bosis later in her life with perhaps fatal embolism on that occasion.

Jarvinen and Asp¹ found that the post-thrombotic state developed with unexpected rapidity—after one to three years 87% of patients already had symptoms and/or signs of venous insufficiency and after eight years at the latest all patients had such symptoms and/or signs. Bauer² found that 80% of patients with a venous ulcer had had a deep vein thrombosis. In the varicose vein clinic in this hospital, where approximately 2000 patients are seen each year, we have found that over 50% of the female patients with a postphlebotic limb give a history of ante- or post-partum deep vein thrombosis and in some cases it had occurred after several deliveries.

While the 30 deaths from pulmonary embolism per million deliveries are of extreme importance in the maternal mortality figures they do not give any picture of the hundreds of women with the postphlebotic limb for the remainder of their lives.

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¹ Jarvinen, P, et al. *Annales Chirurgiae et Gynaecologiae Fenniae*, 1975, 64, 96.

² Bauer, G. *Acta Chirurgica Scandinavica*, 1942, suppl 74, p 86.

Treatment of Wilson's disease

SIR,—We have read with interest the letter from Dr D P Vaughan and Mr R Kaderbhai (29 November, p 519) in which they suggested that metronidazole should be tried in the treatment of penicillamine-intolerant patients with Wilson's disease in preference to triethylene tetramine dihydrochloride. All suggestions for new orally active chelating agents are valuable and deserve investigation, but we have learned from experience that many chelating agents which bind copper in vitro do not act as cupruric agents when given to patients with Wilson's disease. A chelating agent which will bind copper in vivo and result in its precipitation in the tissues is theoretically dangerous since the possibility exists that the copper will eventually be freed from the ligand, resulting in a massive increase in "free copper" at some vulnerable site in the body.

Over the years we have investigated a number of compounds which may have this action—for instance, sodium diethyl dithiocarbamate, a very powerful copper-binding agent, when given to rats results in a fall in the urinary excretion of copper. Similar findings have been made for aminotriazole and benzotriazole; it was therefore with some doubts that we set up the following study to test the cupruric activity of metronidazole. Two patients who had presented with hepatic Wilson's disease and who had each been taking penicillamine for two years volunteered to test the compound. The test

procedure was as follows. No drugs were given for 72 hours, a 15½-hour overnight urine sample was collected to estimate basal copper excretion, the patients were then each given 450 mg of penicillamine hydrochloride, and urine was collected for six hours. After 48 hours the test was repeated, only on this occasion penicillamine was replaced with a dose of 500 mg of metronidazole (a slightly larger dose on a molar basis, the molecular weight of metronidazole being 171 and that of penicillamine HCl 176). The findings are given in the table below.

It is apparent from these results that metronidazole does not have a sufficient cupruric action to warrant long-term trial in patients with Wilson's disease. Until an alternative compound is found which will actively promote the excretion of copper, triethylene tetramine dihydrochloride remains the best available therapy for penicillamine-intolerant patients with Wilson's disease.

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Tests on overseas doctors

SIR,—Your leading article on "Tests on overseas doctors" is indeed interesting reading (6 December, p 542). The Overseas Doctors' Association, since its formation in early June, has been in constant touch with the BMA, the royal colleges, and the General Medical Council and is concerned and conscious of the problems of overseas doctors who are coming to work in the United Kingdom. The DHSS, the Temporary Registration Assessment Board, and the GMC are concerned in examining overseas doctors as to their competence by clinical testing and language tests before they are given registration to practise in the United Kingdom. Unfortunately these tests have been organised rather in a hurry and some of the procedures of this are far from desirable.

As chairman of the Overseas Doctors' Association I attended as an observer at one of the examinations and my comments have been sent to the chairman of the TRAB. It was a pity, as you rightly said, that no representatives of the overseas doctors were asked to explain their position at the meeting of the National Association of Clinical Tutors at the Royal College of Physicians on 25 November. If an opportunity like this arose again the ODA will be happy to express their views and give constructive suggestions regarding these tests. Our views are that a test of this sort is absolutely essential. The test should be carried out three months after a preliminary acclimatisation period during which these doctors would be attached to a district hospital to go through the various departments and work as a

clinical clerk. At the same time, in the evening, they would attend evening courses in the English language so far as it relates to their practice, and such courses are now being organised in various universities and polytechnics. At the end of the three-month period these doctors would then be asked to sit for the examination. The present examination is far from satisfactory and space does not allow me to elaborate on this at present.

Sir, the whole question of junior doctors training in the United Kingdom is in turmoil and in this situation the overseas doctors feel that they are being made scapegoats. It is indeed interesting to note that in the *BMJ* you publish the pass lists for the MRCP and FRCS but you do not mention the number of candidates who sat for the examination and the number of candidates who failed. But in the overseas doctors' test examination you publish both the figures.

While we do not oppose a test we do object to the ways and means with which the test is carried out. I feel confident that, given time, we shall be able to solve this problem with good will on both sides.

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SIR,—We are very worried about the effect of the new examination which is being run by the General Medical Council for foreign doctors wishing to work in Britain, as it seems that the standard set is so high that the majority are doomed to failure.

To quote a recent example, we have had for several years a connection with Barcelona and have had three excellent men who came here as orthopaedic house officers and progressed to registrar level. A fourth man came recently with a strong recommendation for further training in orthopaedics. His English was excellent and his background entirely satisfactory. He has failed the examination and has had to go back to Spain. We have no doubt that the three previous men would also have failed and yet they all turned out to be excellent in every respect.

If it is made exceptionally difficult for a foreign doctor to pass this examination our supply of such people is going to run out, with obvious effects on the staffing of many hospitals. It also means that Britain will quickly lose its image as a place for the training of doctors from many countries and this would be to our detriment as well as theirs. Obviously there must be some kind of test of reasonable competence, but we feel strongly that this examination is too difficult, and it would be interesting to know whether other consultants have formed the same opinion.

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Vocational training for general practice

SIR,—There are suggestions that the period of vocational training for general practice

Copper excretion	Basal urine 1 (15½ hours)	Six hours after penicillamine	Basal urine 2 (15½ hours)	Six hours after metronidazole
Case 1				
Total (µg)	15.1	155	20.7	13.0
Rate (µg/min)	0.017	0.430	0.022	0.034
Case 2				
Total (µg)	33.0	210	26.8	21.5
Rate (µg/min)	0.035	0.583	0.029	0.060