

significant. It is true that significant differences in the developmental quotient were found when various subgroups of infants were studied, such as those receiving more or less than half of their intake as maternal milk; but there remains the paradox that the mean developmental quotient of those infants who received banked human milk with a lesser contribution of maternal milk was lower than that of those fed banked human milk alone. Perhaps, therefore, the message about banked human milk and neurodevelopmental attainment is more complex than many acknowledge.

I agree that the value of banked human milk in neonatal care warrants re-examination; the pendulum has swung too far in favour of low birthweight formulas. Comparative studies examining the relative incidence of infection^{1,4} and necrotising enterocolitis⁵ in babies fed human milk or artificial formula suggest that differences in mortality may be apparent between the two feeding regimens. Unfortunately, the haphazard organisation of milk banks in the United Kingdom continues to prove an obstacle both to the national study of this issue and to the sophistication of processing techniques capable of controlling or changing the nutritional composition of human milk.⁶

A F WILLIAMS

Department of Child Health,
St George's Hospital Medical School,
London SW17 0RE

- Davies DP. Future of human milk banks. *BMJ* 1992;305:433-4. (22 August.)
- Lucas A, Morley R, Cole TJ, Gore SM, Davis JA, Bamford MFM, et al. Early diet in pre-term babies and developmental status in infancy. *Arch Dis Child* 1989;64:1570-8.
- Naryanan I, Prakash K, Prabhakar AK, Gujral VV. A planned prospective evaluation of the anti-infective property of varying quantities of expressed human milk. *Acta Paediatr Scand* 1982;71:441-5.
- Naryanan I, Prakash K, Murthy NS, Gujral VV. Randomised controlled trial of effect of raw and Holder pasteurised human milk and of formula supplements on incidence of neonatal infection. *Lancet* 1984;ii:1111-2.
- Lucas A, Cole TJ. Breast milk and neonatal necrotising enterocolitis. *Lancet* 1990;336:1519-23.
- Williams AF. How should we use banked human milk? In: Xanthou M, ed. *New aspects of nutrition in pregnancy, infancy and prematurity*. Amsterdam: Elsevier, 1987:117-27.

Self help organisation's advice on myalgic encephalomyelitis

EDITOR,—I should like to assure Simon Wessely¹ that neither the ME Association nor ME Action regards Michael Sharpe and colleagues' findings in patients with chronic fatigue² as another attack on its credibility. Nor do we see why the paper should "further sour relations between the organisations and the profession."

As Wessely points out, the apparent relation between functional impairment and membership of a self help organisation at follow up does not mean that membership of such an organisation is responsible for the impairment. Aside from the fact that the study did not focus on myalgic encephalomyelitis, or on the work the ME Association does, Sharpe reassured us that there was no evidence of a causal relation between membership of a patient group and level of disability.

As regards the potential damage resulting from inaccurate information about myalgic encephalomyelitis, it is worth emphasising that the quote that illustrates this came from *Nursing Standard* and not from a magazine for patients. The British organisations have long been unhappy with the way the media have portrayed the illness and reviewed existing research, and it is often extremely difficult to get erroneous or biased information corrected. Sometimes we get a right of reply, but usually we don't.

Finally, I wish to make clear that our current advice on exercise and stress is based on sound

scientific research, the recommendations of our medical advisers, and 50 years' experience. Since our aim is to help patients it would be ridiculous for us to ignore good research and to stick instead to outdated explanations, speculation, or even prejudice. No one gains from such a narrow minded approach, least of all us.

The main reason why our beliefs tend to differ from those of Wessely and H Cope and A S David³ is that the authors do not distinguish between myalgic encephalomyelitis and chronic fatigue and we do. We see myalgic encephalomyelitis as more than "mental and physical fatigue," and we have evidence that treatments that seem to help patients with chronic fatigue do not always benefit people with myalgic encephalomyelitis (C Hickie, conference "Unravelling the mystery," North Carolina, 17-18 November 1990).

Our cautious attitude may worry those who disagree with us, but a less critical approach may lead to mistakes and we are anxious to avoid this.

M C HUMME

ME Association,
Stanford le Hope,
Essex SS17 0HA

- Wessely S. Outcome of chronic fatigue syndrome. *BMJ* 1992;305:365. (8 August.)
- Sharpe M, Hawton K, Seagroatt V, Pasvol G. Follow up of patients presenting with fatigue to an infectious diseases clinic. *BMJ* 1992;305:147-52. (18 July.)
- Cope H, David AS. Outcome in the chronic fatigue syndrome. *BMJ* 1992;305:365. (8 August.)

Using cytokines

EDITOR,—Salem Malik and Jonathan Waxman point out that the recent increase in understanding of cytokine biology offers great promise for clinical medicine.¹ Their editorial focuses particularly on the use of cytokines as antitumour agents and on the role of these substances in the pathology of cancer. The relevance of cytokines extends to other aspects of clinical medicine in which the immune system has a role. Cytokines play an essential part in the functioning of this system, yet paradoxically they can damage tissue and be life threatening if produced in excessive amounts or under inappropriate circumstances. For example, tumour necrosis factor and interleukin 1 cause morbidity and death in conditions related to infection (for example, sepsis, adult respiratory distress syndrome, and cerebral malaria) and in chronic inflammatory diseases such as rheumatoid arthritis and ulcerative colitis.^{2,4} Advances in clinical medicine related to cytokine biology should therefore be targeted at enhancing their beneficial properties while suppressing their harmful effects. Thus, for example, in treating cancer the aim should be to retain the tumour killing properties of cytokines while suppressing their anorectic and tissue wasting actions.

These aims can be achieved by using drugs, cytokine receptor antagonists, and nutrients. The widespread metabolic changes that result from the induction or application of cytokines depend on secondary messengers and intracellular signalling. These offer broad scope for nutritional modulation.⁵ Fish oil reduces production of interleukin 1 and tumour necrosis factor in patients with rheumatoid disease and brings about an amelioration of symptoms. It is also beneficial in ulcerative colitis and psoriasis. Fish oil and saturated fats reduce the anorectic effects of interleukin 1 and tumour necrosis factor in experimental animals.⁶ Thus consideration of the nature of fat in patients' diets offers scope for manipulating cytokine biology. Recent studies showing that free radicals enhance production of cytokines draw attention to the importance of the effectiveness of the antioxidant defences of patients in whom cytokines are operating.^{6,7} Key nutrients, such as vitamins E and C, play a major part in these defences. This highlights their importance in the diets of patients

who are undergoing cytokine treatment, or are producing cytokines in amounts that are incompatible with the restoration of normal tissue function and health.

ROBERT GRIMBLE

Department of Nutrition,
Medical School,
Southampton University,
Southampton SO9 3TU

- Malik S, Waxman J. Cytokines and cancer. *BMJ* 1992;305:265-7. (1 August.)
- Tracey KJ, Wei H, Manogue KR, Fong Y, Herse DG, Nguyen HT, et al. Cachectin/tumour necrosis factor induces cachexia, anemia and inflammation. *J Exp Med* 1988;167:1211-27.
- Kwiatkowski D, Hill AVS, Sambon I. TNF concentration in fatal cerebral, non fatal cerebral, and uncomplicated *Plasmodium falciparum* malaria. *Lancet* 1990;336:1201-4.
- Mahida YR, Wu K, Jewell DP. Enhanced production of interleukin 1 β by mononuclear cells isolated from mucosa with active ulcerative colitis of Crohn's disease. *Gut* 1989;30:835-8.
- Grimble RF. Nutrition and cytokine action. *Nutrition Research Reviews* 1990;3:193-210.
- Grimble RF. Dietary manipulation of the inflammatory response. *Proc Nutr Soc* 1992;51:285-94.
- Chaudhri G, Clark IA. Reactive oxygen species facilitate the in vitro and in vivo lipopolysaccharide-induced release of tumour necrosis factor. *J Immunol* 1989;143:1290-4.

Perineal tears

EDITOR,—Though M Stokes and D J Jones are correct to state that a perineal tear may lead to injury to the anal sphincter mechanism, they seem to imply that all tears lead to such injury.¹ They also suggest that a "prophylactic episiotomy should be performed if the perineum seems likely to tear."

Only a small proportion of perineal tears result in damage to the sphincter. A prophylactic episiotomy gives no guarantee of protecting the sphincter. A properly sutured tear is generally associated with less short term and long term morbidity than a repaired episiotomy. "Episiotomy should be used only to relieve fetal or maternal distress, or to achieve adequate progress when it is the perineum that is responsible for the lack of progress."² Advice concerning the use of episiotomy is more properly the province of midwives, other professionals concerned with intrapartum care, and the women themselves.

MALCOLM GRIFFITHS

Department of Obstetrics and Gynaecology,
Royal Berkshire Hospital,
Reading RG1 5AN

- Stokes M, Jones DJ. Colorectal trauma. *BMJ* 1992;305:303-6. (1 August.)
- Sleep J, Roberts J, Chalmers I. Care during the second stage of labour. In: Chalmers I, Enkin M, Keirse MJNC, eds. *Effective care in pregnancy and childbirth*. Oxford: Oxford University Press, 1989:1129-44.

Cardiac rehabilitation programmes

EDITOR,—Hannah McGee and John H Horgan note the increasing relevance of smaller uptake rates of cardiac rehabilitation programmes in older women and asks what factors might be responsible for this.¹

A short inpatient cardiac rehabilitation programme began in this district in July 1989 and was extended to include a 12 session outpatient programme in July 1990. Both of these were discontinued in April 1992 owing to insufficient funding. During the 34 months 784 myocardial events were recorded (myocardial infarctions, coronary artery bypass graft surgery, angioplasties, and heart transplants), of which 554 occurred in males and 230 in females.

A total of 62% of male patients and 63% of female patients participated in the inpatient cardiac rehabilitation programme. Later, entry to the outpatient programme was determined by a

number of criteria including general fitness and performance on an exercise treadmill test. Of the eligible males, 32% underwent an exercise test, compared with only 9% of the women. Of these, 69% of men and 68% of women went on to participate in the outpatient cardiac rehabilitation programme. Because of the low uptake of women for an exercise test, however, the final figures for the percentage of patients who received outpatient cardiac rehabilitation were 35% for men and 17% for women. It would seem that failure to participate in outpatient cardiac rehabilitation arises at the time of the exercise treadmill test.

We matched women for age and next of kin. The mean age of women who underwent the exercise test was 60.6 years, compared with 72.4 years for those who did not. The mean age of those who had the test and went on to participate in the outpatient programme was 61.6 years, compared with 60.0 years for those who had a test but failed to go on to the outpatient programme. A total of 77% of women who underwent the test had a partner who was alive, compared with 37% of those who did not. In addition, 86% of women who went on to participate in the outpatient programme had a partner who was alive, compared with only 38% of women who took the test and then discontinued treatment.

Our initial findings suggest that age is a factor in determining which female patients undertake an assessment exercise test but not necessarily whether or not they go on to further rehabilitation. The support and encouragement of a partner, however, during assessment and treatment may be crucial in determining whether or not a patient continues with cardiac rehabilitation.

T J SCANLON

Department of Public Health Medicine,
Mid Downs Health Authority,
Linwood, Haywards Heath RH16 4BE

S GODFREY

Intensive Care Unit,
Crawley Hospital,
Crawley RH11 7DH

1 McGee HM, Horgan JH. Cardiac rehabilitation programmes: are women less likely to attend? *BMJ* 1992;305:283-4. (1 August.)

Preschool screening for cryptorchidism

EDITOR.—James A Morecroft and Roger J Brereton seem to have missed the point we made, which was to have early detection of undescended testes through the already existing screening programme (at birth, 6 weeks, 8 months, 18 months, and 3 years) and offer treatment of orchidopexy. What we believe is alarming is that among those operated, only 39% were below 6 years of age. There seems to be unacceptable delay in offering surgical treatment to those diagnosed as having undescended testes.

Morecroft and Brereton also misquote us by saying that 39.1% of boys underwent orchidopexy before the age of 2. Our letter refers to age below 6 and not 2.

Their suggestion of orchidectomy after puberty totally disregards the psychological effect it might have on those boys presenting after puberty. Moreover, diagnosing this condition for the first time after puberty only reflects on the quality of the screening programme and defeats the purpose of screening.

SURINDER KAUL

Health Intelligence Unit,
Welsh Health Common Services Authority,
Cardiff CF2 1SB

D P W ROBERTS

Gwynedd Health Authority,
Bangor, Gwynedd LL57 4TP

1 Morecroft JA, Brereton RJ. Preschool screening for cryptorchidism. *BMJ* 1992;305:424-5. (15 August.)
2 Kaul SA, Roberts DPW. Preschool screening for cryptorchidism. *BMJ* 1992;305:181. (18 July.)

Dispensing doctors

EDITOR.—The arguments for dispensing by general practitioners put forward by David Roberts are less than convincing, but pharmacist Gordon Geddes, and A J Morton-Jones and M A L Pringle, fail to address the fundamental issue since any comparison between doctors' and pharmacy dispensing does not compare like with like.^{1,3}

General practitioners cannot charge a fee for any service, drug, or appliance, but chemists are allowed to charge fees and sell an ever increasing number of medicines on the GSL or P list over the counter.⁴ As Morton-Jones and Pringle indicate, there would seem to be considerable differences between the prescribing habits of dispensing and prescribing doctors.⁵ This difference is illusory and can wholly be attributed to over the counter sales by chemists of the cheaper preparations, which are not available to the patients of dispensing doctors.

The prescription charge is an unfair and inefficient tax which encourages self treatment. It is quite legal for chemists to sell prescribed preparations over the counter and in doing so it deprives the taxpayer of the prescription tax that would otherwise be paid. If the patient is exempt or the preparation costs more than the prescription tax the patient is unlikely to pay for it privately. The loss of these cheaper items from a prescribing doctor's prescribing analysis and cost (PACT) data increases the average net ingredient costs of medicines actually dispensed for the NHS and allows a further increase in the prescription charge to be introduced, a self perpetuating trend. Each increase in the prescription charge results in more patients purchasing keenly priced and heavily promoted "quality" medicines rather than the inferior generic preparations now available from the NHS at £3.75 per item.

In their survey of general practitioners' views of their extended role Spencer and Edwards failed to discuss the considerable disquiet felt by many doctors over the increasingly ambiguous position occupied by pharmacists.⁵ Primarily business people motivated by profit, chemists sit apart from other members of primary health care teams, whose first allegiance is to the patient whether as employees of the health authority or of general practitioners.

If, as stated in the recent debate in the House of Lords,⁶ pharmacists do provide a wider range of service more economically than any doctor, the government should forthwith relax the regulations and allow all general practitioners to provide the same service; but I fear the dispensing regulations will remain in their present form intentionally because depriving doctors of their medicines prevents them from practising medicine. This role is reserved for the new (private) apothecaries.

PAUL THOMAS

Ipswich IP6 0AQ

1 Roberts D. Dispensing doctors. *BMJ* 1992;305:187. (18 July.)
2 Geddes G. Dispensing doctors. *BMJ* 1992;305:478. (22 August.)
3 Morton-Jones AJ, Pringle MAL. Dispensing doctors. *BMJ* 1992;305:478. (22 August.)
4 NHS (Pharmaceutical Services) Regulations 1992. London: HMSO, 1992:Schedule 2, Part III, paragraph 13(1).
5 Spencer J, Edwards C. Pharmacy beyond the dispensary: general practitioners' views. *BMJ* 1992;304:1670-2.
6 Warden J. Dispensing with doctors? *BMJ* 1992;304:1530. (13 June.)

Back testing devices

EDITOR.—I agree with Malcom I V Jayson that back testing devices are by no means lie detectors and should not be taken as final arbiters.¹ I believe, however, that by focusing solely on malingering Jayson has missed an important point about the use of these devices in compensation cases. True malingering is rare, and even patients who greatly amplify their symptoms are a minority. Most

patients involved in medicolegal cases do have some impairment that deserves fair compensation, and the main problem is to quantify this handicap. Dynamometers for testing backs are useful for this.

This department has used an isoinertial device since 1988, in daily clinical practice and in more than 300 medicolegal cases. Careful observation and examination must remain an important part of the assessment as the physician's brain is still one of the most useful tools available. In low back disorders, however, a precise anatomical source of nociception cannot be recognised in most patients; the physician will be guided by objective tests like Schöber's test or the fingers to floor distance and by his or her subjective impression, which may be influenced by the empathy between physician and patient. The back testing devices allow trunk function to be quantified more precisely, but this is possible only if the patient makes the maximum effort; thus the machines could be better described as truth detectors than lie detectors.

If patients do not make the maximum effort this does not mean that they are deliberately malingering or amplifying their symptoms. We can conclude only that, for some reasons a physiological maximal effort was not achieved, that we are not able to quantify the impairment, and that a more complete psychological assessment is needed.

Regarding the identification of maximal effort, it has been established that true maximum effort yields extremely reproducible results while deliberate submaximal efforts do not.^{3,5} In the case of trunk testing, excessive illness behaviour correlates not only with poor performance but also with a higher variance.⁶ Moreover, reproducibility is not the only criterion for assessing maximal performance; inconsistent performances suggest poor effort, for example when involuntary secondary axis torque in a given axis exceeds the voluntary performance when asked to demonstrate torque in the same axis.^{7,8} Finally, observation during the test is important, and in medicolegal cases the examination must be performed by the physician who will write the conclusions and not by a technician.

M SZPALSKI

Department of Orthopaedics,
Centre Hospitalier Molière Longchamp,
1180 Brussels, Belgium

1 Jayson MIV. Trauma, back pain, malingering, and compensation. *BMJ* 1992;305:7-8. (4 July.)
2 Nachemson A. Recent advances in the treatment of low back pain. *Int Orthop* 1985;9:1-10.
3 Bohannon RW. Differentiation of maximal from submaximal static elbow flexor efforts by measurement variability. *Am J Phys Med Rehabil* 1987;66:213-8.
4 Chengalur SN, Smith GA, Nelson RC, Sadoff AM. Assessing sincerity of effort in maximal grip strength tests. *Am J Phys Med Rehabil* 1990;69:148-53.
5 Davies GJ. *A compendium of isokinetics in clinical usage*. La Crosse, Wisconsin: S and S, 1984.
6 Hirsch G, Beach G, Cooke C, Menard M, Locke S. Relationship between performance on lumbar dynamometry and Waddell score in a population with low back pain. *Spine* 1991;16:1039-43.
7 Spengler DM, Szpalski M. Newer assessment approaches for the patient with low back pain. *Contemporary Orthopedics* 1990; 21:371-8.
8 Szpalski M, Hayez JP, Poty S, Debaize JP. Intérêt de l'examen fonctionnel dynamométrique dans l'évaluation des pathologies lombaires. *Revue Française du Dommage Corporel* 1990;16: 663-72.

Doctors' legal position in medical emergencies

EDITOR.—Daniel Peckham raises the possibility that doctors who use common law to treat a life threatening drug overdose against the patient's wishes might subsequently face charges of assault.¹ A booklet prepared for members of the Medical Protection Society offers clear advice on this:²

In the case of a genuine emergency the practitioner may safely proceed to do what is reasonably necessary