and influential paper because we are also comparing inpatient versus outpatient treatment techniques (albeit with entirely different clients). We acknowledge that the outpatient programme in our study was less intensive than that of Edwards and Guthrie (paragraph 3 in Discussion) and that more intensive outpatient methods may lead to improved outcome (final paragraph, Discussion); (d) again, Dr McBride appears to have misunderstood the purpose of our study. We were evaluating the success of different detoxification procedures per se and neither intending nor attempting any long term follow up study.

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opiate withdrawal. Our own experience has convinced us of the value of a clonidine detoxification programme,¹⁰ and we have now used it successfully for almost three years.

Certainly methadone reduction is "the most commonly used withdrawal procedure for opiate addicts." However, it does not warrant this position of popularity and is not uncontested. We believe that clonidine offers definite advantages over methadone reduction and should therefore now provide the preferred treatment for opiate withdrawal.

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- 1 Johns AR, Gossop M. Prescribing methadone for the opiate addict: a problem of dosage conversion. *Drug and Alcohol Dependence* 1985;16:61-6.
- 2 Marlatt GA, Gordon JR. *Relapse prevention*. New York: Guilford, 1985.
- 3 Lipton DS, Maranda MJ. Detoxification from heroin dependency: an overview of method and effectiveness. In: Stimmel B, ed. *Evaluation of drug treatment programs*. New York: Haworth, 1983.
- 4 Medical Working Group on Drug Dependence. *Guidelines of good clinical practice in the treatment of drug misuse*. London: DHSS, 1984.
- 5 Edwards G, Guthrie S. A controlled trial of inpatient and outpatient treatment of alcohol dependence. *Lancet* 1967;i: 555.

SIR,—We would like to take issue with the statement by Dr Michael Gossop and others (12 July, p 103) that methadone reduction is "agreed to be the most effective and safe technique currently available" for withdrawal.

Several papers in recent years have compared detoxification from opiate addiction by gradually decreasing doses of oral methadone with abrupt withdrawal of opiates and suppression of the withdrawal syndrome by clonidine.¹⁻⁴ In terms of withdrawal discomfort and numbers of patients completing detoxification the two procedures have proved equally effective. In only one of the four studies quoted² was withdrawal discomfort worse in the clonidine treated group, and in only one of these studies³ did any patients transfer to methadone reduction.

In contrast to clonidine, methadone reduction prolongs withdrawal from opiate dependence. The withdrawal period in Dr Gossop's study was 21 days for inpatients and 56 days for outpatients. A clonidine detoxification programme, in contrast, need take only 10 days for withdrawal from methadone⁵ and less for withdrawal from heroin.⁶ This has important implications for early entry to an abstinence orientated treatment programme and also for the issue of cost effectiveness that Dr Gossop and his colleagues raise in their introduction.

An additional advantage of clonidine over methadone is its lack of potential for abuse. There is consequently no danger of resale on the black market when it is prescribed to outpatients. A proportion of the methadone prescribed to outpatients is probably used in this way, thus effectively maintaining unregistered addicts.

The only significant limitation to the usefulness of clonidine is its hypotensive effect. This limits the use of effective doses and, in our view, restricts its safe prescription to inpatient detoxification programmes, although it has been widely used for outpatients in the USA.⁵ Lofexidine, a clonidine analogue with much lower hypotensive potency, has proved effective in open trials.⁷⁻⁹ We are currently conducting a double blind comparison of clonidine and lofexidine in the suppression of

- 1 Washton AM, Resnick RB. Clonidine versus methadone for opiate detoxification. *Lancet* 1980;ii:1297.
- 2 Rounsaville BJ, Kosten T, Kleber H. Success and failure at outpatient opioid detoxification: evaluating the process of clonidine and methadone assisted withdrawal. *J Nerv Ment Dis* 1985;173:103-10.
- 3 Cami J, de Torres S, San L, Sole A, Guerra D, Ugena B. Efficacy of clonidine and of methadone in the rapid detoxification of patients dependant on heroin. *Clin Pharmacol Ther* 1985;38:336-41.
- 4 Kleber HD, Riordan CE, Rounsaville B, et al. Clonidine in outpatient detoxification from methadone maintenance. *Arch Gen Psychiatry* 1985;42:391-2.
- 5 Washton AM, Resnick RB. Outpatient opiate detoxification with clonidine. *J Clin Psychiatry* 1982;43:39-41.
- 6 Kleber HD, Gold MS, Riordan CE. The use of clonidine in detoxification from opiates. *Bull Narc* 1980;32:1-10.
- 7 Gold MS, Pottash AC, Sireney DR, Extein I, Annitto WJ. Opiate detoxification with lofexidine. *Drug Alcohol Depend* 1981;8:307-15.
- 8 Washton AM, Resnick RB. Lofexidine in abrupt methadone withdrawal. *Psychopharmacol Bull* 1982;18:220-1.
- 9 Washton AM, Resnick RB, Geyer G. Opiate withdrawal using lofexidine, a clonidine analogue with fewer side effects. *J Clin Psychiatry* 1983;44:335-7.
- 10 Scannell TD, Lipsege MS. ABC of poisoning: opioids. *Br Med J* 1984;289:1538.

Backache and the Guillain-Barré syndrome

SIR,—The Lesson of the Week by Drs J E Clague and R R MacMillan (2 August, p 325) is correct but should be accepted with caution. Back pain can occur with the Guillain-Barré syndrome and this cannot be disputed. However, there is no way of accurately predicting which patients with backache are likely to develop Guillain-Barré syndrome and therefore the backache is of little or no diagnostic value without the presence of neurological symptoms or signs, and it is only retrospectively that the pain can be attributed to acute demyelination of the peripheral nerves.

A general practitioner with an average list of 2000 patients will see 200 cases of backache each year.¹ The incidence of backache in the general population is about 10 000/10.² The incidence of Guillain-Barré syndrome is about 1.7/10,³ and between 10%² and 55%³ of patients will have muscle pain or, less commonly, localised backache. One of the paper's main references³ reported that in only four of 29 cases (14%) was pain the most prominent early symptom, three cases had transient low backache on the day of, or the day before, the onset of the weakness, and pain preceded weakness by one to five days. The likelihood of a patient presenting with localised backache after being diagnosed as having Guillain-Barré syndrome must be about one in 20 000 to one in 50 000.

Secondly, as there was such a direct relation with heavy lifting to the onset of backache in the second case, and the interval between the onset of

pain and the demonstration of neurological signs was so long, the pain may not have been related to the Guillain-Barré syndrome or indeed may have precipitated the Guillain-Barré syndrome.

Finally, one of the most important pointers to the diagnosis of Guillain-Barré syndrome is a preceding upper respiratory tract or gastrointestinal viral infection, which occurs in 60%-70% of cases⁴ and hence provides the alternative name "acute idiopathic postinfectious polyneuropathy."⁵ No comment on preceding infection was made.

As the Lesson of the Week is often read with particular interest and remembered, it would be unfair to give the impression that the most important point or "take home" message is, "Guillain-Barré syndrome should be considered in the differential diagnosis of back pain"; rather the message should be that "Guillain-Barré syndrome should be considered when backache is associated with neurological signs, especially within a few weeks of a viral illness."

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- 1 Knox JDE. The patient complaining of pain in the back. In: Cormack J, Marinker M, Morrell D, eds. *Practice: a handbook of primary medical care*. London: Kluwer, 1982:641-9.
- 2 Ravin H. The Landry-Guillain-Barré syndrome: A survey and clinical report on 127 cases. *Acta Neurol Scand* 1967;43(suppl 30):8-64.
- 3 Ropper AH, Shanani BT. Pain in Guillain-Barré syndrome. *Arch Neurol* 1984;41:511-5.
- 4 Johnson KP, Wolinsky JS, Ginsberg AH. Immune mediated syndromes of the nervous system related to virus infections. In: Vinken PJ, Bruyn GW, eds. *Handbook of clinical neurology*. Vol 34. Amsterdam: North-Holland, 1982:392-5.
- 5 Bradley WG. The neuropathies. Acute idiopathic post-infectious polyneuropathy (Guillain-Barré-Strohl syndrome) In: Walton JN, ed. *Disorders of voluntary muscle*. London: Churchill Livingstone, 1974:831-4.

Prevalence of multiple sclerosis in a south London borough

SIR,—In their assessment of the prevalence of multiple sclerosis in a south London borough (26 July, p 237) Drs Edward S Williams and Ronald O McKernan arrived at an estimate of 115/100 000—the third highest in the United Kingdom.

If whole families in which a proband with multiple sclerosis occurs are examined, as strongly recommended by Charcot,¹ then the prevalence of multiple sclerosis, wherever studied, becomes much greater. We may be sure that the disease is much more widespread than would appear from the number of patients who are diagnosed.

In a study of 473 English families 19 mothers out of 275 studied and 2 out of 133 fathers had clinical multiple sclerosis.² Thus 21 out of 408 parents of a proband themselves had multiple sclerosis (5.15%); and if we take the usually accepted figure for prevalence as 60/100 000 (certainly too low) then this means that the prevalence of multiple sclerosis in the parents of a proband was (100 000/408) × 21 × (1/60) = 85.8 times as common as in the general population. For siblings of a proband the corresponding figures were 8/319 = 2.51% and (100 000/319) × 8 × (1/60) = 41.8 times as common among siblings as in the general population.

However, when we included in the estimate of multiple sclerosis the multiple sclerosis diathesis brought out by laboratory testing² then among the parents of a proband clinical and potential multiple sclerosis was 188.5 times as common as in the general population; and for siblings it was 245 times as common. In the absence of a specific test for multiple sclerosis, as opposed to multiple sclerosis diathesis, it is impossible to say how many people with multiple sclerosis diathesis do in fact

have lesions of the disease, though the suspicion is that it must be high,³ and surprisingly large numbers of "silent" cases of multiple sclerosis have anatomical lesions at necropsy. Certain it is that multiple sclerosis (especially in its mild "subclinical" form) is very much more common than believed. If the families of the patients recorded by Drs Williams and McKeran were studied we can be sure that many more "minimal" and "subclinical" examples of this wide spectrum disease would come to light. It is indeed likely that the high figure for Orkneys and Shetland is the norm.

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- 1 Charcot J-M. *Leçons du Mardi à la Salpêtrière*. Notes de Cours de MM Blin, Charcot et H Colin. Tome 1. Paris: Louis Bataillat, 1892.
- 2 Field EJ. Multiple sclerosis: an abiotrophy with heuristic implications. In: Scarlato G, Matthews WB, eds. *Multiple sclerosis: present and future*. New York: Plenum, 1984.
- 3 Herndon RN, Ruddick RA. Multiple sclerosis: the spectrum of severity. *Arch Neurol* 1983;40:531-2.

SIR,—We should like to echo the comments made by Drs Edward S Williams and Ronald O McKeran that prevalence estimates for multiple sclerosis in the United Kingdom of "over 30-40/100 000" are likely to be rather wide of the mark and that a north-south gradient may have been overemphasised.

As part of a survey funded by the Multiple Sclerosis Society on the impact on the family and the degree of handicap in multiple sclerosis we have a provisional list of over 480 names in the Southampton and South West Hampshire Health District, which has a GP registered population of about 430 000. We have found that a rather higher proportion (62%) of people with multiple sclerosis are known to their general practitioners. However, it is essential to verify the diagnosis, especially in milder cases, for there are some people who do not actually have multiple sclerosis, despite their general practitioner's belief to the contrary.

If a similar relation holds between our provisional list and our final list as in the authors' study, we are likely to have prevalence figures significantly greater than 100/100 000 for a population which approximates more closely in size to the north east Scotland study populations.

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SIR,—Drs Edward S Williams and Ronald O McKeran have carried out a valuable survey of multiple sclerosis in southern England, but their general conclusion that "the latitudinal effect on the prevalence of multiple sclerosis in the United Kingdom is less appreciable than previously believed" may be premature. They have obtained an estimate for point prevalence of multiple sclerosis in 1985 of 115/10⁵ with an incidence of 5/10⁵/year for the period 1976-84. However, the superficial similarity of their statistics to those published by Shepherd^{1,2} in the early surveys from north east Scotland (prevalence of 127/10⁵ in 1970 and an incidence of 5.3/10⁵/year in 1959-73) may be obscuring a real difference between north and south.

As Drs Williams and McKeran indicate, almost without exception, the estimated prevalence of multiple sclerosis in the United Kingdom has increased with time, partly due to a fall in mortality. Shepherd derived a revised estimate for prevalence of 144/10⁵ in 1973, including 50 patients not

identified during the first survey, and this figure was further updated in 1980 (178/10⁵).³

Drs Williams and McKeran chose to compare their survey with the first study from Aberdeen because they believed that the methods of ascertainment were similar. Since 1970 laboratory tests for supplementing clinical evidence for the disease and computerised hospital morbidity registers have become more widely available. Drs Williams and McKeran had access to these facilities in identifying potential cases of multiple sclerosis and recruited patients from their own and other hospitals in London so they are likely to have made a more complete ascertainment than was achieved initially in Aberdeen. In addition their prevalence was estimated from medical records; ascertainment in studies where patients are not reviewed personally is inflated since diagnostically doubtful cases are less easily excluded.⁴ It might therefore have been more appropriate to have compared the prevalence in Sutton with the more recent and significantly higher estimate from Aberdeen. Evidence for a north-south gradient in disease frequency is also available from routine statistics. Apart from changes with time, mortality attributable to multiple sclerosis has been consistently higher in Scotland than in other parts of the United Kingdom since the 1940s, and at present the standardised mortality ratio is 123 (England and Wales 1951-75=100).⁵ Scotland also has the highest hospital discharge rates for multiple sclerosis (44% above the national average from 1976-80).

The issues raised by Drs Williams and McKeran are important since regional differences in the distribution of multiple sclerosis have been widely interpreted as implicating environmental events in its aetiology; elsewhere we have suggested that variations in the frequency of the disease within the United Kingdom are significantly influenced by regional differences in the normal frequency of the HLA alleles DR2 (and DQw1) associated with multiple sclerosis.⁵ In making these correlations we are aware that there are too few areas where simultaneous prevalence and immunogenetic studies have been carried out. It would therefore be of considerable interest to know the frequencies of HLA-DR2 and DQw1 in patients and controls from Sutton.

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- 1 Shepherd DI, Downie AW. Prevalence of multiple sclerosis in north-east Scotland. *Br Med J* 1978;iii:314-6.
- 2 Shepherd DI, Downie AW. A further prevalence study of multiple sclerosis in north-east Scotland. *J Neurol Neurosurg Psychiatry* 1980;43:310-5.
- 3 Downie AW, Phadke JG. Multiple sclerosis in north east Scotland. *The Chief Scientist Reports* 1984;42:151-6.
- 4 McAlpine D, Lumsden CE, Acherson ED. *Multiple sclerosis: a reappraisal*. 2nd ed. Edinburgh: Churchill Livingstone, 1972.
- 5 Swingler RJ, Compston DAS. The distribution of multiple sclerosis in the United Kingdom. *J Neurol Neurosurg Psychiatry* (in press).

Implications of a district scheme to provide plastic insulin syringes to diabetics

SIR,—The report by Dr A P Allen and colleagues (28 June, p 1710) adds solid support to the belief that plastic syringes are the treatment of choice for diabetics on the grounds of economy to the health service as well as of safety, comfort, and convenience for the patients. This view now must be (or should be) held universally by doctors responsible for the care of diabetic patients, is mirrored by the experience of diabetic clinics in Strathclyde^{1,2} and London,³ and should add valuable endorsement to the parliamentary campaign which the British Diabetic Association is mounting to

persuade the department of health that this equipment should be generally available on prescription. However, clinicians must also remember that plastic syringes can be used for purposes other than the injection of insulin and should consider what measures might be necessary to prevent the abuse of this disposable equipment.

Eleven hundred patients with insulin treated diabetes attend our unit at Glasgow Royal Infirmary. About one third of the patients have a single daily insulin injection and the remainder take two or more injections per day. In March 1983, when U100 insulin was generally introduced in the UK, we took the opportunity to offer Becton-Dickinson plastic syringes to all our patients and to abandon the use of glass syringes with steel needles. As of June 1986, virtually the whole clinic population has used disposable equipment for the past three years.

By encouraging the reuse of plastic syringes we have established that patients who take a single daily insulin injection use about 50 syringes a year, while patients who take multiple daily injections use an average of 80 syringes per annum. Each year, therefore, we dispense almost 80 000 syringes to our patients and in the past three years have issued nearly a quarter of a million syringes. Some time ago we became aware that some plastic syringes were being obtained by drug abusers for the injection of hard drugs: our unit was known to hold stocks of this equipment and theft became a problem. The unit operates an open door policy of informal self referral, and individuals who were not diabetics would present themselves to the staff (usually late or early in the day), claiming to be one of our patients and requesting a further supply of syringes. Other drug addicts obtained these syringes from other sources, possibly from domestic refuse.

Over the past year, we have addressed this potentially serious problem by implementing several measures. Firstly, we have ensured that stocks of plastic syringes which are outwith the hospital pharmacy are retained in a single place which is properly secured. Secondly, we have issued all our patients with a simple record card which identifies them as patients who take insulin and attend the unit: the card must be produced and countersigned by nursing or medical staff before syringes are issued. Thirdly, we have offered disposable containers (Cin-bins, Labco Ltd) to any patient who experiences difficulty with the disposal of domestic refuse; these containers hold several hundred syringes and are brought back to the hospital for incineration. Finally, we have encouraged patients to use the simple and inexpensive commercial device (BD Safe-Clip, Becton-Dickinson) which severs the needle from a discarded plastic syringe and renders it useless.

So far as can be established these measures have been almost completely successful in preventing the abuse of plastic syringes by addicts. Doctors who supervise large diabetic clinics within the urban conurbations of the UK, where drug abuse is regrettably prevalent, should be aware that a similar problem is likely to arise if they dispense large quantities of plastic syringes and should forestall the problem by adopting the kind of measures that we have been compelled to use.

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- 1 Strathclyde Diabetic Group. Disposable or non-disposable syringes for diabetics? *Br Med J* 1983;286:687-90.
- 2 Strathclyde Diabetic Group. Prospective survey of re-used plastic syringes for diabetics. *Diab Med* 1986;3:264-5.
- 3 Lester E, Woodroffe FJ, Grant AJ. Experience with routine reuse of plastic syringes. *Br Med J* 1984;289:1498-9.