that the advisory group used evidence from trials in shaping the delivery of services.

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Randomised controlled trials of treatment are needed

EDITOR,—The current interest in low back pain¹ is to be welcomed, particularly in the light of the doubling of the rate of male sickness and payments of invalidity benefit for spinal disorders in the 10 years to 1991–2.² The rate of payment of benefit, however, is an unreliable measure of the burden of back pain in the community because it principally measures long term disability, not pain and disability in those who can continue to work or who are economically inactive.

Two key points in the Clinical Standards Advisory Group's recommendations for a revolution in the treatment of low back pain are that physical treatment should be focused on the early stages of the condition to prevent it becoming chronic and that a new specialist back pain rehabilitation service should be developed for patients who have had back pain for over six weeks.² The clear aim is to reduce long term absence due to sickness. With the increasing emphasis on evidence based medicine, we should carefully consider whether early physical treatment after initial treatment in general practice will reduce the burden of long term disability from low back pain before we start major changes. The advisory group's report does not convincingly show this.

Two randomised trials with multiple outcome measures, published after the advisory group's report, compared conventional management in primary care with and without physiotherapy exercises for acute simple back pain.^{3,4} One failed to show a difference in outcome after one year, while the other found that conventional management in primary care resulted in a significantly better outcome after 12 weeks. Another trial showed, as its only outcome measure, a 50% reduction in long term sickness absence after a clinical and radiological assessment with advice to maintain activity compared with conventional treatment.⁵

Before there is a revolution in the treatment of acute back pain we should obtain proof from randomised controlled trials that true reductions in the level of pain or disability suffered, or both, can be achieved. Any future change in the rate of payments of benefit for spinal disorders cannot be relied on as a single measure of success or failure in treating back pain.

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Complications of juvenile chronic arthritis

Frequency of eye screening should suit individual patients

EDITOR,—A potential source of confusion in T R Southwood's article on arthritis in children is the question of screening for chronic anterior uveitis.¹ Southwood advises screening every three to six months except in low risk groups. A report published recently by a joint working party of the Royal College of Ophthalmologists and the British Paediatric Association recommends that this should be so for five years from the onset of juvenile chronic arthritis for high and medium risk groups, with subsequent screening annually for 10 years after the onset of juvenile chronic arthritis, or until the age of 12, whichever is shorter.² The report also clearly defines the different risk groups for uveitis: high risk—early onset (age less than 6 years), pauciarticular disease, positive for antinuclear antibodies; medium risk—polyarticular disease and positive for antinuclear antibodies, or pauciarticular disease and negative for antinuclear antibodies; and low risk—systemic juvenile chronic arthritis, juvenile chronic arthritis associated with HLA-B27, or disease starting after the age of 11 years. The report also expands on the "screening every three to six months" for the respective groups.

I have often found that children are re-referred from colleagues sooner than necessary for screening or that general practitioners have become concerned because their patients have not been seen in the eye clinic for almost a year, when this may be appropriate. In addition, the end point of screening does not seem to be widely known. Obviously, clinic visits that are more frequent than recommended interrupt schooling more and add further disruption to the child's family.

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Surgical treatment of septic arthritis is superior

EDITOR,—I am concerned by T R Southwood's suggestions for the management of childhood septic arthritis.¹ Southwood suggests that affected joints should be aspirated for diagnostic purposes before treatment with antibiotics is given. This practice seems to be common among rheumatologists and results in the late referral to orthopaedic surgeons of patients with septic arthritis. At the time of referral the joints of these patients are often severely damaged, and this may result in lifelong disability. Early surgical intervention can prevent many of these poor results.

Southwood should at least have mentioned arthrotomy and joint washout, which is the safest way of treating septic arthritis to prevent joint destruction.² In certain joints arthroscopic washout is an alternative, but this may be associated with a higher recurrence rate. Repeated joint aspiration for early infection also has its advocates,³ but if rapid resolution does not occur arthrotomy and washout is advocated. Clearly this approach cannot be used in late infection as loculation and solid debris which cannot be broken down or cleared with a needle will be present in the joint.

These patients should thus be referred early for an orthopaedic opinion as they require early surgical intervention to prevent joint damage and resultant disability and may also need prolonged

orthopaedic surveillance and treatment in the future if treatment fails.

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Evidence for decreasing quality of sperm

Presentation of data on sperm concentration was flawed

EDITOR,—Few studies have attracted as much attention as that by Carlsen *et al* on the decline in human sperm concentrations over the past 50 years.¹ Few studies, however, have caused so much controversy as well.^{2,4} Carlsen *et al* analysed 61 publications from 1938 to 1990 in which sperm samples from presumably normal men were investigated. In a table the authors gave, for each publication, the number of samples in the study, and the men's fertility status. Linear regression analysis showed a highly significant trend towards lower sperm concentrations. In their figure 1 the authors stated that they gave 61 datasets as circles, with year and sperm count as coordinates and the circles' area representing the logarithm of the number of subjects in each study (fig 1a). Brake and Krause² and Olsen *et al*³ criticised Carlsen *et al*'s paper for various statistical reasons as well as for methodological reasons—for example, that the abstinence times were different. Likewise, Bromwich *et al* pointed out that a change in the "normal" values over time may have been a possible explanation for the observed trend.⁴

Original figure 1 as given in paper by Carlsen *et al* (a) and redrawn figure (b) based on data given in their table (for comparison the regression line is also included, although an independent statistical analysis was not performed)