients were involved in 193 self-poisoning episodes, of which 71 (39%) patients were not seen by a psychiatrist, 55 (30%) of these not being admitted from the casualty department. A search of hospital records in psychiatric hospitals serving the general hospital plus continual recording of self-poisoning episodes revealed that, of those patients not seen by a psychiatrist, 14 were already known to the psychiatric services, though half of these had come into contact only because of previous overdoses. In a four-month period following self-poisoning, two patients were seen following subsequent overdoses—a 15-year-old girl, who was referred to child guidance, and a 61-year-old woman with depression secondary to hypocalcaemia. There was also one patient who was referred following a medical admission for psychogenic vomiting with hypokalaemia. Three patients were admitted as psychiatric inpatients within one month of their overdose, two being diagnosed as having personality disorders and one as a depressed alcoholic. Two further patients were referred by their general practitioners for psychiatric assessment because of worries about further overdosing. In all, 11% of the patients discharged home were seen by a psychiatrist subsequently, with continuing psychiatric contact in the majority of cases.

Although no patients appeared to have committed suicide (from a search of coroners' records) as a result of discharge before psychiatric assessment, this superficial survey of records suggests a high rate of psychiatric morbidity in these patients. I would seriously question the ability of overworked casualty officers or medical staff to make adequate assessments of these patients in a busy casualty department, where the patients may still be under the influence of the drugs that they have taken. There are obviously many hospitals like the one described above where shortage of

acute beds and lack of immediate psychiatric assessment mean many patients are sent home without adequate assessment. Written guidelines and discussion of self-poisoning assessments with psychiatric staff would help those staff who have to make the decision about whether a patient should be sent home. Provision of personnel with expertise in assessing these patients might be one way of reducing medical admission without unnecessary risk to the patients concerned.

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Diverticular disease in Kenyan Africans

SIR,—I am interested in the comments by the Reverend H C Trowell and Mr D P Burkitt (30 June, p 1795) on my article on diverticular disease in Kenyan Africans (2 June, p 1465). The heading of their letter is, I feel, misleading as diverticular disease occurs not only in urban but also in rural Kenyan Africans. The Kenyatta National Hospital is the major referral hospital for the whole country and the fact that the patients were examined there does not mean that they lived in Nairobi. As the series was a retrospective radiological one and much of the clinical information was not available, I was unable to differentiate the patients according to their place of residence or social class. In Nairobi, however, most Africans in the upper social classes attend one of the private hospitals and the Kenyatta National Hospital deals largely with the lower income groups. It should also be noted that in the article by Archampong *et al*¹ that Dr Trowell and Mr Burkitt mention in their letter the patients with diverticular disease, though mainly upper class, had all lived on traditional African high-residue food. The authors concluded that other factors may contribute to the pathogenesis of the disorder.

I agree that quantitative data and dietary surveys are needed. I have just completed such a survey and hope to publish the results in the near future.

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¹ Archampong, F Q, Christian, F, and Badoe, E A, *Annals of the Royal College of Surgeons of England*, 1979, **60**, 464.

SIR,—Dr John F Calder has reported an unusually high incidence of diverticular disease of the colon for Africans (2 June, p 1465). If others have not found this, it is not necessarily from lack of looking. During a 17-month period (1972-3) at Mulago Hospital, Kampala, I found only one patient with diverticular disease, and he had only one diverticulum.

A 40-year-old Ugandan official was referred for barium enema. He gave a six-month history of left iliac fossa pain and intermittent blood in his stools. Stool examination was negative. A single sigmoid diverticulum was seen, associated with localised narrowing and a "saw-tooth" mucosal pattern. A noteworthy feature of barium enema examination in Ugandan patients was the very large capacity of the colon. Two litres of contrast could be introduced without filling of the caecum. Over-