other words, using a non-parametric test the study does lend support for the beneficial effect of sodium restriction. In view, however, of the large fall in blood pressure that occurred irrespective of sodium intake during the first month's treatment period, we believe that the study is inconclusive and should not be used as evidence for the value of sodium restriction in mild hypertension.

As we stated in our last letter more evidence for the value of sodium restriction is required. In the meantime, and until this evidence is obtained, our own advice to patients with hypertension is to continue moderate restriction of sodium intake, a manoeuvre which is likely to be as effective as a diuretic but without the metabolic problems associated with diuretic treatment.

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***This correspondence is now closed.--ED, BMJ.

Venous sampling in locating a phaeochromocytoma

SIR,-Dr D J Allison and others (2 April, p 1122) have proposed an interesting and eminently practical sequence of investigation for patients with suspected phaeochromocytoma. I disagree, however, with the authors' suggested initial test-that is, the measurement of urinary vanillylmandelic acid.

The best strategy for identifying from among the many people with arterial hypertension the few who will turn out to have phaeochromocytomas is subject to controversy. A widely read textbook proclaims: "The basic screening investigation for phaeochromocytoma is the urinary vanillylmandelic acid."1 Another equally celebrated textbook states: "Metanephrines determinations are most satisfactory for initial testing."2 Yet another well known textbook assigns equal accuracy to both tests.3

An exhaustive search of the published work identified nine papers in English which reported at least 15 patients with proved phaeochromocytoma and detailed the characteristics of their control groups.4-12 Reports that seemed to include patients from previously published studies were excluded. The following data were collected from each publication: (a) The number of patients with phaeochromocytoma tested for urinary vanillylmandelic acid and urinary metanephrines or urinary catecholamines, or both; (b) the number of patients correctly identified by the tests used; (c) the characteristics of the control groups; (d) the number of controls correctly identified by the tests used; (e) the criteria used to define the normal range for the quantitative results of the tests used. For each test we calculated the sensitivity by

dividing the total number of patients correctly identified by the total number of patients tested, and the specificity as the total number of controls having results within the defined normal range divided by the total number of subjects in the control groups.

The table shows the sensitivity and specificity of the three tests commonly used in screening for phaeochromocytoma. Measurement of urinary metanephrines seems to be the best test, followed by measurement of urinary vanillylmandelic acid and urinary catecholamines. False negative results were seen only when radiological procedures using contrast material containing methylglucamine preceded the urine collection by several days.¹

Recent advances in the biochemical diagnosis of phaeochromocytoma-that is the analysis of fractional urinary free catecholamines using high pressure chromatography and amperometric detection have shown a sensitivity of 100% compared with 95% for urinary metanephrine and 89% for urinary vanillylmandelic acid.13 14 The technique is costly, however, and, for the time being, should be used only for reliable confirmation of an abnormal screening test.

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- ¹ Dollery CT. Arterial hypertension. In: Wyngaarden JB, Smith LH, eds. *Cecil textbook of medicine*. Philadelphia: WB Saunders Company, 1982:227.
 ² Holland OB. Pheochromocytoma. In: Isselbacher KJ, Adams RD, Braunwald E, Petersdorf RG, Wilson JD, eds. *Harrison's principles of internal medicine*. New York: McGraw-Hill Book Company, 1980: 1739.
 ³ Russel RP. Wholey, PK C.
- 1739. ³ Russel RP, Whelton PK. Systemic hypertension. In: Harvey AM, Johns RJ, McKusick VA, Owens AH Jr, Ross RS, eds. *The principles and practice of medicine*. New York: Appleton-Century-Crofts, 1980-288.

- Jr, Ross RS, eds. The principles and practice of medicine. New York: Appleton-Century-Crofts, 1980:288.
 Sjoerdsma A, Enselman K, Waldmann TA, Cooperman LH, Hammond WG. Pheochromocytoma: Current concepts of diagnosis and treatment. Ann Intern Med 1966;55:1302-6.
 Engelman K, Portnoy B, Sjoerdsma A. Plasma catecholamine concentrations in patients with hypertension. Circ Res 1970;26, 27; suppl 1:1-141-5.
 Gitlow SE, Mendlowitz M, Bertani LM. The biochemical techniques for detecting and establishing the presence of a pheochromocytoma. A review of ten years' experience. Am J Cardiol 1970;26:270-9.
 Remine WH, Chong GC, van Heerden JA, Sheps SG, Harrison EG. Current management of pheochromocytoma. An review of 46 cases. J Urol 1974;111:715-21.
 Bravo EL, Tarazi RC, Gifford RW, Preoperative blood transfusions in the safe surgical management. N Engl J Med 1979;301:682-6.
 Stewart BH, Bravo EL, Meaney TF. A new simplified approach to the diagnosis of pheochromocytoma. J Urol 1979;125:79-81.
 Jones DH, Reid JL, Hamilton CA, Allison DJ, Welbourn RB, Dollery CT. The biochemical diagnosis, localization and follow up of pheochromocytoma: The role of plasma and urinary catecholamine sin pheomerona W. B., Dollery CT. The biochemical diagnosis, localization and follow up of pheochromocytoma: A review J. Med 1979;125:579-81.
 YanHeerden JA, Sheps SG, Hamberger B, Sheedy PF, Poston JG, Remine WH. Pheochromocytoma: Urinary versus plasma determinations. Br Med J 1981;282:853-4.
 YanHeerder JA, Sheps SG, Hamberger B, Sheedy PF, Poston JG, Remine WH. Pheochromocytoma: Current status and changing trends. Surgery 1982; 91:367-73.
- Poston JG, Remine WH. Pheochromocytoma: Current status and changing trends. Surgery 1982;
- Surfer Status and Changing trends. Surgery 1902; 91:367-73.
 Moyer TP, Jiang N-S, Tyce GM, Sheps SG. Analysis for urinary catecholamines by liomid chromato-graphy with amperometric detection: methodology and clinical interpretation of results. Clin Chem 1979; 25:256-63.

New drugs: antiarrhythmic drugs

SIR,-Dr W S Hillis and Dr B Whiting (23 April, p 1332) recommend that for treatment of supraventricular tachycardia intravenous amiodarone be given at a dose of 3.5 mg/kg over five minutes. Later in their article they mention the possibility of resulting hypotension. We think, however, that the dangers of such a rapid infusion rate have not been adequately emphasised.

Recently, we treated 10 patients with tachyarrhythmias with intravenous amiodarone as the drug of first choice. In eight patients (four with supraventricular tachycardia, two with ventricular tachycardia, and two with tachycardia associated with a broad complex of the QRS segment) intravenous amiodarone was infused at the rate of 300 mg over 10 minutes. Of these eight patients, four reverted to sinus rhythm but one of them developed severe hypotension. Two other patients became severely hypotensive after infusion without an appreciable rhythm change, and immediate direct current cardioversion was safely performed. We were unable to predict which patients were going to react badly to amiodarone on the basis of the type of arrhythmia, haemodynamic state, evidence of cardiomegaly, or serum potassium concentration. Despite the small size of our study we thought that the evidence was sufficiently strong for us to increase the infusion time to 30 minutes, and we had no problems in two subsequent patients.

There are examples in the published work bearing out our experience,1 including cases of fatal hypotension. Most of these seem to have followed fast rates of infusion of this drug. The manufacturer's current recommendations suggest a minimum infusion time of 20 minutes. We would caution against rapid infusion rates of intravenous amiodarone except in an extreme emergency.

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Staubi M, Studer H. Behandlung der arrhythmien mit amiodaron. Schwiz Med Wschr 1981;111: mit a: 460-5.

Bronchoconstriction in response to ipratropium bromide

SIR,-Like Dr K R Patel and Dr W M Tullett (23 April, p 1318) and also Dr Connolly¹ I too have encountered a mild atopic asthmatic patient who responded to nebulised ipratropium bromide (1 mg) with profound bronchoconstriction (forced expiratory volume in one second fell by half one hour after nebulisation). This did not occur with nebulised saline or cromoglycate and was rapidly reversed with metered dose salbutamol. Nebulisation of cromoglycate (40 mg) 30 minutes before the ipratropium bromide converted the bronchoconstrictor response to a mild bronchodilator response (forced expiratory volume in one second increased by 10% 30 minutes after nebulisation). The patient did not have appreciably hyperreactive airways (the provocative concentration of metacholine required to cause a 20% fall in the forced expiratory volume in one second was 0.19 mg/ml, so it is unlikely that this idiosyncratic response is purely a reflection of non-specific airway hyperreactivity.

I have not experienced this response in patients with severe chronic airflow obstruc-

Effectiveness of biochemical tests used in screening for phaeochromocytoma

Test	No patients studied	References	Specificity	Sensitivity
Urinary vanillylmandelic acid	294	4, 6, 7, 8, 9, 11, 12	0·99	0·84
Urinary metanephrines	282	4, 6, 7, 8, 9, 11, 12	0·99	0·96
Urinary catecholamines	179	4, 7, 8, 11, 12	0·99	0·85

tion. Ipratropium bromide is of greater value as a bronchodilator in patients with chronic airflow obstruction than in asthma, though its use has been advocated in acute asthma.²

Although there have been few reports of bronchoconstriction in asthma with nebulised ipratropium bromide, it would seem advisable to exert caution if using this treatment in patients with acute asthma.

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 ¹ Connolly CK. Adverse reaction to ipratropium bromide. Br Med J 1982;285:934-5.
 ² Ward MJ, Fentem PH, Roderick Smith WH, Davies D. Ipratropium bromide in acute asthma. Br Med J 1981;282:598-600.

Traditional medicine

SIR,—It is regrettable that the personal view by Dr Nadaraja Bathirunathan (20 November, p 1482) should throw mud at the medical practices of the Third World countries, speaking ill of them as if most were a fraud. Everyone knows that indigenous medical practices have played an important role in struggling against diseases and preserving people's health and in the long and unbroken expansion of the nations of the world, including the Third World.

China is known as one of the Third World countries. Take traditional Chinese medicine as an example. Thousands of years of practice of traditional Chinese medicine have resulted in abundant experience in medical application and have led to the formation of a treasured medical theoretical system closely combined with medical practice. There are nearly 6000 kinds of drugs recorded in A Dictionary of Chinese Materia Medica, which may partly reflect the development of traditional Chinese medicine. Traditional Chinese medicine exerts considerable effects even on such dangerous diseases as cancer and cardiovascular and cerebrovascular disease. And, what is more, the Chinese doctors are being taught to serve their patients' hearts and souls, regarding the patients' pains as theirs. Of course, there is no doubt that medical practices in all the countries of the world, including the Third World countries, have their merits. I am hoping that the World Health Organisation will do something to gather the merits of medical practices of all the countries for the benefit of the health care of mankind.

Finally, I am looking forward to your journal providing space for recommending medical practices in Third World countries which may be helpful to international academic exchange in medical science. I should like to think that as a result your journal will be more lively, interesting, and attractive.

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Remuneration for administrative work

SIR,—I note that the profession has requested the Doctors' and Dentists' Review Body to support its claim to the Department of Health and Social Security for remuneration for clinical members of unit management teams in view of the increasing devolution of decision making to unit level and the need to recruit the doctors best suited to these duties. My opinion, and that of others to whom I have spoken, is that there should be no fees payable for administrative tasks. This is far more likely to guarantee that committee work is done by those who believe it is a responsibility and who perhaps have some aptitude. Payment of fees creates the possibility that committee structures will become even more hierarchical and that it may be difficult to dislodge from office those who have attained it and who are enjoying the remuneration. Of course, we in Scotland have not yet seen the situation whereby payments are made to clinical members of district management teams.

Surely the only reward required by a consultant with a heavy administrative load is temporary reduction in the clinical or academic component of his or her post. This is the way to encourage those with an aptitude for administration. The existing trend may well encourage those who are ambitious or, worse still, those who are ambitious for financial reasons.

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Crisis in rheumatology manpower

SIR,—Following your leading article on the crisis in rheumatology manpower (19 February, p 586) several letters were published in your correspondence columns, all agreeing that the numbers of senior registrar posts were greatly in excess of the estimated requirements of consultant appointments likely to become available. It is generally accepted, as stated in your article, that the main factor in producing this crisis has been the failure of the Department of Health and Social Security and regional health authorities to fund the planned expansion of consultant posts in rheumatology, for which the development of senior registrar positions was actively encouraged.

In the ensuing correspondence, there was some discussion about the various types of appointment in clinical rheumatology. The college committee on rheumatology has, in fact, delineated three types of specialist rheumatologist (apart from the specialist in medical rehabilitation, which is a separate issue):

(1) Physicians working exclusively in clinical rheumatology.

(2) Physicians practising in rheumatology and in rehabilitation medicine, such posts concerning the development and coordination of rehabilitation services and the rehabilitation of patients disabled by non-rheumatological conditions.

(3) General physicians with special training in rheumatology, who, besides being able to provide a skilled service in diagnostic consultation and in the management of patients with rheumatic diseases, can also participate with colleagues in other specialties in the care of general medical cases, taking their turn, for example, on the rota for the admission of unselected acute medical emergencies. It has been agreed that the pressure of general medical duties should not be to the detriment of specialised rheumatology, which should take up at least half of the overall workload, particularly when the post is single handed.

There are various shades of opinion about these categories. It is generally believed that the interests of patients with rheumatic diseases are best served by physicians working exclusively in clinical rheumatology, but that one of the other two types of appointment may be desirable in certain cases, depending on local circumstances and, of course, financial constraints.

Overriding such considerations is the fact that about one fifth of districts in the country do not have any sort of appointment in rheumatology, which is now recognised as a major medical specialty serving the needs of millions of sufferers with the rheumatic diseases. The answer to the problem can lie only in pressure being applied at district or regional level, from doctors, administrators, and, above all, patients and the public at large, to have this lamentable situation corrected.

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Acquired immune deficiency syndrome

SIR,-The acquired immune deficiency syndrome was first reported in the United States in 1981. The number of cases has grown exponentially, and just over 1400 cases have now been notified with an overall mortality of 40%. Homosexual men, intravenous drug abusers, haemophiliacs, Haitian immigrants, and recently women and children who have had intimate contact with patients with acquired immune deficiency syndrome have also developed the syndrome. In the United Kingdom 12 cases have so far been reported to the Communicable Disease Surveillance Centre, and case reports are appearing in the medical journals; this may indicate the emergence of a similar problem in this country.

We are concerned that those interested in the clinical care of patients with acquired immune deficiency syndrome, as well as those responsible for the surveillance system, are kept as up to date as possible with the current size of the problem and advances in management. We think that doctors may not yet all be aware of the need to report cases or suspected cases to the Communicable Disease Surveillance Centre and the Communicable Diseases (Scotland) Unit. In the last few months we have seen patients with Kaposi's sarcoma and healthy men with unexplained lymphadenopathy or an altered immune profile. Some of our other colleagues in genitourinary medicine, dermatology, oncology, and immunology are seeing the same types of patients. We would like to suggest the formation of an informal group of those interested in the management of such patients. Currently, with only a few cases in the United Kingdom, the care of patients with acquired immune deficiency syndrome is fragmented and each of us is basing our management on limited experience. We think that the suggested group could meet to discuss clinical cases and consider future management in the light of recent advances and the extensive series of patients documented in America. We should emphasise that there would be no intention to pool cases or for any one hospital to be designated as the centre for the care and investigation of patients with this syndrome. The group would allow for all of us with few patients to share knowledge, which we could use in our daily management. Finally, such a group would allow for a more sensitive idea of the size of the problem than is currently available.