research for the first comprehensive national study of police surgeons.

Our researches confirm that intoxication is implicated in many call outs. However, it was often not the prime reason for the call out, typically occurring in combination with other factors, usually some form of physical injury. In cases focusing on fitness to be detained it was the injury rather than the intoxication that was the prime reason for the call out. In cases involving the assessment of fitness to be interviewed, mental state assumed a greater importance. Overall, injury and assault accounted directly for 36% of consultations and alcohol for 19%. This finding concurs with the personal study of Payne-James.[5]

With regard to the assessment of fitness for interview, a key issue is the need for any standardised approach to incorporate a record of the reasons for particular decisions. We believe that the present system within the Metropolitan Police District carries a potential for discrepancy between custody records, surgeons' notes, and records of a surgeon's attendance. Only a minority of police surgeons' decisions subsequently receive in depth scrutiny and our work found no reason to doubt the quality of the service, but this shortcoming should be addressed.

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The cervical spine in rheumatoid arthritis

EDITOR,—I agree with the subtitle of A K Agarwal and colleagues' editorial on the cervical spine in rheumatoid arthritis that it "needs careful assessment."[1] I have two comments to make from my own observations on this problem.

Naturally, larger amounts of anteroposterior subluxation carry a higher risk of neurological deficit. However, the rate of development of the subluxation may be even more important than its amount. Thus a relatively slight flexion injury to a radiologically normal cervical spine in a patient with rheumatoid arthritis can lead to a tetraplegia even if the subluxation is not very great. Thus all patients with rheumatoid arthritis having a general anaesthetic should have their cervical spines supported in a collar. In addition, a spurious "improvement" in anteroposterior subluxation may be reported by the unwary or inexperienced rheumatologist or radiologist,[2] although it really represents the dangerous addition of vertical descent to anteroposterior subluxation. The foramen magnum is in effect being threaded over a conical cervical odontoid process.

The interesting phenomenon of a mid or upper cervical cord lesion causing a suspended neurological deficit is also shown in the rheumatoid cervical spine.[3] For example, severe subaxial subluxation at the C3 or C4 level can lead to compression of the anterior spinal artery by the upper posterior edge of the body of C4. The cord can be compressed and the subsequent ischaemic changes in the cord can lead to changes as low as T1. This can lead, for example, to wasting of the small muscles of the hand. Generally this is accompanied by sensory symptoms and extensor plantar responses and can be confirmed by electromyography. It is an example of the value of clinical electromyography in rheumatological practice—in helping patient management and elucidating a previously unexplained clinical phenomenon.

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Low blood pressure and wellbeing

EDITOR,—The finding of Annika Rosengren and colleagues, that low blood pressure is associated with decreased psychological wellbeing,[1] is consistent with several studies recently published in the *BMJ* including our own.[2-4] These authors are right to point out that in cross sectional analyses it is difficult to make assumptions of causality.

The concept of a "hypotensive syndrome" implies that low blood pressure causes the associated physical and psychological symptoms, such as impaired psychological wellbeing or mild depression. This is clearly the assumption in those countries where the condition is widely "treated" with a variety of drugs.[5] An alternative hypothesis, which has considerable intuitive plausibility, needs to be refuted before this assumption can be justified. According to this hypothesis, depression or decreased psychological wellbeing causes low blood pressure by a variety of possible mechanisms, including diminished physical activity, altered diet, and decreased autonomic arousal. We tested this hypothesis by examining the case notes of 1046 consecutively admitted psychiatric patients, comparing the blood pressure on admission of depressed and non-depressed patients. If minor degrees of depression or diminished wellbeing lead to significantly lower blood pressure, then it should follow that depression that is sufficiently severe to lead to hospital admission will be associated with substantially reduced blood pressure.

The potentially confounding variables of age, alcohol consumption, and medication were controlled for in a logistic regression model, with the binary variable depression versus all other diagnoses as the dependent variable, and systolic and diastolic blood pressure as independent variables. Analyses were conducted separately for men and women. No significant differences were found between the two groups of patients for either systolic or diastolic blood pressure.

The finding that even severe depression does not lead to a lowering of blood pressure suggests that the mild depression and decreased wellbeing associated with low blood pressure in the studies referred to above is not due to a causal effect of the former on the latter, which strengthens the case for the existence of a hypotensive syndrome.

Systolic and diastolic blood pressure by psychiatric diagnosis, controlling for confounding variables

Primary diagnosis	Blood pressure (mm Hg)	
	Systolic	Diastolic
Men		
Depression (n=173)	137·5	86·1
All others (n=353)	136·9	87·1
Women		
Depression (n=264)	133·2	84·7
All others (n=256)	132·7	82·8

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Gangliosides in neurological diseases

EDITOR,—Albert Figueras and colleagues suggest that gangliosides can be withdrawn from the market because their efficacy is not clearly delineated.[1] The accompanying editorial, without scientific justification, calls for suspension of all human studies of possible efficacy of gangliosides because the substances are considered to be potentially immunogenic.[2] We do not agree with either statement.

The editorial was apparently written on the basis of inadequate information and some of the data, as outlined in this letter, may not have been available to Peter O Behan and B A G Haniffah.

Why continue studying the efficacy of gangliosides in humans? They could be continued on the basis of efficacy studies in experimental animals and existing data in humans. In experimental animals, gangliosides have been shown to be protective in a number of conditions including anoxic ischaemia, models of Parkinson's disease, central nervous system trauma, autoimmune neurological disease, and peripheral nerve injury. In humans, gangliosides have been shown to be potentially effective in various central and peripheral nervous system disorders. In addition, data presented at the second world congress of stroke in Washington, DC, last September showed efficacy of ganglioside treatment in acute stroke in two separate large multicentre studies.[3]

With regard to immunogenicity, the only paper to describe rabbits immunised with brain gangliosides which later developed a "ganglioside syndrome" was published by Nagai *et al* in 1976.[4] The purity of the ganglioside preparation used in this study has, however, never been established, and this work has not been reproduced in other laboratories.

An abstract recently presented by R K Yu *et al* at the 22nd annual meeting of the Society for Neuroscience in Anaheim, California, indicated no clear association of treatment with monosialoganglioside (G_{m1}) and the development of antibodies to it in 418 samples from human subjects receiving parenteral gangliosides. In addition, serum antibodies to gangliosides, particularly monosialoganglioside, have been reported in patients with a variety of neurological conditions and those without neurological disease. These antibodies are found in patients who have never received parenteral gangliosides. The association of these antibodies with any human diseases is currently unclear. A strong case can be made for the antibodies being consequential to neurological disease,[5] and there is no correlation between the presence of these

antibodies and in vitro indices of inherent toxicity of sera in patients with Guillain-Barré syndrome.[6]

We see no scientific justification for the statement about the immunogenicity of gangliosides, nor do we find any direct evidence to support the contention that naturally occurring antibodies to monosialoganglioside are pathogenic. Thus, we feel that the recommendation to suspend human trials is erroneous, unjustified, and devoid of scientific merit.

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1 Figueras A, Morales-Olivas FJ, Capella D, Palop V, Laporte J-R. Bovine gangliosides and acute motor polyneuropathy. *BMJ* 1992;**305**:1330-1. (28 November.)
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EDITOR,—Albert Figueras and colleagues describe 17 cases of acute motor polyneuropathy presumably associated with the administration of gangliosides that have previously been reported to the Spanish drug surveillance system.[1] We believe that their report conveys an erroneous view.

To assess the benefit:risk ratio for gangliosides the Spanish National Committee of Pharmacovigilance created a task force. Two authors of the paper—Figueras and Morales-Olivas—were members of a group of neurologists and clinical pharmacologists on the task force. The panel of experts signing this letter were recruited by the pharmaceutical companies involved in Spain.

The Spanish National Committee of Pharmacovigilance analysed 16 of the 17 cases reported as being cases of Guillain-Barré syndrome. Typical Guillain-Barré syndrome occurred in five patients and atypical Guillain-Barré syndrome in two others. Of these seven patients, six had potential aetiological factors other than use of gangliosides; protopathic bias was detected in five, and in the remaining one it was doubtful whether the drug could be blamed. The final conclusions of the national committee were, firstly, that it is not possible with the available data to establish a definite causal relation between the use of gangliosides and acute polyneuropathies and, secondly, that patients diagnosed as suffering from acute neuropathies should have a detailed drug history taken and should be followed up (Grupo de Trabajo Gangliósidos, 18th session of Spanish National Committee of Pharmacovigilance, Spain, 1992).

We reviewed the first 14 consecutive yellow cards reported to the Spanish drug surveillance system; only four of the patients could be regarded as having Guillain-Barré syndrome. In only three cases was administration of gangliosides compatible temporally with the onset of symptoms.

Two Spanish epidemiological surveys on the Guillain-Barré syndrome were presented at the scientific debate of the Spanish National Committee of Pharmacovigilance (Madrid, health ministry, 30 January 1992). In short, these studies show that the incidence of Guillain-Barré syndrome in Alcoy (0·93 cases/100 000)[2] and Cantabria (0·95 cases/100 000)[3] is comparable with that in other countries in which gangliosides are not used. Furthermore, 74 patients with Guillain-Barré syndrome were identified in these studies; none of them had ever been treated with gangliosides.

Taking the clinical and epidemiological information into account, the Spanish health authorities decided, firstly, to prescribe gangliosides under special rules and, secondly, to recommend new clinical trials. These trials are now under way in 12 hospitals to confirm the efficacy of gangliosides in diabetic neuropathy.

We did not find scientific justification in our report to the Spanish National Committee of Pharmacovigilance for Peter O Behan and B A G Haniffah's statement about the immunogenicity of gangliosides.[4] We believe that many of the arguments and circumstances discussed here were unknown by the authors of the editorial.

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Natural remedies

EDITOR,—Snake oil salesmen might recognise the treatment that was given to Simon Crawford's patient, but not homoeopaths, lay or medical.[1] The medicine prescribed, Apitop-F, is unlike any homoeopathic treatment; is not listed in homoeopathy's Materia Medica; and does not accord with principles. The person who prescribed the medicine may have had homoeopathic experience but was not using homoeopathy in this case.

Homoeopathy can be safe and effective and was established long before most of our present allopathic treatments. Unfortunately, anyone can describe himself or herself as a homoeopath. There are, however, proper training agencies and reputable bodies. Crawford comes from Glasgow, where there is a homoeopathic hospital and the Scottish College of Homoeopathy, which offer proper training and treatment.

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1 Crawford S. Natural remedies. *BMJ* 1993;**306**:212. (16 January.)

EDITOR,—Despite repeated inquiries I have been unable to discover the nature and contents of the remedy called Apitop-F.[1] It is certainly not stocked by any of the main homoeopathic suppliers in this country and I can assume therefore that it is most likely not homoeopathic but a herbal product—unless it has been imported from abroad, possibly Europe.

The Faculty of Homoeopathy would certainly concur with Simon Crawford's view that it is absolutely unethical for any medicine to be sold as natural and especially as homoeopathic if it were to include pharmacologically active ingredients, whether hormonal or otherwise. Furthermore, the faculty would consider such behaviour unethical; it would most probably result in a referral to the faculty's disciplinary committee.

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Patients' interests or resource allocation?

EDITOR,—Tony Hope and colleagues make the important points that clinical decisions may incorporate decisions about rationing of health care and that is is important to clarify ethical judgments implicit in such decisions.[1] I propose that a useful point to be considered by the doctor is whether a treatment would be clinically indicated for a private patient with unlimited personal resources. If it would be a decision not to offer it to a patient dependent on the NHS must be a decision about rationing of resources rather than about clinical need. The doctor is then ethically obliged to make that clear to the patient to whom treatment is being denied. I fear that we shall be faced with this obligation with increasing frequency.

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1 Hope T, Sprigings D, Crisp R. "Not clinically indicated": patients' interests or resource allocation? *BMJ* 1993;**306**: 379-81. (6 February.)

EDITOR,—We agree with Tony Hope and colleagues that a distinction must be drawn between decisions about which patients will benefit from an intervention and whether offering the intervention to them is an appropriate use of scarce resources.[1] We think, however, that some of the points made by the authors tend to confuse rather than clarify the issue. The two sets of decisions can be understood more easily if thought of in terms of, firstly, assessing need and, secondly, setting priorities.

In contrast with the view expressed by the authors under the heading "Needs theories," we understand the need for health care to be an ability to benefit from an intervention.[2] In operational terms, someone has a need for health care if he or she has the appropriate indications for the intervention in question. The authors fail to emphasise