The Association of Clinical Pathologists: 90th general meeting

I Scientific communications

Classifying and Recording Unexpected Deaths of Infants

JOHN L. EMERY (The Children's Hospital, Sheffield) Unexpected death at home (cot death) constitutes half of child deaths between the ages of 1 week and 1 year. The mortality rate in this age group has shown no tendency to fall and it would seem most likely that any such reduction will come from studies of a preventable group among these home deaths. An investigation by the Ministry of Health (Department of Health and Social Security, 1970) in 1964-66 showed that there is an element of preventability in some home deaths and an analysis of cot deaths carried out in Sheffield indicates that there is possibly a definable group.

A series of 644 necropsies carried out on children found unexpectedly dead in Sheffield showed that 5% (group A) were children having gross deformities such as congenital heart deformity; 25% (group B) were children who had recognizable and possibly treatable diseases; 47% (group C) had evidence of the type of diseases which are usually not lethal; and 23% (group D) had no nameable diseases but, of these, only 6% were normal in all respects.

If we are to prevent some of these deaths it is necessary that the factors found in groups B and C be registered, and to register these deaths as 'unexpected death in infancy syndrome' is a retrograde step. It is recommended that these deaths be registered, recording the type of minimal disease process found, together with the additional registration of 'unexpected death in infancy', as indicated in a letter in the British Medical Journal (Emery and Weatherall, 1972).

References

Department of Health and Social Security (1970). Confidential

Leucocyte Migration Inhibition in Relation to Human Brucellosis

P. G. MANN (Public Health Laboratory, Bath) and ELIZABETH RICHENS (University of Bath) Thirty-one patients in whom brucellosis was considered to be a possible cause for episodic ill health were interviewed for symptoms suggesting active infection. Blood taken at the same time was examined for Brucella abortus antibody and for evidence of leucocyte migration inhibition in the presence of Brucella abortus agglutinatable suspension. Migration inhibition was found in one overtly healthy farmer, as well as in two cases of active brucellosis. A further three patients showed marked inhibition without clear-cut clinical evidence of active infection. In two instances high-titre Brucella antibody was associated with a normal migration index, whilst in nine other cases low-titre antibody was accompanied by marked migration inhibition.

Electrofocusing of Hepatitis B Antigen and Possible Applications to Radioimmunoassay Techniques

C. R. HOWARD AND A. J. ZUCKERMAN (Hepatitis Research Unit, London School of Hygiene and Tropical Medicine) Previous studies on the biophysical and biochemical nature of hepatitis B antigen have been performed on material purified at some stage by isopycnic or rate zonal centrifugation. A method has been developed which avoids the disadvantages which accompany differential centrifugation. Hepatitis B antigen, which has been partially purified from plasma by gel chromatography on Sephadex G-200, was allowed to migrate in an