atrial natriuretic peptide concentrations are raised in children with cardiopulmonary diseases.

We have been interested in seeing whether atrial natriuretic peptide can be found in plasma throughout life and have examined samples of venous blood from the fetal side of the placenta of 10 normal pregnancies and from 30 fasting normal adults (aged 18-42) in the erect posture.

Atrial natriuretic peptide concentrations in cord blood of 10 fetuses and in 30 fasting adults.

Plasma atrial natriuretic concentrations were measured after Sep-pak solvent extraction with a sensitive specific radioimmunoassay developed at the Royal Postgraduate Medical School.¹ The sensitivity was equivalent to 1 pmol/l in plasma. The figure shows concentrations found in the two groups and shows that atrial natriuretic peptide was found in the circulation from birth.

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Polaroid non-mydiatic retinal photography

SIR,—The evaluation by Dr R E J Ryder and colleagues (2 November, p 1256) of the Canon CR2-45NM and CR3-45NM retinal cameras is of great interest. We have used the CR2-45NM camera at a weekly district general hospital diabetic clinic since June 1984 and would like to make the following observations.

Firstly, although the CR2-45NM is technically less sophisticated than the later model, constant use by the same two operators has resulted in 75% of our photographs being graded either "fair" or "excellent," and results have become considerably more consistent and reliable with experience.

Secondly, if a suitable darkened room is available it can be used for both the normal diabetic clinic consultation and the taking of retinal photographs. We find it is often more convenient to photograph the left and right eyes on consecutive clinic visits, rather than to wait the 5-10 minutes necessary to allow the contralateral pupil to dilate. Performed in this way, photography of the fundus takes little more time than measurement of blood pressure.

Used in this way, no additional staff are required and after the initial capital outlay (of about

£12 000) the only running cost is the price of Polaroid film (about £1/patient), which compares favourably with the price of other investigations such as glycosylated haemoglobin.

Finally, the Polaroid photographs may be shown to both patients and medical staff and therefore have considerable educative potential. The immediacy of the technique is greatly appreciated by the patient, particularly if there are any retinal abnormalities, the nature of which can be shown and explained to the patient.

For these reasons we believe that the non-mydiatic camera is a major advance in screening for diabetic retinopathy.

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Clinical management of benzodiazepine dependence

SIR,—As Dr John Mark did in his letter (26 October, p 1201), I would like to congratulate Ms Anna C Higgitt and others (14 September, p 688) on their review article.

Regrettably, our data do not support the authors' findings of cognitive deficits in long term benzodiazepine users. Our samples included 43 long term users of benzodiazepines and 26 untreated patients with chronic anxiety as controls.^{1,2} The suggestions of Ms Higgitt and others that neuro-radiological computed tomographic changes are associated with long term benzodiazepine use^{3,4} could not be confirmed by Poser *et al.*⁵ We have just completed computed tomography in 35 long term users of benzodiazepines and found possible mild atrophic changes in nine (26%) of our sample, the exact percentage of abnormal computed tomograms reported by Lader for his normal control group.³ Thus no compelling evidence exists for a causal relation between brain atrophy and long term benzodiazepine use.

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Children in accident and emergency departments

SIR,—I am grateful to Mr M A Mason for his kind personal comments (9 November, p 1353). Nevertheless, I remain unrepentant about my conviction that there should be more consultants in paediatric accident and emergency medicine.

There can surely be no doubt that the standards of care of children and increased knowledge of their health problems have developed as a result of people concentrating solely on the special problems of children in particular fields. Initially, paediatrics itself had to develop from general adult medicine, and likewise paediatric surgery from general surgery. People with a special concern

for particular aspects of children's medicine and surgery, such as paediatric neurology, cardiology, haematology, etc, have further refined their problems, and community paediatricians are working outside hospitals. I believe that similar developments will occur in the field of paediatric accident and emergency medicine when more people are concerned with the problem; the epidemiological and clinical contributions made by Dr Cynthia Illingworth at the Sheffield Children's Hospital illustrate the potential for change.

I do not mind if the new consultants in paediatric accident and emergency medicine are "drawn from the ranks of those thoroughly grounded in general emergency medicine," as Mr Mason suggests, or from paediatric medicine or surgery, so long as they have had a thorough training in paediatric accident and emergency medicine. I never suggested that there should be a lower level of training for such consultants. I agree that general accident and emergency departments should be developed further and have properly trained consultants; surely this implies that those paediatric accident and emergency departments that already exist should have properly trained consultants too?

What is an anachronism is that over half the children who attend hospital should attend departments where there is very little, if any, paediatric input in a general sense. I do not blame accident and emergency consultants for this; I believe that my paediatric colleagues should take much more interest in the flood of children attending their hospitals. Consultants who, like Mr Mason, really concern themselves with the welfare of children in their departments do ensure that their care is optimal, but I am sure that there are many departments where paediatricians could contribute a good deal.

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Renal disease and digoxin immunoassays

SIR,—Drs James C McElnay and Piet M Hooymans have drawn attention to the importance of endogenous digoxin like substances which interfere with certain digoxin immunoassays (9 November, p 1319). Their claim that all previous data, apart from those of Vinge *et al.*,¹ comes from North America is, however, incorrect.

Using fluorescence polarisation immunoassay (Abbott TDX) the effect of renal impairment on digoxin measurements has been reported.² Serum samples from 50 patients with creatinine values up to 1400 $\mu\text{mol/l}$ (15.8 mg/100 ml), and known not to be on digoxin therapy, were analysed. All digoxin results were below the method detection limit of 0.26 nmol/l (0.2 ng/ml). It is reassuring that these findings have been confirmed and that the other methods tested also showed no cross reactivity.

In the latest report from a widely subscribed external quality control scheme (Wellcome Immunoassay, 1 April-2 September 1985) there were 549 laboratories measuring digoxin by 41 different assays, the five methods investigated by Drs McElnay and Hooyman accounting for about 200 of these laboratories. However, many other assays have not yet been validated in renal impairment and some centres are using assays which have been shown to involve appreciable interference.³

Unfortunately, at least one digoxin method shown to be unaffected by the presence of renal impairment shows cross reactivity when used with neonatal samples,⁴ and significant immunoreactivity in liver disease has just been reported in two further radioimmunoassays.⁵ Scientists and clinicians must investigate the conditions in