severity of the reaction, however, is unpredictable. The following two cases illustrate some problems related to rechallenge and the scientific necessity to confirm adverse reactions.

Case 1-In 1977-8 an excess of cases of leucopenia caused by rifampicin were detected in North Karelia: Rimapen caused 11 cases of leucopenia in 140 patients treated for tuberculosis (7.9%), a much higher incidence than normal (0.08%). We decided to change the rifampicin preparation and prospectively study the frequency of leucopenia with Rimactan. The study was intended for internal use at the department for pulmonary diseases and was carried out in 1979-80. One patient out of 132 developed leucopenia. Our conclusion was to go on using Rimactan. This policy, however, was not accepted by the medical director of the hospital, who emphasised that there was no published evidence of an excess of side effects of Rimapen. Under these circumstances I felt obliged to publish our observations to avoid further unnecessary adverse reactions. To ensure the part played by rifampicin in two uncertain cases of leucopenia I rechallenged the patients with daily rifampicin three and three and a half years after the suspected rifampicin induced leucopenias. One patient reacted with a 'flu like syndrome and subsequently with renal failure and haemolysis on the ninth day of rechallenge despite careful precautions and informed consent. The possibility of such a severe side effect had been estimated as practically non-existent on the basis of the only seven previous cases, of which most had occurred during intermittent treatment or irregular drug intake. Seven haemodialyses were required and renal function returned to normal in three months.2 In 1982-3 a randomised study with Rimapen and Rimactan was performed. In contrast to the previous study no differences in frequency of leucopenia caused by the drugs were detected.3

Case 2—In 1980 the first long acting theophylline preparation, Euphyllin Retard, was introduced in Finland. Since 1976 we had had difficulties in treating a 52 year old woman for severe bronchial asthma. She was steroid dependent, had maximal bronchodilating medication, and had to maintain a strict diet free of salicylate, preservative, and food colouring. She received Euphyllin Retard in November 1980 and reacted with an asthma attack after the third tablet. She noticed that the drug tasted of vanilla, which had earlier caused asthma symptoms. The adverse reaction was suspected to have been caused by vanillin (0.24 mg in the coating) and it was reported to the manufacturer. The company, however, refused to remove the vanillin in the coating without a more detailed case report. Therefore rechallenge with Euphyllin Retard and double blind challenge tests with vanillin and lactose as placebo were performed in May 1982. Unexpectedly the patient reacted with bronchospasm to both substances. Therefore the tests were repeated with vanillin and cellulose as placebo in October 1982. Bronchospasm occurred after vanillin but not after cellulose. As a result of the study the manufacturer removed the vanillin compound from the drug in June 1983.⁴ During the rechallenges with Euphyllin Retard and with vanillin and lactose the patient suffered her only asthma attacks during that vear.

I describe these two cases as a warning. In my opinion recommendations for rechallenges are questionable. They may even be in discordance with the Helsinki Declaration. Careful ethical consideration is necessary. Rechallenges should not be a scientific necessity. Rechallenge is almost the same as the deliberate harming of the patient. Should it be allowed at all except when there is no therapeutic alternative?

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- 1 van Assendelft AHW. Leucopenia caused by two rifampicin preparations. Eur J Respir Dis 1984;65:251-8.
- 2 van Assendelft AHW. Renal failure and haemolysis caused by rifampicin. Tubercle 1986;67:234-5.
- 3 van Assendelft AHW. Leucopenia in rifampicin chemotherapy.

 J Antimicrob Chemother 1985;16:407-8.
- 4 van Assendelft AHW. Bronchospasm caused by vanillin and lactose. Eur 7 Respir Dis 1984;65:268-472.

The debasing of medicine in the Soviet

SIR,—Those who have written on the above subject in your journal seem to have at least one thing in common: they are all against sin. The question, then, is not whether abuses have occurred in medicine in the Soviet Union but how we should respond to the situation. We can, and at times perhaps should, act as Old Testament prophets, denouncing evil when we see it. Sometimes, however, we may prefer to think of ourselves as a curious and variable mixture of saint and sinner and consider it to be more appropriate to sit down with our Soviet colleagues as equals and friends to discuss, among other things, what actions are unacceptable in medical practice. This method may be slow, but, as Dr A Haines has pointed out (17 January, p 180), it can produce results

I have been on two medical visits to the Soviet Union in recent years and each time have been impressed by the open, thoughtful, and courteous atmosphere in which our discussions were held. Certainly, there are great cultural differences between us, but these may be due as much to historical as political factors, as Ms Caroline White (13 December, p 1524) suggested. Is it not just possible that, were the Royal College of Psychiatrists to explore these differences with its opposite number in the Soviet Union, it might prove more fruitful than pursuing its present policies?

Since Dr G A Low-Beer's letter was published (7 February, p 373) we have heard that a number of dissidents are being released. If our response to this action is generous and positive perhaps it may encourage the government of the Soviet Union to increase the pace of democratisation and strengthen the hand of Mr Gorbachev against those in the Soviet Union who feel threatened by his more liberal policies.

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Doppler studies in the growth retarded fetus

SIR,—Is it possible to go a stage further regarding the work of Dr G A Hackett and colleagues (3 January, p 13) and consider the part played by the abdominal para-aortic bodies, including the organs of Zuckerkandl, in the control of selective vasoconstriction in the hypoxic fetus?

Why are these bodies clustered down the aorta and found (among other places) very close to the origin of the inferior mesenteric artery, near but less close to the superior mesenteric artery, and near the origins of the umbilical arteries? These bodies are mature and functioning in utero at a time when the adrenal medulla, which will in due course be secreting mainly adrenaline, is immature. As Dr Hackett and coworkers state, in fetal hypoxia circulatory adjustments occur to protect the fetal brain, myocardium, and adrenal glands. The abdominal para-aortic bodies are obviously distal to the main arterial vessels to the brain and heart but also seem to be just distal to the main sources of arterial supply to the adrenal glands.

Do these very vascular but poorly innervated structures, which secrete noradrenaline in response to fetal hypoxia, release this catecholamine into the venous circulation, whence it is distributed after passage through the heart, or can these organs release noradrenaline directly into arteries or at least to affect nearby arteries? If noradrenaline can be secreted directly to affect the local arterial tree this would explain the Doppler findings in the aortas of some growth retarded fetuses and their

increased risk of necrotising enterocolitis. The direct action of noradrenaline on the gut, causing smooth muscle relaxation and sphincter contraction, might also explain the troublesome abdominal distension and feed intolerance experienced by some growth retarded babies. Are the para-aortic bodies the basic reason why any baby can develop necrotising enterocolitis?

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Telling the patient

SIR,—Your (understandably) anonymous contributor (14 February, p 437) suggests, in describing her obstetric tragedy, that the consultant's apparent reluctance to discuss this with her was somehow the result of his defence society's advice. The defence societies make a substantial effort to encourage members to provide understandable explanations and to apologise when things may have gone wrong. No obstacle is placed in the way of the provision of a prompt, sympathetic, and above all truthful account of what has occurred.

This advice has been given prominence in recent publications by all of the defence societies and even in *Hansard*. I hope that such publicity will help to lay this unfounded impression to rest.

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WHO not amused

SIR,—In its Christmas competition of 1985 the *Lancet* invited readers to plan the expenditure of £1m yearly, for five years, in the best interest of health care in one or many lands. This humanitarian concern was in the true spirit of Christmas. The *BMJ*'s Christmas competition "WHO" kidding" was certainly not.²

One of the *Lancet*'s prizewinning entries was a proposal to eradicate guineaworm disease, which still exists in some 21 countries. Within weeks of the publication of this proposal the World Health Organisation's parliament adopted a resolution that committed all countries and the director general to action. This prompt response shows the influence of good medical journalism on the work of the organisation.

The diagram which was the topic of the $BM\mathcal{J}$'s facetious competition was an honest effort, by one of my staff, to use an analogy from physics to try to understand the forces that would impart movement into the field of health promotion. Debate on this public health problem resulted, in November 1986, in the Ottawa Charter for Health Promotion. The World Health Organisation would welcome suggestions from your readers on how to put the charter into action. One example of such collaborative action, which is of particular relevance to the United Kingdom, is the Healthy Cities project. In European cities and Third World villages the World Health Organisations's scarce resources are being directed towards specific measures to improve people's wellbeing.

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 Canadian Public Health Association, 1986.