BRITISH ASSOCIATION OF PAEDIATRIC SURGEONS

The Fifth Annual Meeting of the British Association of Paediatric Surgeons took place at The Hospital for Sick Children, Great Ormond Street, on July 24, 25 and 26, 1958. The President was Miss Isabella Forshall. During the morning sessions papers were read and on two afternoons there were ward rounds and television demonstrations at The Hospital for Sick Children. On the afternoon of July 25, the Association was invited to attend a meeting at St. Bartholomew’s Hospital where members of the staff of St. Bartholomew’s read papers. Dr. Willis Potts, Chicago, gave the Simpson-Smith Memorial Lecture, at The Hospital for Sick Children, on ‘Oesophageal Atresia’, and the Moynihan Lecture at the Royal College of Surgeons on ‘Respiratory Emergencies in the New Born’.

The Annual Dinner took place on the evening of July 26, at the Apothecaries Hall. Professor Sir James Paterson Ross was the guest of honour. Paediatric surgeons from 20 different nations attended and took part in the meeting.

The following are abstracts of papers not published in full:

F. R. EDWARDS (Liverpool). ‘Aortic Rings.’ Owing to persistence of the 12 mm. embryo stage of development the oesophagus and trachea may be surrounded by vascular structures in the form of a ring. This may be in the form of a double aorta or by compression from aberrant vessels or a long ductus arteriosus passing round to a right aortic arch.

Each form of vascular ring can be explained by absorption taking place in different parts of the two aortic arches.

Severe pathological changes are produced in the trachea in the form of a chondromalacia, with narrowing of the lumen, and a secondary tracheobronchitis is often present. The oesophageal changes are temporary only. Other congenital abnormalities such as hemivertebra, spina bifida, pulmonary stenosis and tetralogy of Fallot may be present.

Only a proportion develop symptoms, depending upon the tightness of the ring.

Stridor is the main symptom, which is in part relieved by maintaining an extended state of the cervical and thoracic region. The condition may improve slowly, but the stridor tends to recur with recurrent respiratory infections. Dysphagia may be present with regurgitation into the lungs. If symptoms are present early then it suggests a double arch; if they come on at the age of 2 to 3 years it suggests a right aortic arch with a ductus.

A posterior oesophageal defect is seen on barium swallow, and angiocardiography may demonstrate the anatomical position. Bronchoscopy will demonstrate the narrowing of the trachea associated with a pulsating vessel, and oesophagoscopy will enable the retro-oesophageal vessel to be compressed against the spine. Study of the brachial and femoral pulses on the two sides will give information as to the distribution of the retro-oesophageal vessel.

Differential diagnoses are congenital oesophageal stenosis and atresia, primary laryngeal and tracheal deformities, tracheobronchitis, and enlarged bronchial and paratracheal lymph nodes.

Considerable pre-operative treatment by vapour tents, antibiotics, etc., may be required.

Operation consists of the division of the lesser arch or the individual compressing vessel, and the ligamentum arteriosum. Trial compression of the area to be divided is undertaken first to ensure that no major vessel is occluded.

Seventeen cases have been operated upon: there were 11 rings and six aberrant right subclavian arteries. All survived.

It may be some months before the tracheal deformity returns to normal and the stridor completely disappears.

W. PORADOWSKA (Warsaw). ‘Some Neonatal Problems.’ Forty-nine newborn babies and infants were treated by surgery for complicated chest pathology in Warsaw over a period of three years. The cases included: (1) 32 cases of pneumothorax complicated by staphylococcal bronchopneumonia which were treated initially by suction drainage. Of these 17 did not respond and a thoracotomy, decortication and excision of the diseased segment or lobe was performed. The results in the latter group were as follows: 12 recovered completely; in three cases recovery was complicated by a pleural fistula, and two died; (2) five cases of respiratory difficulty due to congenital cysts of the lungs were operated upon and the cysts removed; (3) nine newborn babies with congenital diaphragmatic herniae were operated upon; there were two deaths, one due to other abnormalities and the second to broncho-pneumonia; (4) one case of anterior meningocele with respiratory distress was operated on and the tumour removed, but the child died of meningitis; (5) two cases of cavernous lymph-haemangioma of the upper chest were operated upon, with one death due to massive collapse of the lung.

G. W. TAYLOR (London). ‘Primary Lymphoedema.’ An analysis of 159 patients with primary lymphoedema of the lower limb was presented. Of these patients there were 17 (11%) with lymphoedema congenita, 123 (77%) with lymphoedema praecox and 19 (12%) with lymphoedema tarda. The disease was familial in 24 patients.
and familial and congenital (Milroy’s disease) in four patients. Lymphangiography in 139 patients revealed three main types of lymphatic abnormality. Eighty-seven (62\%) patients had hypoplasia of the lymph trunks, 24 (17\%) patients had varicose lymph trunks and in 21 (15\%) patients there was a total aplasia of the main limb lymphatics. The prognosis was best in the patient with hypoplasia and in this group conservative treatment with elevation and support was often successful. Patients with severe lymphoedema were treated by the excisional operation of Charles. The condition of chylous reflux was described in which incompetence of the mesenteric and pelvic lymphatics allowed retrograde flow of intestinal chyle into the lower limb. These patients could be helped by retroperitoneal ligation of the incompetent lymph trunks.

A short film was also shown demonstrating spontaneous rhythmical contraction in the retroperitoneal lymphatics of patients with chylous reflux.

D. Innes Williams (London). ‘Surgery of the Adrenal Cortex in Children.’ Adrenal cortical tumours may produce androgenic or oestrogenic changes, Cushing’s syndrome or hyperaldosteronism; or be without endocrine activity. Many of them are benign lesions for which surgery may be successfully undertaken. Operation is also required for adrenal cortical hyperplasia when associated with Cushing’s syndrome and hyperaldosteronism, but not with the adenogenital syndrome.

Eleven tumours with varying manifestations, and a case of Cushing’s syndrome due to hyperplasia, were described and the diagnostic methods discussed. Consideration was given to the operative approach and to the pre- and post-operative endocrine treatment.

W. J. W. Sharrard (Sheffield). ‘Congenital Paralytic Dislocation of the Hip.’ Among 57 children with myelomeningocele and paralysis in the lower limbs, there were 58 dislocations or subluxations of the hip joint.

Twenty-six dislocations were present at birth, and occurred when there was paralysis below the third or fourth lumbar segments. It is considered that the dislocation in these cases is due to the action of strong adductor and flexor muscles acting in utero in the presence of paralysed gluteal muscles.

Five other dislocations and seven subluxations developed during the first 18 months of life, when there was paralysis below the second lumbar segment. This was again due to the action of adductors and flexors of the hip.

It was demonstrated that these cases require operative correction of the contracture to reduce the dislocation, and transplantation of the psoas to the greater trochanter and of the sartorius to the outer side of the knee to maintain reduction of the dislocation.

Ambrose Jollens (Manchester). ‘The Value of Treatment with I.N.H. and P.A.S. in Tuberculous Peripheral Lymphadenitis.’ Forty-four cases of peripheral glandular tuberculosis were divided into pairs with similar distribution, condition and progression, providing two groups for comparison. Both groups were treated by orthodox surgical means but, in addition, one received full dosage of I.N.H. and P.A.S. for three months.

The chemotherapy gave no apparent advantage when the duration of the condition, the duration of the discharge and the necessity for operative interference were compared. In fact, chemotherapy led to a delay in the institution of operative measures with a delay in the eventual cure in some cases.

Operation cannot be avoided and chemotherapy should be given for a short time before operation, in order to protect against widespread dissemination, but need not be continued for more than a fortnight afterwards.

In this series, excision of glands gave much better results than incision and curettage of abscesses, and in a third group 27 had excisions without chemotherapy with excellent results, and it appears that excision should be done whenever possible.

K. M. Laurence (London). ‘The Natural History of Spina Bifida.’ Four hundred and seven cases of spina bifida cystica born between January, 1947, and December, 1956, were followed up. All the 38 meningocoeles have survived while 185 of the remainder, classed as myelocoeles, have died. A life table, however, shows that 50\% are alive at 1 year old and 36\% remain living after 8 or more years.

The prognosis and features of the myelocoeles depend upon their position. The lesions in the dorsi-lumbar and lumbo-sacral regions carry the greatest risk, while sacral and purely dorsal myelocoeles fare better. A close correlation exists between prognosis and hydrocephalus which was found in 231 cases, of whom 179 cases have died. Sphinicter involvement, not seen in cranial or cervical lesions, became more common down the spinal axis, while the incidence of limb paralysis, greatest in the dorsi-lumbar region, is least in the sacral and cervical.

The deaths occurred mostly in the first year of life from ascending intracranial infection (86 cases), many of the later deaths being due to hydrocephalus (49 cases), and renal failure (10 cases).

Comparison with the Registrar General’s returns shows that the series is representative only for children who died after 3 months, as those dying in the first 2 months rarely get referred.

R. B. Zachary (Sheffield). ‘Oesophago-trachea.’ A fistula between the trachea and oesophagus has been reported frequently, but is usually of small dimensions. Larger communications between the two structures have occurred infrequently, and only two cases have been reported in which the entire septum was deficient. Three further cases are added to this list, two in siblings from Sheffield Children’s Hospital, and one from Alder Hey Children’s Hospital, Liverpool. An attempt to repair these anomalies should be made by an approach first in the right chest and then in the neck, forming two separate tubes. Two attempts have so far been made, one by Sandergaard in Sweden, and one by the author. The infants survived five and one days respectively.