Scottish Paediatric Society

At the Summer Meeting held in the Postgraduate Centre, Raigmore Hospital, Inverness on 1 June 1974, the President, Professor J. O. Forfar, was in the Chair.

The titles of the clinical demonstrations were as follows.

Hydatid disease. C. A. S. Galloway. Raigmore Hospital, Inverness.

Beckwith's syndrome. F. N. Porter (introduced). Raigmore Hospital, Inverness.

Two cases of fructosaemia. Anne Hamilton (introduced). Raigmore Hospital, Inverness.

Ovarian tumour. Amber Durdana (introduced). Raigmore Hospital, Inverness.

Studies on a fatal case of measles. H. Williams (introduced), H. Richmond (introduced), and P. MacArthur. Raigmore Hospital, Inverness.

Scientific communications

Physical and mental development after severe neonatal respiratory failure. R. Dinwiddie (introduced), D. H. Mellor, S. Donaldson (introduced), A. M. Stewart (introduced), and G. Russell. Royal Aberdeen Children's Hospital, Aberdeen.

Thirty-five children aged 4 to 8 years who had suffered from severe respiratory failure requiring artificial ventilation in the neonatal period had been recalled for detailed assessment of physical and mental development. In order to determine whether mechanical ventilation might itself be a factor in causing long-term damage, these 35 children had been paired with a group of children who had also had neonatal respiratory distress but had not required artificial ventilation. Detailed physical examination had shown that the mean values for height, weight, and other growth measurements in both groups were normal for age and that there was no difference between the two groups. Neurological and physiological assessment had shown that 86% of the ventilated children and 94% of the nonventilated children had no significant neurological or mental handicap. These results were considered to be encouraging and with improving techniques of care, even better results were predicted.

Use of diphosphonates in diseases associated with ectopic calcification. H. Sheppard (introduced), W. S. Uttley, J. Syme, and N. Belton (introduced). Royal Hospital for Sick Children and Department of Paediatrics, Western General Hospital, Edinburgh.

Disodium etidronate was described as a diphosphonate which had shown promise in early clinical trials in the treatment of diseases with abnormal calcification and ectopic bone formation. Its mode of action was to prevent the accretion of micro-apatite crystals by chemisorption on calcium phosphate nuclei. The progress and response to treatment in 3 patients over a 12-24-month period were described. The usefulness of the drug in diseases of ectopic calcification was confirmed. Metabolic studies were described as indicating a decrease in calcium balance, particularly in the long term, due largely to faecal loss.

Experience with an ion-specific electrode to measure sweat chloride. W. R. McWhirter. University Department of Child Health, Ninewells Hospital, Dundee.

The Orion skin chloride measuring system had been evaluated in children of various ages. The method was found to give reproducible results in nearly all cases. Failure to obtain reproducibility was related to inadequate sweating by the subject and this was most likely to occur in the first week of life. There was generally a clear distinction between healthy children and patients with cystic fibrosis. The method was simple and reliable provided that the operator had had reasonable experience with the instrument. One distinct advantage of the method compared with the use of filter paper was the speed with which results were obtained. The design of the instrument made the method completely safe and only a few patients noticed slight tingling during iontophoresis. The mean sweat chloride in the 'normals' was 26.9 mEq/l., compared with 102.3 mEq/l. in the patients with cystic fibrosis.

Value of measuring CSF osmolality in hypernatraemic dehydration. A. H. Habel. Royal Hospital for Sick Children, Edinburgh.