thyroxine as in patients with newly diagnosed thyroid diseases, to suggest that they are no longer measured would be retrograde.

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1 Gow SM, Caldwell G, Toft AD, *et al.* Relationship between pituitary and other target organ responsiveness in hypothyroid patients receiving thyroxine replacement. *J Clin Endocrinol Metab* (in press).

SIR,—My doubts about the value of biochemical tests in monitoring patients receiving thyroxine replacement have been laid to rest after meditating on the article by Dr W D Fraser and his colleagues.

They make the unjustified assumption that their clinical assessment of patients receiving thyroxine is correct. Gross biochemical evidence of hypothyroidism can be found in patients with neither signs nor symptoms, and a claim could be made that every woman is hypothyroid until proved otherwise. Time teaches the sad but salutary lesson that hypothyroidism cannot be consistently diagnosed clinically. Thyroid function tests confirm compliance, which has been shown in numerous studies to be surprisingly low, often less than 50%.[1] A normal or high serum thyroxine concentration confirms recent compliance. A raised serum thyroid stimulating hormone concentration shows that replacement is inadequate. These tests can often indicate whether patients have recently run out of thyroxine tablets or whether they have taken them for a few days before attending the clinic to mollify the doctor.[2] This unusual opportunity to give details of their non-compliance has a salutary effect on the patient.

Inadequate replacement can be associated with hypercholesterolaemia. In the same issue Drs Madeleine Bell and J I Mann (p 769) write: "The risk of coronary artery disease is directly related to the amount of cholesterol circulating in low density lipoproteins." This is the reason for adequately ensuring treatment of hypothyroid patients. Cardiologists and thyroidologists should meet some time.

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1 Sackett DL, Haynes RB, Tugwell P. *Compliance in clinical epidemiology*. Boston: Little, Brown, 1985:199-222.
2 Keynes WM, Fowler PBS. *Hypometabolic states in clinical endocrinology*. London: Heinemann, 1984:239-42.

When things go wrong

SIR,—We read the leading article by Dr Richard Smith (23 August, p 461) with interest. With every year that passes, as defence insurance premiums mount inexorably, we may complain but are required by contract to pay our subscriptions anyway. Presumably, the single level of premium, regardless of specialty, reflects an underlying concept of the unity of medical practice. This year, however, the 70% increase in annual subscriptions imposes a severe strain on any feelings of unity we might have. We, the undersigned, cannot see how defence societies can continue to justify the same premium for all medical practitioners regardless of risk or salary.

Firstly, let us take the aspect of risk. Virtually all insurance policies rise with risk. In medicine the major risks are borne by surgeons, gynaecologists, and general practitioners. Pathology, for example, is a low risk specialty (as recognised by considerably lower premiums in the United States, for example) and rarely figures in medical litigation cases. Therefore it is clear that the risk borne by surgeons, etc, is being subsidised by low risk specialties such as pathology. We would probably tolerate this if there was an equitable distribution of financial reward between the specialties. The low risk specialties such as pathology, however, have a considerably lower reward than high risk specialties such as surgery and general practice.

The survey quoted in the recent Medical Defence Union report on the rise in subscriptions (about which no one in this department was asked for an opinion) is hardly likely to be representative or equitable. Low risk specialties such as pathology are relatively small and are always likely to be outvoted by the high risk, highly rewarded specialties. The cost of medical defence, however, is beginning to represent a sufficiently large proportion of a junior pathologist's salary that he must protest against this unfairness. Indeed, we would hope that our representatives in the Royal College of Pathologists will take steps to find alternative insurance if the traditional defence unions continue to exploit us.

Finally, the comparisons with other professions are grossly misleading. We know that the insurance premiums of colleagues in law, accountancy, and architecture are paid by their institutions and that they bear no relation to their personal salary. On top of this, compare the salary of solicitors, accountants, and architects with that of pathologists, particularly those in training grades. We note that the question of differential subscriptions has been left open, and we hope that the defence organisations will therefore respond to the needs of the low risk minorities in medicine.

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Haem arginate in acute hepatic porphyrias

SIR,—Like Dr Pertti Mustajoki and others (30 August, p 538) we have used haem arginate to treat acute hepatic porphyrias.

We gave the drug to four patients with an acute porphyric attack in which abdominal symptoms predominated (three patients with acute intermittent porphyria, one with variegate porphyria). Haem arginate was given as 3 mg/kg once a day for four successive days in two patients, for three days in one patient, and for two days in one. A single dose of 3 mg/kg was also given to seven women in the subacute phase of acute hepatic porphyria (three with acute intermittent porphyria, one with variegate porphyria, three with hereditary coproporphyria), all of whom had abdominal symptoms.

The table shows mean urinary values before and after treatment in six of the subacute cases and three of the acute cases. Two patients in the subacute phase also had faecal values measured before and after treatment: in one, with hereditary coproporphyria, coproporphyrin values fell from 673 to 203 μg/g wet stool and protoporphyrin values from 131 to 43 μg/g; in the other patient, with variegate porphyria, respective values were 363 to 133 μg/g and 841 to 261 μg/g. In patients with acute abdominal symptoms the pain completely regressed during treatment. One patient showed considerable improvement of intestinal peristalsis after the first infusion.

Coagulation tests were performed in six patients, two of whom were given haem arginate repeatedly. Tests carried out before treatment and 2, 24, and 48 hours afterwards included thrombocyte counts, Quick test, thrombin time, activated partial thromboplastin time, euglobulin fibrinolysis test, fibrin/fibrinogen degradation products, fibrinogen and ethanol gelisation test. The results obtained showed only light activation of the haemocoagulation system with only mild deviations in values and a rapid return to normal; no clinical correlations were found in any of the cases studied. Thrombophlebitis was not observed, even after repeated application to the same vein. Electromyography in five patients showed no remarkable changes after infusion; in one patient with an acute attack a tendency to normalisation, suggesting regeneration of neurones, was observed after treatment.

Changes in the concentration of serum haemopexin (haem-haemopexin complex degradation is much faster than that of haemopexin itself) observed after haem arginate treatment were only transient and did not correlate with clinical effects. No appreciable changes were found in liver and kidney function, haemoglobin concentration, and leucocyte count.

Our findings showed a favourable clinical effect of haem arginate in acute attacks of porphyria as well as regression of abdominal complaints in the subacute phase; these effects were confirmed by a reduction in excreted porphyrins and their precursors.

Early treatment in the initial phase of clinical symptoms is essential, as haem arginate seems to have little effect when severe conditions have already developed. In these conditions haemoperfusion followed by haem arginate might be clinically beneficial.[1]

We thank Dr Josef Stibor for performing the coagulation studies, Dr Jiří Vacek for performing electromyographic examinations, and Dr Zbyněk Hrkal for determining serum haemopexin concentrations. These findings were presented in part at the Gordon Research Conference, Wolfeboro, NH, USA, 28 July-1 August 1986.

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1 Kordač V, Martásek P, Horák J, Jirsa M. Hemoperfusion in acute intermittent porphyria. *Br Med J* 1984;288:1458.

Urinary porphyrin and precursor values in patients with porphyria. (Values are means (ranges))

	Patients with subacute attacks (n=6)		Patients with acute attacks (n=3)	
	Before	After	Before	After
δ-Aminolevulinic acid (μmol/24 h)	154 (41-263)	8·35 (21-91)	1365 (374-1952)	58 (36-96)
Porphobilinogen (μmol/24 h)	69 (7-208)	17 (0·44-24·3)	461 (57-850)	15 (10-19)
Total porphyrins (nmol/24 h)	1035 (765-1477)	513 (116-849)	7136 (1427-10 210)	866 (670-1129)

Clearance of psoriasis with low dose cyclosporin

SIR,—I write to confirm the recent report by Dr C E M Griffiths and colleagues (20 September, p 731) regarding the treatment of psoriasis with the immunosuppressant cyclosporin A and to mention two possible drawbacks of this treatment. I have now completed a preliminary trial of cyclosporin A in seven elderly patients with intractable psoriasis who had received all the standard treatments, including antimitotic treatment with methotrexate or hydroxyurea. An approved trial was set up to