outside this body, and therefore this tumour should not be considered a true pinealoma.

REFERENCES

- Dayan, A. D., Marshall, A. H. E., Miller, A. A., Pick, F. J., and Rankin, N. E. (1966). Atypical teratomas of the pineal and hypothalamus. *Journal of Pathology and Bacteriology*, **92**, 1.
- Russell, D. S., and Rubinstein, L. J. (1971). *Pathology of Tumours of the Nervous System*, 3rd ed. Arnold, London.
- Wildi, E., and Frauchiger, E. (1965). Modifications histologiques de l'épiphyse humaine pendant l'enfance, l'âge adulte et le vieillissement. *Progress in Brain Research*, **10**, 218.
- Zülch, K. J. (1956). Biologie und Pathologie der Hirngeschwülste. In *Handbuch der Neurochirurgie*, Vol. III. Ed. by H. Olivecrona and W. Tonnies. Springer, Berlin.

Necrotizing enterocolitis. S. F. Cahalane and B. Moore. The Children's Hospital, Temple Street, Dublin 1.

Necrotizing enterocolitis is a condition predominantly affecting premature newborn infants but occurring occasionally in older children, and is probably identical with ischaemic colitis, a condition of old age. The aetiology is unknown but splanchnic shock is known to cause a similar condition in experimental animals. It has been suggested that infection and immune reaction may play a part.

Clinical manifestations are vomiting followed by abdominal distension and bloody diarrhoea. Mortality is high whether conservative or surgical treatment is adopted. 10 cases from the necropsy files of this hospital were analysed according to clinical and pathological features. 7 were males, and ages varied from a few hours to 3½ years. Only 3 were premature. One or more adverse perinatal factors had occurred in each of the 5 newborn cases. Exchange transfusion, which is known to be implicated in some cases, had been carried out in only one of the series.

The small bowel was involved in all 10 cases, the stomach in 2, the appendix in 1, and various parts of the colon in 5 cases. The bowel was dilated, hyperaemic, and showed a greyish mucosal pseudomembrane on gross inspection. Perforation had occurred in 3 cases.

Microscopically there was mucosal necrosis in all cases and submucosal haemorrhage in 8. Intravascular thrombi in the bowel wall were found in 3 cases and there was an inflammatory exudate in 3. The most interesting finding in other organs was the presence of intra-alveolar haemorrhage.

Only one case had been diagnosed before death. The x-ray picture does not appear to be specific.

Deaths during the first year of life in children born in Malmö, 1966-70. G. Östberg and Ingrid Bjerre. Department of Pathology, Malmö General Hospital, Malmö, Sweden.

The study was undertaken as a preliminary to a clinical follow-up of low birthweight children. 146 children below 2500 g birthweight died (13.2% of all live births in the same weight group) and 84 over 2500 g. The total neonatal mortality in Malmö (260,000 inhabitants, annual birth rate 14/1000) was 0.95%.

The death rate was nearly 100% for infants below 1000 g weight and 28 weeks' gestation, successively

falling in higher 500 g groups. Nearly all the low birthweight children died within 6 days. 45 of 84 with a weight over 2500 g died within 6 days and 27 lived more than one month.

Necropsies were performed on all but one. They were placed in 5 diagnostic groups: malformations 64 cases; 'various' (erythroblastosis, infections) 32 cases; haemorrhage (brain, lungs, adrenals) 31 cases; hyaline membrane disease 61 cases; and immaturity 42 cases. In the last 3 groups the children were mostly grossly immature. Birthweight and gestational age were lowest in the immaturity group (mean values 909 g, 188 days), were intermediate in the group with hyaline membrane disease (1827 g, 222 days), and were highest in the malformation group (2968 g, 266 days). Immature infants died within the first week, those with hyaline membrane disease during days 1, 2, and 3, and malformed children more evenly distributed throughout the year. Maternal complications with uterine bleeding from placenta praevia or ablatio were more common in the groups with haemorrhage, hyaline membrane disease, and immaturity.

Fatal complications of THAM (tris-buffer) administration in the newborn. Helga Rehder and E. Heiming. Division of Paediatric Pathology, University Institute of Pathology, 53 Bonn-Venusberg, West Germany.

In the course of treatment of two newborn girls with respiratory acidosis, THAM (tris-buffer) was inadvertently infused into one of the umbilical arteries. The first child died on the 9th day. Necropsy revealed extensive skin necrosis of the back and left lower extremity. The internal organs showed haemorrhagic necrosis secondary to thrombosis and vascular damage. The other child survived, but cutaneous scars, sciatic nerve palsy, and necrosis of the femoral head on one side persisted. Several months later the infant was operated on for vesico-vaginal fistula and pyonephrosis: one kidney was removed and found to be fibrosed and scarred, with its parenchyma much diminished. Similar scarring was found in other internal organs and this was interpreted as a sequel to haemorrhagic necroses similar to those seen in the first case.

Lymphoreticular aggregates in infant's lungs. J. L. Emery and F. Dinsdale. Department of Pathology, Children's Hospital, Western Bank, Sheffield 10.

Hypoglycaemia in the newborn. K. M. Laurence and A. D. Griffiths. Department of Child Health, Welsh National School of Medicine, Heath Park, Cardiff, and Department of Paediatrics, Nevill Hall Hospital, Abergavenny, Wales.

Standard celloidin-embedded brain sections (cerebrum, midbrain, pons, medulla, cerebellum, and spinal cord) were studied from 17 infants who died after a period of hypoglycaemia (true blood glucose <20 mg/100 ml) during the first 24 hours of life. Nearly all cases were treated with intravenous glucose immediately