failure, those in wards and renal clinics, and, for that matter, general medical patients for those nephrologists with non-renal medical duties as well. In workload terms it is more meaningful to count all these excluded patients in relation to a finite time interval—that is, the number of patients seen or transplantations performed within a specified period (incidence). The patients undergoing dialysis at one moment in time can be counted as a prevalence. The prevalence of patients with functioning grafts should not be equated with the prevalence of patients on dialysis as the workload is quite different. An analysis of the total nephrological service in the UK was beyond the resources of our unit, nor did we wish to burden our respondents with a time consuming detailed questionnaire. The non-inclusion of the transplant load seems to have irked people most. But it could be argued that the transplanted patient when well becomes part of the renal clinic load, when ill part of the ward load, and after rejection part of the dialysed load. Even these units without a local transplantation service look after transplanted patients, who become a variable proportion of the renal clinic workload. A two monthly outpatient check up should not constitute such a major work commitment, especially in these days of improved results. It seems counterproductive to give equal weighting to the load of patients with well functioning grafts. After all, transplantation is meant to lessen the cost and load on the medical services in comparison to dialysis.

If Drs Ogg and Jones dislike our arbitrary scoring system the raw data (the replies we were given) are published as well, and readers can apply any other scoring system they choose to the raw data. Their confidence in the data may be restored by a look at a copy of the return for the unit they mention listing "three university staff" since that was the reply given to us. Naturally we were dependent on the accuracy of the replies, as in any survey. We intended to count a consultant with two sessions of nephrology as one person, the same as a consultant with 11 sessions. Alternative units of account such as whole time equivalents can also be deceptive, since they hide the actual numbers of people involved. It is not easy to extract meaning from lists of fractions, sessions, or aggregated whole time equivalents. The reader may well want to know also how many individuals have contributed to one whole time equivalent. There is also a role for surveys which look simply at pairs of hands, irrespective of time commitments—that is, the people available for the tasks that arise. We do not believe this invalidates our survey. It merely looks at the data in a simpler way. This we explained in our paper. If you happen to be the sole renal and general medical consultant in a busy dialysis unit in a university teaching hospital (as one of us is) you do not have the luxury of dividing out your time into official sessions for non-renal, teaching, research, and dialysis duties. Irrespective of what is meant to be undertaken sessionwise (never defined in our unit anyway by either health board or university), you spend most of the working week and a great deal of your own free time as well on the renal workload. There is no one else to share "sessions" with. Units with several pairs of hands should consider themselves fortunate. It is remarkable that it is the staff of these better provided units who are most anxious to emphasise that they spend only a fraction of their time on "renal" duties. How lucky they are.

We look forward to the publication of the "careful" survey of 1986 manpower by the Royal College of Physicians' committee on renal medicine. The information so provided will no doubt be useful when it eventually appears. However, in the last two surveys Scotland appeared anomalously as a "region."^{2,3} The information is therefore not particularly helpful to individual Scottish dialysis units. Surely there is a place for smaller individual unit orientated surveys emphasising staff numbers as well as the larger regional ones emphasising sessions.

W K STEWART
LAURA W FLEMING

Department of Medicine,
Ninewells Hospital and Medical School,
Dundee DD1 9SY

- 1 Sells RA, Macpherson S, Salaman JR. Assessment of resources for renal transplantation in the United Kingdom. *Lancet* 1985;ii:195-7.
- 2 de Wardener HE, Peart WS, Cattell WR, et al. Distribution of nephrological services for adults in Great Britain. *Br Med J* 1976;ii:903-6.
- 3 Jones NF, Goodwin FJ, Roberts AP. Manpower and workload in adult renal medicine in the United Kingdom 1975-82. *Br Med J* 1984;288:992-4.

A limited role for manipulation?

SIR,—Professor Malcolm Jayson appeared to draw general conclusions about the role of manipulation which were based largely on studies limited to the treatment of low back pain (6 December, p 1454).

Manipulation is not, of course, concerned only with pain in the low back and it is used at all levels of the vertebral column (as well as for peripheral joints). In addition, not all manipulation uses a "system of diagnosis which is not that of conventional medicine"; one needs only to refer to some of the standard medical texts on orthopaedic medicine to confirm this.^{1,2}

Medical manipulation involves more than just the application of forces to joints and it incorporates conventional systems of examination and diagnosis. Properly constituted within the framework of orthopaedic medicine it can be combined with other forms of treatment to offer a level of skill in relation to the musculoskeletal system which is not normally available. The importance, for example, of a thorough examination of the whole back is exemplified in the diagnosis of the cause of such seemingly unrelated symptoms as chest and abdominal pain.^{3,4}

There are many patients with musculoskeletal symptoms who require neither surgery nor intensive anti-inflammatory or immunosuppressive medication. Much more work needs to be done to assess the possible benefits of a whole range of treatments for this group. The field is, however, inhibited by the lack of any department of orthopaedic medicine within the NHS, and patients are often caught in a limbo between orthopaedic surgeon and rheumatologist. What is needed is a research orientated teaching department such as that in France at Université Paris VI, where orthopaedic medicine is recognised as a postgraduate specialty. This would then perhaps offer an opportunity to investigate properly the merits of a treatment which dates back several thousand years and which still remains with us despite the advances of modern medical technology.

ADAM WARD

Tunbridge Wells,
Kent TN2 5LF

- 1 Maigne R. *Orthopedic medicine*. Springfield, Illinois: Charles C Thomas, 1979.
- 2 Cyriax J. *Textbook of orthopaedic medicine*. Vol 1. London: Baillière Tindall, 1980.
- 3 Ward A. Somatic component to myocardial infarction. *Br Med J* 1985;291:603.
- 4 Ashby EC. Abdominal pain of spinal origin. *Ann R Coll Surg Eng* 1977;59:242-6.

Non-invasive femoropopliteal assessment: is that angiogram really necessary?

SIR,—Mr A R Baker and colleagues raise two issues regarding our non-invasive scoring system (6 December, p 1505).

Assessment of inflow is undoubtedly difficult, but palpation of the femoral pulse remains as good as most non-invasive methods for detecting aortoiliac stenoses of greater than 50%.¹ Although stenoses of less than 50% may be "haemodynamically significant," their relevance to clinical practice is uncertain. On this unit in the previous two years 148 femorodistal bypass operations have been

performed for critical ischaemia. Forty eight (32%) required a synchronous inflow procedure. In the remainder, in whom inflow was judged adequate on our clinical assessment of the femoral pulse, 24 had a preoperative angiogram and 76 had only an intraoperative distal angiogram or no angiogram at all. To date the crude patency rate of this group (87%) is no different from that of those who had a preoperative angiogram (85%). This concurs with the experimental observation that the increase in flow secondary to a femorodistal graft is unlikely to change a subcritical iliac stenosis into a critical one.²

While being impressed by the results of percutaneous transluminal angioplasty in selected cases, we have not found that many patients with critical leg ischaemia have lesions suitable for percutaneous transluminal angioplasty. In 87 cases in which intraoperative distal angiograms were obtained extensive atherosclerotic occlusions were shown extending distal to the popliteal artery in 74 limbs (85%). A proximal inflow procedure was required in 11 of the 13 limbs in which the popliteal trunk was suitable for the distal anastomosis. When feasible in such cases percutaneous transluminal angioplasty requires multiple dilations and is associated with a restenosis rate over 50%.³ Claims that 40% of patients with arterial disease of the leg currently requiring surgical intervention could be treated by percutaneous transluminal angioplasty are speculative.⁴ The relative roles of surgical vascular reconstruction and percutaneous transluminal angioplasty in limb salvage have yet to be defined.

C P SHEARMAN
B R GWYNN
M H SIMMS

Selly Oak Hospital,
Birmingham B29 6JD

- 1 Campbell WB, Cole SEA, Skidmore R, Baird RN. The clinician and the vascular laboratory in the diagnosis of aortoiliac stenosis. *Br J Surg* 1984;71:302-6.
- 2 Williams LR, Flanagan DP. Alterations in femoral artery haemodynamics associated with femoropopliteal bypass. *J Surg Res* 1984;36:97-101.
- 3 Rush DS, Gewertz BL, Lu C-T, Ball DG, Zarins CK. Limb salvage in poor-risk patients using transluminal angioplasty. *Arch Surg* 1983;118:1209-12.
- 4 Doubilet P, Abrams HL. The cost of underutilization: percutaneous transluminal angioplasty for peripheral vascular disease. *N Engl J Med* 1984;310:95-102.

Depression after stroke

SIR,—Dr Allan House's review (10 January, p 76) is welcome, but in view of the perpetual struggle for NHS financial priorities it is doubtful if the necessary research that he proposes will ever be carried out. And so we shall continue to be in ignorance of whether depression after stroke is underdiagnosed or undertreated. As a survivor of a haemorrhagic stroke four years ago, mercifully spared substantial intellectual dysfunction (I can still edit a monthly medical journal), there remains plenty to feel depressed about.

If you can only stand for a minute or two and walk less than 100 yards you have to redesign your lifestyle considerably if feeling depressed does not progress to withdrawal and frank depression. Drugs never can and never will redesign lifestyles. Two practical things could make the stroke victim feel less depressed. The first of these is better provision for the physically handicapped. This is probably outside our control and maybe we, the stroke victims, will need to wait for our own Bob Geldof on this score, for Britain pays only lip service to the needs of disabled citizens. What is also needed, and here the solution is more within the profession's power to act, is surely the development of a stroke expert or consultant.