Correspondence

Neurophysiological studies on workers exposed to lead

Sir,—May I reply to the comments Triebig has made on our paper (1985;42:503). At no stage did we suggest, on the basis of our studies, that the biological occupational exposure limit for Pb-B of 70 µg/dl proposed in 1982 in the EEC for male workers should be lowered. We said, "The observations of the present study confirm the need for reappraisal of what is to be considered a safe blood lead concentration for the purposes of monitoring men and women at work." This opinion is shared by the World Health Organisation¹ and the Council of Ministers of the European Communities.²

Specific points that require comment are:

(1) I agree with Triebig as to the lack of consistency in the nerves affected. But this has been the pattern in many other studies and was clearly referred to in our paper. Perhaps paragraph 3 of p 176 of our paper should be looked at with greater care.

(2) Triebig states "The age (mean or distribution or both) of the lead exposed workers and the control group is not given." This was certainly considered as an important factor, and is clearly stated in our paper as follows, "The sets of data were tabulated into four age groups as a 2 × 4 table with unequal replication within each cell, and the difference in sample means were tested using 2-way orthogonal ANOVA."

(3) Triebig states "The authors performed no correlation analyses for the detection of possible dose-effect/relationships." In fact a dose effect correlation analysis was performed but no significant correlation between blood lead concentrations and nerve conduction velocities was observed. This has been the experience in other studies.³

(4) Triebig states "Blood lead concentrations (Pb-B) were estimated only once." Yes, it probably would be better to have "time weighted average" for Pb-B but this is not obligatory. Baker *et al* state "In most instances current and cumulative exposure indices correlated with effect parameters."⁴

(5) Triebig states "The authors give no information about the lower limits of the neurophysiological parameters measured." This is not correct. We cited the relevant publications giving normal values for Singaporean workers; it is suggested that these papers be referred to for detailed information. Further, Triebig's concern of lack of information on the incidence of abnormal nerve conduction velocities is not relevant. Our study compares the group average performances of the lead exposed group with a con-

trol group and, as such, the question of comparing incidence data does not arise.

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References

- ¹ World Health Organisation. *Recommended health-based limits in occupational exposure to heavy metals*. Geneva: WHO, 1980. (Technical report series No 647.)
- ² European Communities Health and Safety at Work: protection of workers exposed to lead. *Am Ind Hyg Assoc J* 1983;44:B-21-22.
- ³ Ashby JAS. A neurological and biochemical study of early lead poisoning. *Br J Ind Med* 1980;15:254-60.
- ⁴ Baker EL, Feldman RG, White RA, *et al*. Occupational lead neurotoxicity: a behavioural and electrophysiological evaluation. *Br J Ind Med* 1984;41:352-61.

Book reviews

Colour atlas of mesothelioma. By JSP Jones, C Lund, and HT Planteydt. (Pp 201; £49.) Lancaster: MTP Press Ltd, 1985.

This beautifully produced atlas is written by pathologists for their fellow pathologists to help them in making the pathological diagnosis of diffuse malignant mesothelioma, but its well written and concise text and beautiful colour illustrations will be appreciated by any physician with an interest in asbestos related diseases as well as by chest physicians and surgeons. There is an excellent account of the histopathology and cytology, followed by more than 60 pages of colour illustrations. There follow eight case histories, illustrated by radiographs as well as by photographs of the specimens and histopathology. Of interest is case No 8, a cystic mesothelioma of the peritoneum, an unusual type with a long course and the patient still alive and asymptomatic at the time of going to press. Only the occupational histories are rather brief: "the patient was a mechanic." This reveals little about possible exposure to asbestos during life. The account of the other forms of mesothelioma is also of interest and the method of work and addresses of the mesothelioma panels throughout the world are of practical value to all pathologists.

M L NEWHOUSE

Occupational biomechanics. By DB Chaffin and G Andersson (£32.70.) Bognor; John Wiley & Sons Ltd, 1984.

Aches, pains, and physical trauma resulting from inadequate or absent matching of the worker to the