Paediatric Pathology Society

Proceedings of the Eighteenth Annual Meeting

The Eighteenth Annual Meeting was held in London on 18-20 October 1972, the latter 2 days being a Royal College of Physicians Conference in conjunction with the British Paediatric Association.

Scientific communications

Uses of routine postmortem radiography. A. J. Barson, F. A. Langley, and J. G. B. Russell. Department of Pathology, St. Mary's Hospital, Whitworth Park, Manchester M13 0JH.

Whole body anteroposterior and lateral x-rays have been taken of every infant undergoing necropsy examination in St. Mary's Hospital over the past 2 years. The x-ray machine was designed for this purpose and is located adjacent to the postmortem room and operated by a mortuary attendant or a pathologist. 250 infants have now been x-rayed after death, of whom 144 were stillborn and 106 were neonatal deaths.

X-ray is always useful in providing a convenient means of assessing bone age. 101 infants showed significant radiographical pathology. This was often difficult to display by gross dissection or was easily overlooked without prior knowledge. Bony anomalies of the spine or limbs are often more easily shown radiographically. Pathological calcification of soft tissues and air in the thorax, peritoneum, or blood vessels can also be detected.

It is important that the x-ray should be available to the pathologist before the necropsy is begun so that the examination can be carried out appropriately. A post-mortem x-ray may be a useful adjunct to a clinico-pathological discussion. On occasions, pathological features may be best shown by the injection of radio-opaque material into blood vessels or body cavities after death, a useful research technique which is better undertaken in the postmortem room than in the radiology department.

Data provided by the *in vitro* culture of eosinophilic granuloma of bone. C. Nezelof, M. F. Rousseau, and S. Despre. Laboratoire d'Anatomic Pathologique, Groupe Hospitalier Necker-Enfants Malades, 149 Rue de Sevres, Paris 15.

'U'-cell culture—a new technique. G. R. Sutherland and A. D. Bain. Department of Pathology, Royal Hospital for Sick Children, Sciennes Road, Edinburgh EH9 1LF.

Urine cell culture is a technique which we have recently described. Several parameters may affect the ability of these cells to grow in culture, such as ges-

tational age, postnatal age, and urine cell count. The types of cells that grow in culture and the possibility of separating them were explored. The use of this technique for cytogenetic studies has been established, both in the living child and at perinatal necropsy. An important use of this technique may be in the study of inborn errors of metabolism; urine cell culture of only one such case has been successfully performed to date and the results were presented.

Cellular immunity in Wilms's tumour and neuroblastoma (with film). S. Kumar. Department of Child Health, Clinical Sciences Building, York Place, Manchester 13.

Neuroblastoma: a retrospective study of 247 cases. J. W. Keeling. Department of Morbid Anatomy, The Hospital for Sick Children, Great Ormond Street, London W.C.1.

A retrospective study was made to try to correlate clinical and histopathological features in cases of neuroblastoma with the outcome of the disease.

There were 69 survivors with follow-up periods of between 9 months and 20 years, with a median survival time of 7 years. More than half of the deaths from neuroblastoma occurred within 6 months of presentation: 93% died within 2 years. There was a marked difference in survival depending on the site of the primary tumour, 10% of 91 adrenal tumours surviving compared with 44% of 53 thoracic tumours and 57% of 14 pelvic ones.

Prognosis was best if the tumour was confined to the primary site, but 9.5% of 117 cases with distant metastases survived; in none of these was there diffuse bone marrow involvement.

Histologically, tumour components were classified into four groups. Grouping according to the histological appearance of the major part of the tumour correlated well with outcome: only 7% of the least differentiated group survived, compared with 79% of the most differentiated group. Grouping according to the appearance of the most differentiated cell type present in the tumour correlated less well.

50% of infants presenting in the first 6 months of life survived; there was rapid fall off in survival with increasing age, and after the age of 2 years survival was infrequent. There was no sex difference in the incidence of the disease, but more girls survived. There has been an improvement in survival over the years to 34% in 1960-69.