CORRESPONDENCE

Because we receive many more letters than we have room to publish we may shorten those that we do publish to allow readers as wide a selection as possible. In particular, when we receive several letters on the same topic we reserve the right to abridge individual letters. Our usual policy is to reserve our correspondence columns for letters commenting on issues discussed recently (within six weeks) in the BMJ.

Letters critical of a paper may be sent to the authors of the paper so that their reply may appear in the same issue. We may also forward letters that we decide not to publish to the authors of the paper on which they comment.

Letters should not exceed 400 words and should be typed double spaced and signed by all authors, who should include their main degree.

HTLV-III, haemophilia, and blood transfusion

SIR,—We are writing on behalf of the directors of the UK haemophilia reference centres to express our concern about the safety of blood and unheated blood products.

The acquired immune deficiency syndrome (AIDS) is now the most important complication of treatment for haemophilia. By the end of April 1985 over 60 American and 20 European haemophiliacs with this disorder had been reported and about half of these had died. In haemophiliacs the prevalence of antibody to the causative agent HTLV-III in the UK has been rising since 1980,[1] mainly due to the use of unheated concentrate of factor VIII imported from America. However, seroconversion is also appearing in patients with haemophilia A treated only with factor VIII concentrates derived from UK plasma (Ludlum CA, Tucker J, Steel CM, *et al*, personal communication) and also in patients with haemophilia B treated only with locally produced factor IX concentrate.[1] Suggestions have already been made for using heat treated dried factor VIII concentrates since HTLV-III is known to be heat sensitive.[2,3] A similar case could also be made for using heat treated factor IX concentrate. However, in some categories of patients cryoprecipitate was considered to be the most appropriate treatment.[1]

To assess the impact of these recommendations on treatment for haemophilia in the UK the directors of the 109 haemophilia centres were circulated in May 1985 with a short questionnaire; 83 replies were received (table). Many centres were using cryoprecipitate and a substantial number were still using unheated UK factor VIII concentrate, but this may have represented clearing of existing stock. Only a few centres were using heat treated factor IX concentrate, presumably because this must be purchased from commercial sources whereas the unheated material is supplied "free" from the UK manufacturers. Heat treated UK factor IX is not yet available.

The figures have some disturbing implications. Without doubt the prevalence of HTLV-III infection in the homosexual population and other potential blood donors is increasing.[1] The safety of cryoprecipitate and unheated UK blood products with regard to HTLV-III infection can therefore no longer be assumed, especially as these materials may need to be administered in repeated doses. Although there may be regional variations in donor positivity for HTLV-III antibody, we no longer consider that the use of cryoprecipitate or other non-heat treated concentrates is justified. Nor is this problem confined to patients with haemophilia. Although the risk from ordinary blood transfusion is still very small, it is undoubtedly increasing from the previous estimate of one in 100 000.[2] Certain patients, such as those undergoing open heart surgery or those with acute leukaemias or other haematological disorders, may easily receive whole blood, platelet transfusions, cryoprecipitate, or other blood derivatives from 50 or more donors in a short space of time. The risk of HTLV-III infection in such patients could now be as high as one in 20 in certain areas of Britain.

All these considerations underline the need rapidly to introduce screening for HTLV-III antibody for all blood donations. Three commercial test kits have now been approved by the American Food and Drug Administration and, although there may be a small number of false positives, it is unreasonable to delay testing until this possibility is eliminated. Donations which are found to be positive for HTLV-III antibodies should be discarded. The logistics of retesting, confirmatory testing, and donor counselling can then be dealt with as separate important issues, as discussed in detail in the excellent review of Osterholm *et al*.[4] We believe that donors would readily accept this interim measure because, after all, they are themselves potential recipients. Although such testing will be expensive, we think that it should be implemented as soon as possible to protect recipients and to preserve public confidence in our blood transfusion services. When testing is fully implemented the role of single donor cryoprecipitate in the management of haemophilia can then be reassessed.

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Factor VIII and IX concentrate use in UK

Concentrate type	Concentrate used: Yes	No	Comment
Unheated commercial VIII	1	82	
Children unheated commercial VIII	0	83	
Unheated domestic VIII	33*	48	
Children unheated domestic VIII	15*		
Cryoprecipitate	73	10	
Heated commercial VIII	66	17†	
Heated domestic VIII	46	36	Not yet freely available
Unheated domestic IX	55	12	
Heated commercial IX	14	50	Two centres use both heated and unheated
Neither IX	14		Presumed too few cases of haemophilia B

* Includes three centres using it only for patients with HTLV-III antibodies.
† Includes five Scottish centres using heated domestic VIII. Others include small centres using unheated domestic VIII or cryoprecipitate.

1 Moffat EH, Bloom AL, Mortimer PP. HTLV-III antibody status and immunological abnormalities in haemophilic patients. *Lancet* 1985;i:935.
2 Anonymous. Blood transfusion, haemophilia and AIDS [Editorial]. *Lancet* 1984;ii:1433-5.
3 Anonymous. Update: acquired immunodeficiency syndrome (AIDS) in persons with hemophilia. *MMWR* 1984;33:589-92.
4 Carne CA, Weller IVD, Sutherland S, *et al.* Rising prevalence of human T-lymphotropic virus type III (HTLV III) infection in homosexual men in London. *Lancet* 1985;ii:1261-2.
5 Osterholm MT, Bowman RJ, Chopek MW, McCullough JJ, Korlath JA, Polesky HF. Sounding board: screening of donated blood and plasma for HTLV III antibody: facing more than one crisis? *N Engl J Med* 1985;312:1185-8.

Exercise and osteoporosis

SIR,—We perfectly understand Dr Roger Smith's ambivalent feelings (20 April, p 1163) about the effect of physical exercise on bone mass and should like to provide some additional information on the basis of our, partly unpublished, findings.

Using a Norland-Cameron single photon analyser, we compared the bone mineral content of the non-dominant radius diaphysis of 21-25 year old bricklayers (n=35) with that of male medical students of similar age (n=25). We could find no significant difference (1·13 (SD0·16) g/cm; 1·12 (SD0·15) g/cm), although the two groups had evidently exerted different amounts of physical activity.[1]

To study the effect of preinvolutional activity on the bone mass of the elderly,[2] we divided 61-75 year old healthy men and women into groups: men were classified as having been manual workers or non-manual workers, women as manual workers, housewives, or non-manual workers. No significant difference was found between the bone mineral content values in men or women (table I), suggesting that physical exercise before involution is not likely to have a decisive effect on the bone mass of old age.

TABLE I—*Mean (SD) bone mineral content in 61-75 year olds*

Group	Bone mineral content (g/cm)	p
Men:		
manual workers (n=39)	1·12 (0·14)	NS
non-manual workers (n=60)	1·11 (0·14)	
Women:		
manual workers (n=83)	0·71 (0·10)	
housewives (n=64)	0·71 (0·11)	NS
non-manual workers (n=55)	0·69 (0·11)	

However, in a more recent two and a half year long follow up study we have found that physical exercise in old age may perhaps reduce involutional bone loss. Usual daily physical activity was estimated by interviewing and scored 1, 2, 3, or 4. Yearly bone mineral loss was calculated from the difference between the bone mineral content measured at the beginning and at the end of the follow up period. The annual decrease in bone mineral content showed a slight but significant negative correlation with the degree of physical activity (table II).

TABLE II—*Mean (and SD) activity indices and mineral loss in men and women aged 60-79*

	Men		Women	
	60-69	70-79	60-69	70-79
No	64	82	96	76
Activity index	2·8 (1·4)	2·3 (1·0)	2·4 (0·9)	2·0 (0·9)
Mineral loss (cg/cm/yr)	0·6 (1·8)	0·8 (1·9)	0·5 (1·8)	0·9 (2·4)
r	−0·28	−0·31	−0·23	−0·25
p	<0·05	<0·05	<0·05	<0·05

Hence, despite the uncertain and contradictory effect of excess exercise on bone mass, we think that maintaining physical activity can be an important factor in inhibiting or diminishing involutional bone loss and thus in preventing osteoporotic complaints and symptoms.

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1 Gergely I, Krasznai I, Horváth T, Szücs J, Hollo I. Bone mineral content of the radius of healthy adults. *Orvosi Hetilap* 1978; 119:699-705.
2 Gergely I, Krasznai I, Horváth T, Szücs J, Hollo I. Bone mineral content of the healthy aged. *Aktuel Gerontol* 1978;8:109-11.

Male infertility

SIR,—The treatment of male infertility is difficult and all too frequently unsuccessful. In particular, patients with idiopathic oligospermia have not been shown, as discussed by Drs F C Wu and J H J Bancroft (11 May, p 1417), to benefit in controlled trials of treatment with clomiphene, tamoxifen, mesterolone, testosterone rebound, gonadotrophins, arginine, and kallikrein. Nevertheless, in their clinical algorithm for male infertility the authors suggest these treatments for idiopathic hypospermatogenesis. This surely cannot be justified apart from a placebo effect and only raises false hopes in patients and deepens their ultimate despair. It therefore appears totally inappropriate for the Medical Research Council Reproductive Biology Unit at Edinburgh to advocate treatment of unproved benefit.

A further point which merits clarification is the diagnosis of chronic prostatitis. Microscopical and bacteriological examination of the expressed prostatic secretion[1] is essential for the diagnosis and rational treatment of prostatitis because digital assessment of the prostate alone is unreliable.

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1 Drach GW, Fair WR, Meares EM, Stamey TA. Classification of benign diseases associated with prostatic pain: prostatitis or prostatodynia? *J Urol* 1978;120:266-7.

∴ The authors reply below.—ED, *BMJ*.

SIR,—We thank Mr Osborn for his comments on our algorithm on male infertility. It is our intention that the algorithm should be followed with the text, which clearly stated that none of the non-specific treatments mentioned for idiopathic hypospermatogenesis have to date been shown to be *effective in controlled trials*. Some of these trials are continuing. Indeed, the algorithm specifically indicated that if and when these treatments are used they may well be ineffective and that the next line of action should be the consideration of artificial insemination by donor or adoption. It is not our policy to advocate empirical treatment for male infertility. We believe that any treatment for idiopathic hypospermatogenesis should, in the current state of knowledge, be administered under conditions of a controlled clinical trial. However, when treatment trials are inappropriate or not feasible we feel that the judicious use of non-specific treatment should not be dogmatically condemned in a situation where the alternatives of childlessness, artificial insemination, and adoption are the only possible options.

Mr Osborn's second comment, regarding the diagnosis of chronic prostatitis, is incorrect. While we agree that digital assessment of the prostate alone is unreliable, the examination of expressed prostatic secretion is not essential for the diagnosis of chronic prostatitis.[1] The presence of palpable abnormalities of the prostate in conjunction with significant seminal leucocytosis (>1×10^6/ml peroxidase positive cells) should make the diagnosis of chronic (usually non-bacterial) prostatitis highly probable. It is more important to emphasise that the aetiological importance of chronic prostatitis and the efficacy of its treatment in male infertility remain to be proved.

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1 Comhaire F, Verschraegen G, Vermeulen L. Diagnosis of accessory gland infection and its possible role in male infertility. In: Frajese G, ed. *Oligozoospermia: recent progress in andrology*. New York: Raven Press, 1981:275-83.

Children not immunised for measles

SIR,—Dr Terry Kemple's article makes three important points: (*a*) organisation is important to improve vaccination uptake; (*b*) use of the DHSS guidelines as information for reasons not to vaccinate children would improve uptake; (*c*) those children not vaccinated are very likely to develop measles. As a trainee in Aberdeenshire I carried out a project which confirms these findings.

Parents of 907 children completed a questionnaire about measles and their child's vaccination status. These children, aged 2 to 13, were resident in the practice at the time of vaccination, and this information was checked against the practice records. One hundred and twenty one children were not vaccinated (15%) and the table shows the reasons the parents gave.

Parents' reasons for not having their child vaccinated

Reasons parents gave	No (%)
Advised against vaccination by medical person	78 (64·5)
Forgot about vaccination	9 (7·5)
Vaccination isn't important	8 (6·5)
Vaccination thought to be bad or possibly harmful	11 (9·5)
Developed measles before age when vaccination done	15 (12)
Total	121 (100)

Using this information and considering how we could improve vaccination uptake, I think the important points are: (*a*) only 11 of the 121 (9·5%) parents thought that the vaccination was a bad idea; (*b*) 78 (65%) said they had been advised against immunisation. None of the reasons they gave coincided with the DHSS guidelines; (*c*) 17 (14%) cases of non-vaccination were due to poor organisation or misunderstanding.

It would seem that greater awareness of DHSS advice by all members of the health team—GPs, practice nurses, and health visitors—would produce the greatest improvement in vaccination uptake. Within our training practice a meeting demonstrated our differences and we all agreed to use the DHSS guidelines. By involving all professionals concerned with vaccination this agreement prevented confusion for parents caused by different advice by different professionals. Information included by the manufacturer with each phial of vaccine is designed to cover the company legally, and most experts consider this too exclusive.

Finally, the aim of immunisation is protection against measles. In Dr Kemple's sample 20 out of 42 had developed measles. In our group of children, during the 1982 epidemic, 55 out of a susceptible 93 (59%) developed measles. There were no long term complications in these children —*but that was just good fortune.*

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