3 h after the dose either before or after 10 days of drug administration. Isolated increases in plasma GH levels were noticed during the 10 days of treatment with BS 100-141 but were probably not drug-induced. No side effects were recorded. Blood pressure fell by a mean of 20/30 mm Hg.

Similar findings have been reported with levodopa.⁵ Moreover, in subjects over 40 years of age a decrease of GH release has been reported after other stimuli (insulin, arginine, levodopa, exercise).⁶ Weitzman⁷ also found in an older adult group (aged 47-62 years) a marked reduction in GH secretory episodes, some subjects showing no GH peak at all during the 24-h study period. From the inability of BS 100-141 to increase GH secretion in patients aged 44-60 years, we may assume that with aging an important decrease in the number of α -adrenoceptors takes place.

Although a noxious effect of high plasma GH levels on the vascular system has been mentioned only in acromegaly and diabetes we think that these data may be of some interest since those subjects requiring anti-hypertensive therapy with clonidine or BS 100-141 are most frequently in the older age group.

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¹ Lal, S, et al, *Clinical Endocrinology*, 1975, **4**, 277.

² Lancranjan, I, and Marbach, P, *Metabolism*. In press.

³ Scholtysik, G, et al, *Arzneimittel-Forschung*, 1975, **25**, 1483.

⁴ del Pozo, E, et al, *Clinical Endocrinology*, 1977, **6**, suppl, p 49.

⁵ Gomez-Sacher, C, and Kaplan, N M, *Journal of Clinical Endocrinology and Metabolism*, 1972, **34**, 1105.

⁶ Bazzarre, T L, et al, in *Proceedings of the IIIrd International Symposium, Milan, 1975*, ed A Pecile and E E Müller. Amsterdam, Excerpta Medica, 1976.

⁷ Weitzman, M D, *Annual Review of Medicine*, 1976, **27**, 225.

Benign mucous-membrane pemphigoid associated with penicillamine treatment

SIR,—There have been many recent reports of patients on penicillamine therapy who have developed pemphigus foliaceus^{1,2} and other conditions in which autoimmune processes are believed to be important. We have recently seen a case in which benign mucous-membrane pemphigoid has appeared in a man taking penicillamine.

A man of 45 had suffered from rheumatoid arthritis for at least 12 years and had been treated with penicillamine 250 mg twice daily for two years as well as aspirin, indomethacin, prednisolone, and diazepam. In June 1976 he developed ulcers in the mouth and three months later soreness and bleeding of the nose and conjunctivitis. Penicillamine was stopped, but he continued to suffer the same symptoms and went on to develop blisters on the skin and hoarseness. At this stage (October 1976) he was seen by us at this hospital. He had a sparse crop of blisters on the skin, mainly on the hands and feet. There was extensive blistering and ulceration of the whole buccal cavity except the tongue and of the anterior nares. The voice was hoarse. There was bilateral conjunctivitis.

Biopsy of the skin and mouth showed blister formation at the level of the basement membranes. Conjunctival biopsy showed granulation tissue only. Direct immunofluorescence on the oral biopsy specimen showed linear binding of IgA to the whole of the basement membrane. Immunofluorescence elsewhere was negative.

He was treated with prednisolone and azathioprine as well as topical steroids. The eye lesions healed with conjunctival scarring and symblepharon formation. The skin lesions healed rapidly without

scarring. By March 1977, when he was shown to the dermatological section of the Royal Society of Medicine, he still had soreness in the nose and one small blister on the palate.

The question remains whether this disease developed as a result of penicillamine treatment. Certainly it failed to respond to stopping the drug, but this is also seen in many cases of penicillamine-induced pemphigus foliaceus.^{1,2} Benign mucous-membrane pemphigoid is an uncommon disease and is rare under the age of 60. This patient has also shown an unusually good response to steroids. Oral ulceration, the original symptom in this case, is a well-recognised side effect of penicillamine treatment and may arise in several different ways.³ It is possible that some cases of penicillamine-induced mouth ulcers are formes frustes of this condition.

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¹ Hewitt, J, Benveniste, M, and Lessana-Leibowitch, M, *British Medical Journal*, 1975, **3**, 371.

² Marsden, R A, et al, *British Medical Journal*, 1976, **2**, 1423.

³ Kuffer, R, and Noble, J P, *Revue de Stomatologie*, 1973, **74**, 309.

Correcting the calcium

SIR,—Your leading article (5 March, p 598) approves of correction of the serum total calcium concentration when the serum albumin concentration is abnormal. Published mean "correction factors" range from 0.018 to 0.025, expressed as mmol/l change in serum total calcium concentration for each 1 g/l change in serum albumin concentration, and you suggest that a factor of 0.020 be used to correct to a serum albumin concentration of 40 g/l. However, the "correction factors" quoted are *mean* values and we have found a wide scatter of individual "correction factors" ranging from 0.013 to 0.052 with a mean of 0.025.¹ In a further, as yet unpublished, study of 17 normal subjects individual "correction factors" derived from a tourniquet test range from 0.015 to 0.040. These differences are both statistically (at the 0.05 level) and clinically significant. Routine "correction" of the serum total calcium concentration using a mean factor may not be misleading in the majority of cases, but where there is a clinical suspicion of a disorder of calcium metabolism this "correction" is inadequate. In these cases direct measurement of the serum ionised or ultrafiltrable calcium concentration should be performed.

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¹ Pain, R W, et al, *British Medical Journal*, 1975, **4**, 617.

. Drs Phillips and Pain feel that the data in their original paper can be interpreted only as evidence that individuals vary greatly in the avidity of the plasma proteins for binding calcium. These conclusions are based in part on a study of regression coefficients of calcium on albumin in 25 hospital inpatients who had multiple estimations; such patients were almost certainly ill and it seems unlikely that changes in plasma albumin were the only factors affecting the plasma calcium. Their conclusions were also based on two other studies in which plasma albumin and calcium levels were measured in normal subjects before

and after a change in posture or the application of a tourniquet. The accuracy of the measurement of a change in plasma level is very limited because the difference is small compared with the total amount and its error is large because the errors of both measurements are compounded. For these reasons we hesitate to accept their view that individuals have characteristic and reproducible "correction factors" with such a wide scatter. If their new study provides good evidence of the reproducibility of the factor it will be of great interest. In the meantime there seems no justification for not using mean values from the literature.

Drs Phillips and Pain suggest that in difficult cases the plasma levels of ionised or ultrafiltrable calcium should be measured. In centres with a special interest in calcium metabolism and a large volume of samples from suitable patients these assays may certainly be useful. Sadly, however, even at their best, the methods currently available have a greater analytical error than have methods for total calcium or albumin.—Ed, *BMJ*.

Medical hazards of air travel

SIR,—Two recent experiences on an intercontinental international air carrier prompt me to write this letter.

About one hour after departure for London a male passenger was found slumped in his seat, unresponsive to command, sweating profusely, and with a weak, thready pulse. Search of his baggage disclosed that he was on antihypertensive medication. At this point I was requested to see him. Without any equipment (not even a sphygmomanometer) a period of observation led me to a diagnosis of hyperventilation syndrome in an overworked, exhausted business executive. He completed the journey uneventfully.

On my return flight I was asked to see a 74-year-old woman who was travelling non-stop from Scotland to New Zealand. She was afflicted with most of the infirmities that accompany old age and, in addition, had an acute anxiety state triggered off by aerial claustrophobia (this was her first major airline trip).

My first comment, based on several prior incidents similar to the above, is that there is a need for far more careful medical clearance of older passengers travelling six hours or more at a time. The present requirement is carried out casually and cursorily and sometimes is ignored altogether. Who should be responsible for implementation is a moot point. Perhaps the travel agent should have a medical questionnaire completed by all intending passengers over the age of 50 who plan to leave their own country. Secondly, inquiry reveals that there is no uniformity among IATA carriers about what should be included in first-aid kits on their aircraft. It seems to vary from carrying it all to next to nothing. So if anyone on board, including crew members, were to suffer a myocardial infarct nothing but oxygen would be available.

The objection has been raised that treatment depends on diagnosis and diagnosis can only be made by a physician. Nowadays physicians travelling on aircraft are advised not to identify themselves and generally refrain from doing so. I happen to be an exception. Is it not a sad commentary of our times that fear of possible malpractice litigation prevents a doctor from being a Good Samaritan? Perhaps a medical advisory ground-to-air service on all major routes could be developed similar to the sea-to-shore medical radio services in existence for

the past 40 years. The purser would be the logical crew member to act as liaison officer, assuming that adequate medical supplies were available.

J G CALLANAN

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Confidentiality and the three wise men

SIR,—Your medicolegal correspondent reports (14 May, p 1291) that the confidential views of "three wise men" were made public at the Normansfield inquiry held under section 70 of the NHS Act 1946, where the Medical Defence Union is representing the doctor concerned. Your correspondent's report and comments on the situation are excellent and can be summed up in the statement that a procedure that depends essentially on confidentiality will not work if confidentiality is breached.

I wish to add a warning. It is addressed to all who may contemplate telling the "three wise men" of their suspicions, to all "wise men" who are about to give their views to the administration, and to any doctor or dentist who may be the subject of an inquiry. The warning is that none of them should say anything that they are not prepared to see made public later. This warning should remain in force unless the profession is firmly reassured that what was intended to be confidential will remain so.

J B HARMAN
President,
Medical Defence Union

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COHSE and the Royal Commission

SIR,—Regarding your report on COHSE's evidence to the Royal Commission (14 May, p 1292) I would like to draw the attention of all doctors to an important omission.

COHSE, along with the other unions and certain sections of the paramedicals, are presenting evidence to support their claim to be members of a health care team with equal status with the doctors. I think any move in this direction should be firmly opposed as I feel the head of any such clinical team or organisation must be the doctor who has ultimate responsibility for diagnosis and management.

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Related ancillary staff

SIR,—The BMA and the Department of Health and Social Security continue to perpetuate the argument that the stumbling block in coming to an agreement on payment to related ancillary staff is "accountability." I can only assume that this means that the DHSS is not happy about the integrity of general practitioners who employ their relatives. This of course is a calculated insult to the whole medical profession.

Both the BMA and the DHSS have perpetuated the myth that doctors would resent snoopers to see if the relatives were really working in the surgery. I have yet to meet a GP who would object to checks being made. I wonder what checks are made on parlia-

mentarians who employ their relatives? They are also paid from taxpayers' money.

The BMA seems unable to negotiate; after over 10 years absolutely nothing has been worked out, even though everyone concerned agrees that the situation is unjust. It is saddening that the matter has to go through the courts.

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*The Secretary writes: "The General Medical Services Committee of the BMA has spent more time in negotiations over the past few years on the question of related ancillary staff than on any other single item. It is not true that the BMA has perpetuated the myth that doctors would resent snoopers. A number of detailed schemes have been put forward to the Department by the GMSC, all of which contained methods of control against abuse, and these schemes have all received considerable publicity.

"The chairman of the GMSC wrote to the Secretary of State on 9 May setting out in some detail the long history of our negotiations and asking the Secretary of State to receive a deputation; a reply is currently awaited."—ED, *BMJ*.

Professional indemnity

SIR,—I was interested to read the BMA's factual statement on the proposed professional indemnity insurance scheme (14 May, p 1297). I regret that there is no reference made in the paper to Scotland. You will be aware that Scots law and the Scottish Health Service regulations are, to some extent, different from English law and regulations. Have Bowring's made any proposals for the provision of legal advice to those of us who live and work in Scotland? I presume that this would require the appointment of a Scottish solicitor.

M J ILLINGWORTH

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Points from Letters

Charges to private patients for use of NHS facilities

Dr J H BERGIN (Princess Margaret Hospital, Swindon) writes: "... Concurrently with the restrictions on availability of private patient services new charges have been promulgated by the Department of Health and Social Security under so-called agreements with the profession. These charges are levelled at private patients who are treated in hospital and consequently utilise hospital facilities. The charges ostensibly represent the hospital costings for the services provided. Two aspects of this costing are interesting. First, if the charges that are supposed to represent actual costings are applied to my own x-ray department one of two things obtains. Either the x-ray department is underfunded to the tune of between 30 and 40% or private patients are overcharged to the same tune. The other equally fascinating aspect of this is that if the professional aspect of these charges are applied to our own department on the basis of examinations carried out, then the remuneration of each of the consultants involved works out at approximately £132 000 per year. ...

Pelvic sepsis after hysterectomy

Dr G S W EVANS (High Wycombe, Bucks) writes: Your leading article (14 May, p 1239) "Pelvic sepsis after hysterectomy" stirred my memory, and possibly yours; for the *BMJ* (2 April 1892, p 739) recorded the action for libel *Denholm v Tait* which occurred at Manchester Assizes in 1892. ... Lawson Tait had advanced the practice of gynaecology to a peak not far short of present-day experience. He was the first to introduce many operative techniques previously unknown; and in 1892 he operated on a woman for what appeared to be myoma of the uterus. Unfortunately the patient died after the operation. Tait apparently implied that the death was not unconnected with the electrolytic treatment previously given by her medical attendant, Dr Denholm, and a libel action ensued. The patient had sustained a vesicovaginal fistula from the electrolysis, and it is possible that, after the operation, organisms from the vagina could have gained access to the pelvis. Your leading article shows that the same problem exists today. Lawson Tait maintained that the patient died from haemorrhage, but the opposition, probably rightly, said "peritonitis." Agreement was reached out of court, but this legal action undoubtedly ruined Tait's surgical practice. He died in 1899. ...

Yoghurt to the rescue

Dr JEAN HIGGIE (Malpas, Cheshire) writes: During the past six months whenever I have prescribed any of the oral penicillins I have suggested that the patient also has a small yoghurt a day and I have not had one case of penicillin-induced diarrhoea.

Donor insemination

Mrs C MAKIN (Plympton, Plymouth) writes: ... The position of the parents in donor insemination might be improved if some of the husband's sperm was used in conjunction with the donor's. If the donor's blood group was always identical with that of the husband it would be difficult to prove that the husband was not the true father of the baby. ...

Mr S ROBINSON (Cambridge) writes: I was interested to read the report by Drs G W Pennington and Sandra Naith on donor insemination (21 May, p 1327). However, I believe it is over-optimistic to claim a 44% success rate when 10 patients out of the original 207 became pregnant before AID was performed. ... Would this suggest that there could be a 5% error (or more) in the 44% claimed?

The doctor's place in the team

Dr S HAGARD (Cambridge) writes: It is interesting to read in your leading article (21 May, p 1301) that in respect of the management of the elderly demented "the doctor's role is as a member of the caring team, not necessarily as its leader"—a refreshing contrast to the BMA's evidence on the subject to the Royal Commission on the subject of health teams (29 January, p 303).