steroid therapy; without detailed examination² it may not be easy to distinguish between the two. The evidence for corticosteroids causing sudden death has not been conclusive.³

The patient most probably had Addison's disease which improved on corticosteroids prescribed for his asthma, but these should not be blamed for his sudden death, nor should his asthma. His sudden unexpected death,⁴ occurring after a period of stress ("prolonged period of driving"), may have been due solely to primary Addison's disease.—I am, etc.,

H. K. LIM

Barnet General Hospital,
Barnet, Herts

¹ Green M., and Lim, K. H., *Lancet*, 1971, **1**, 1159.
² Sanerkin, N. G., and El-Shaboury, A. H., *Lancet*, 1965, **2**, 468.

³ Cope, C. L., *British Medical Journal*, 1966, **2**, 847.

⁴ Mason, A. S., Meade, T. W., Lee, J. A. H., and Morris J. N., *Lancet*, 1968, **2**, 744.

Hard Water and Cardiovascular Disease

SIR,—The association between increased water hardness and reduced mortality from all cardiovascular diseases has been recorded in many countries over the last 14 years. Research is being carried out into the mechanism and its associated effects; this includes the work of Elwood and his colleagues¹ with very little additional statistical evidence of precise causation or associated clinical or laboratory change.

It seems obvious that there must be some protective factor or factors in hard water areas, and it is possible that boiling water may reduce this protection. The present fashion to drink most of our water in boiled form, especially as tea, coffee, and soup, may be of importance in the increasing incidence of cardiovascular disease. Perhaps we would benefit from consuming tap water regularly, at least with each meal.—I am, etc.,

SIDNEY SHAW

Department of Haematology,
Charing Cross Hospital,
London W.C.2

¹ Elwood, P. C., et al., *British Medical Journal*, 1971, **2**, 362.

Hyposensitization Treatment

SIR,—Dr. W. J. H. Leckie (6 November, p. 366), criticizes a number of aspects of the clinical trial which I performed to test the effects of hyposensitization with *D. pteronyssinus* extract in patients with house-dust allergy (23 October, p. 204). He comments that, as localized skin reactions were observed in some patients receiving *D. pteronyssinus* extract, the double blind situation had ceased to exist. This was one of the reasons for choosing human dander extract to act as control as it has antigenic properties itself in atopic persons, in lower dilutions than the house-dust mite, but nevertheless within the concentrations given in the trial (the 1:10,000 extract contained approximately 0.1 g of whole human dander/100 ml, which was a concentration reported by Voorhorst,¹ and considerably greater than that by Berrens,² to give positive skin tests in sensitive subjects). Thus the skin reactions observed were at that time regarded as a possible complication of either treatment.

The failure of ventilatory function to improve significantly is also cited as a cause for disquiet. For significant improvement to

have occurred in any of the parameters recorded consistent improvement over the pre-treatment period was required in the assessment period. While improvement in asthma occurred, I did not claim that any patients had been completely cured, and as it is the nature of the disease for the ventilatory function to fluctuate it is perhaps over-optimistic to expect such a consistent improvement. Had a less stringent method of analysis been used, Dr. Leckie would perhaps be justified in his criticism of the quality of the method. In fact the diary card method of assessing the changes in respiratory symptoms usually correlates very well with daily measurements of peak flow rate (Table).

Correlation Coefficient Between Measurements of Peak Flow Rate taken at mid-day, with 1-6 points Breathlessness Score, Frequency of Nocturnal Attacks of Asthma, and Total 24-hour inhaler usage from Eight Subjects over a 28-day Period. (Total Number of Observations = 228.)

	Day Breathlessness Score	Night Asthma Score	Total Daily Inhaler Use
r	0.4642	0.2833	-0.6377
P	<0.001	<0.001	<0.001

Finally, he comments on the small size of the sample. The significant improvement in several aspects of patients' asthma was considered worth reporting, as this type of treatment, using *D. culinae* antigen, is now available to practitioners, who until recently had no information about its efficacy.—I am, etc.,

A. P. SMITH

Pulmonary Research Unit,
King's College Hospital,
London S.E.5

¹ Voorhorst, R., Spijkema, F. T. M., Varkekamp, H., Leupen, M. J., and Lyklema, A. W., *Journal of Allergy*, 1967, **39**, 325.

² Berrens, L., *Journal of Allergy*, 1967, **40**, 355.

Handicapped Children in Preschool Playgroups

SIR,—Dr. Elizabeth Grantham in her article "Handicapped Children in Preschool Playgroups" (6 November, p. 346) makes a plea for handicapped children and their mothers to partake of the benefits afforded to normal children in the playgroup situation. This can be acceptable only as long as insufficient provision is made by local authority education departments for accommodation of these children in their nursery schools. The special problems of the handicapped child and his mother require to be handled with a great deal of sensitivity and insight which can be gained only through lengthy professional training and experience. In order to achieve optimum results in the preschool development of handicapped children the adult who is in charge must also be able to interpret and correlate information supplied from other professional sources, such as from doctors, psychologists, remedial therapists, health visitors, and social workers.

Another disadvantage of the preschool playgroup is that, since the mothers give their help on a rota system, it cannot guarantee continuity of adult contact with the children in its care. The basis of a child's confidence in a new environment is founded on the formation of a good continuing relationship with familiar adults as much, if not more, than with other children. The younger

the child, the more he relates to the adults around him. Relationship with other children occurs at a later stage in his social development.

At best, it is doubtful if the resources available to the Preschool Playgroup Association, whose work with normal children is admirable, are sufficient to meet the special needs of the handicapped child at this important stage of his development. At worst, the mushrooming of these "do-it-yourself" nursery schools must not provide education committees of local authorities with a loophole which they may use to allow them to escape from their duty of providing more places for all children, including the handicapped, in their own professionally staffed nursery schools.—I am, etc.,

HELEN L. STEVENSON

Edinburgh

SIR,—Dr. Elizabeth Grantham (6 November, p. 346) describes the role of a voluntary organization in providing an essential range of social and sensory experiences for young handicapped children. The need for these early experiences is accepted by the medical and education professions, not merely to stimulate the child's fullest well being and educational potential, but also to prevent the development of secondary physical and emotional handicap.

An estimate of the need for such places is provided by the W.H.O. working group on the detection and treatment of handicapping defects in young children,¹ which estimates that 2% of all children born really need special care in early childhood because of handicaps, while another 5% might obtain some benefit from such care. It is unlikely that many local authorities are able to provide this number of places, and the separation of responsibility between regional hospital boards, health departments, education departments, and social service departments further confuses the issue. Complications relating to planning also arise from the fact that the geographical boundaries of these authorities may differ widely.

Two questions need to be discussed. Firstly, who is to take the initiative in planning services for the young handicapped child, and secondly, is it possible to establish a meaningful dialogue between voluntary organizations already providing such care and official groups and authorities responsible for planning?

The needs of the young handicapped child are not readily segregated into the administrative boundaries of responsible departments and the need is for planned co-operation between departments and authorities. The *Memorandum on Comprehensive Assessment Centres*² suggests the appointment of a co-ordinator. Where he exists co-operation in planning must be his prime task, but few co-ordinators exist. Not all regional hospital boards will wish to appoint one, and in any event many medical officers of health will feel that they are already fulfilling this task. This leaves the first question unanswered.

When considering the needs of the handicapped child one would imagine that statutory authorities would welcome discussion with voluntary groups already providing care and be willing to provide advice and assistance. There is little evidence of this and a recent study³ of opportunity classes is