

## BRITISH ASSOCIATION OF PAEDIATRIC SURGEONS

The 10th Annual Meeting of The British Association of Paediatric Surgeons took place in Sheffield, from July 9-11, 1963, under the presidency of Mr. R. B. Zachary, F.R.C.S. In addition to a very full academic programme two special lectures were delivered: Sir Kenneth Fraser (Brisbane) gave the 3rd Liverpool Lecture on the Treatment of Hypospadias; and Dr. Robert E. Gross (Boston) gave the University Lecture on Major Surgical Problems in Childhood.

The social programme included a reception by the Lord Mayor, Alderman I. Lewis, on Tuesday, July 9; a visit to Chatsworth House, by courtesy of His Grace the Duke of Devonshire, on Wednesday, July 10, and the Annual Dinner on Thursday, July 11.

Over 200 surgeons from 32 countries attended the Meeting. At the Annual Meeting of the Council of the Association, Mr. J. J. Mason Brown, O.B.E., P.R.C.S.Ed., was elected as President of the Association for 1964/65.

The 11th Annual Meeting will take place in Rotterdam, Holland, from September 1-3, 1964. Inquiries about this Meeting should be addressed to Dr. D. Vervat, Sophia Kinderziekenhuis en Zuigelingenkliniek, Gordelweg 160, Rotterdam, Holland.

The following are abstracts of papers read at the meeting:

C. EVERETT KOOP (Philadelphia, U.S.A.). 'Experiences with 100 Neuroblastomas in Infancy and Childhood.' The neuroblastoma is the most common tumour in our experience, and for this reason and because of its unique behaviour, we have put more thought and research effort into this than into other neoplasms encountered in childhood. The 100 tumours referred to here represent a consecutive experience beginning about 18 years ago; no patient has been excluded from the report, and follow-up has been 100% through the spring of 1963.

Of 100 patients, 86 were operated on more than 14 months ago. Of these 86 patients, 31 are alive, a survival rate of 36%. Of the 14 patients operated on less than 14 months ago (our period of evaluation beyond which only one living patient has ever died) four are already dead, three had bony metastases on admission and presumably will die, three are shrinking under x-ray or chemotherapy or both, two with liver metastases are shrinking with no adjunct therapy.

There seems to be no statistical significance in survival rates in patients under a year calculated by months. However, 22 of those that survived were less than 1 year of age at the time of operation. To state this another way, of our patients under 1 year of age at the time of diagnosis, 60% have survived, whereas in patients over 1 year only 16% have survived. Tumours in the thorax have a far better prognosis in this series than tumours found elsewhere. Bone metastasis is a grave sign, and all

our patients who developed bone metastases, and are considered in the 86 patients under discussion here, are dead.

X-ray therapy is not given routinely to our post-operative patients. Only 13 of the 31 patients surviving had x-ray therapy in addition to surgical excision of the lesion, and we recommend doses in the neighbourhood of 1200r rather than the high doses previously used.

Most of our patients have received some form of anti-cancer chemotherapeutic agent post-operatively in the past three years. Three patients only have had remarkable response out of keeping with our usual experience. The drug that seemed most beneficial was 'leurocristine'.

Studies on the excretion of vanillylmandelic acid in the urine and its significance were discussed, as well as a number of experiments in tissue culture, animal transplantation and immunology.

ROBERT T. SOPER and KLAUS KILGER (Iowa, U.S.A.). 'Vesico-intestinal Fissure.' This paper reviews 52 patients with vesico-intestinal fissure reported in the German and English language during the past century, and summarizes five additional patients seen at the State University of Iowa Hospitals during the past seven years. The incidence of this complex anomaly is estimated at 1:200,000 to 1:250,000 births. There seemed to be no sex preponderance in this series, there being 24 female and 29 male babies in those patients who were determinate for sex. Many of the infants were premature.

The standard core of anomalies justifying this diagnosis include extrophy of the bladder with epispadias, separation of the pubic arch anteriorly and extrophy of the caecum with a rudimentary colon and imperforate anus. The lower extremities assume the 'frog' position of external rotation and hip abduction necessitated by the pubic diastasis and the resultant lateral rotation of the acetabula. The extrophied bladder is split into two laterally placed fields between which lies the extrophied caecum. In the 37 patients in whom there were adequate descriptions of the kidneys and ureters, they were absent bilaterally in two and were normal in 15; hydronephrosis, hydro-ureter and ptosis were the most common upper urinary tract associated abnormalities.

Among the 29 male babies, eight had an apparent absence of the penis, five had a single penis and 15 had a bifid penis; 19 had no recognizable scrotum, and in eight the scrotum was separated into its two component halves separated by a bridge of non-corrugated skin. Among the 24 female children, the clitoris was not recognizable in 14 and was duplicated in 7, and in 14 a duplex vagina was described.

In 21 of the male babies the vas deferens was not

described and in 22 of the 24 female babies the internal genitalia were represented by a bicornuate uterus. The gonadal tissue in 26 of the males consisted of one undescended testis on each side, and in 15 of the 17 females who were adequately described there was a single ovary on each side which lay adjacent to a Fallopian tube which, in turn, led into the ipsilateral half of the bicornuate uterus.

Other anomalies, embryologically not related to the vesico-intestinal fissure, were common. Omphalocele was found in 36 of the 41 patients determinate for this anomaly, and the vertebral column was deformed in 38 out of 53 patients who had an adequate description of the vertebrae. The most common defect was a lumbar spina bifida in 32 of these 38 patients, 24 of them having an associated myelocele or meningo-myelocele. Twelve of the patients had no other gross anomalies, and in 11 incomplete descriptions do not allow evaluation. The anomalies of the extremities and the cardiovascular system were most common among the other associated anomalies.

The embryological theories regarding the origin of vesico-intestinal fissure are reviewed. Particular attention is given in this paper to the thesis of Patten and Barry

suggesting an abnormal caudad locus of formation of the paired genital tubercles in the proctoderm to account for pure extrophy of the bladder. An expansion of this thesis by Rickham postulates an even more caudad migration to produce vesico-intestinal fissure, with arrest of the hindgut in the cloacal stage with imperforate anus.

The history of the attempts at treatment of this anomaly were briefly summarized, and a planned two-to-three stage operation for its correction was suggested. In the neonatal period, at the first stage of surgical treatment, the extrophy of the intestine should be simply closed and the atretic rectum pulled through to the perineum with simple apposition of the extrophied bladder halves. At the second stage, undertaken at the age of 1 to 2 years, urinary diversion into an isolated ileal loop conduit should be performed to improve the upper urinary tract drainage. The third stage should be carried out at the age of 2 to 3 years when bilateral sacro-iliac osteotomies, approximation of the symphysis pubes and skin coverage of the lower abdominal wall should be carried out.

The second reported patient successfully treated by these staged principles is reported, the child being treated at the State University of Iowa Hospitals and having now reached the age of 3½ years.