BRITISH PAEDIATRIC ASSOCIATION

PROCEEDINGS OF THE
TWENTY-FOURTH GENERAL MEETING

The twenty-fourth annual general meeting of the British Paediatric Association was held at Windermere from April 23 to 25, 1953.

BUSINESS PROCEEDINGS. The President, Professor J. M. Smellie, was in the Chair and the following members were present:


The Association had the honour of entertaining Mr. A. Gemmell, President of the Royal College of Obstetricians and Gynaecologists, at the annual dinner, and there were 33 guests present at the meeting together with Professor A. C. Frazer, who gave the Windermere Lecture.

The minutes of the last annual general meeting were approved.

ELECTION OF OFFICERS. The following were elected by ballot for the year 1953-54:

PRESIDENT: Dr. B. E. Schlesinger.
TREASURER: Dr. R. C. Lightwood.
SECRETARY: Professor A. Moncrieff.
EXECUTIVE COMMITTEE (for three years): Dr. J. Forest Smith.
Dr. G. H. Newns.
to replace Dr. C. T. Potter and Dr. B. E. Schlesinger.

ELECTION OF NEW MEMBERS. The following were elected by ballot to membership of the Association:

HONORARY MEMBERS:
Mr. R. Coyte
Professor J. M. Smellie

CORRESPONDING MEMBERS:
Professor G. Frontali (Rome)
Dr. I. McQuarrie (Minneapolis)
Dr. T. McNair Scott (Philadelphia)
Dr. Jessie Boyd Scriver (Montreal)
Professor A. Sundal (Bergen)

ORDINARY MEMBERS:
Dr. P. Bray (Cardiff)
Dr. D. M. Douglas (Edinburgh)
Dr. Ursula James (London)
Dr. J. J. Kempton (Reading)
Dr. M. MacGregor (Warwick)
Dr. G. A. Neligan (Newcastle)
Dr. J. P. M. Tizard (London)

The TREASURER'S REPORT was received and approved.

The REPORT OF THE EXECUTIVE COMMITTEE was received and approved and is printed below.

The Hon. Secretary made a statement on the forthcoming International Paediatric Congress.

Professor W. Gaisford made a statement on the proposed inquiry into paediatric education.

NEXT MEETING. It was agreed to accept the recommendation of the Executive Committee that Windermere should be regarded as the regular meeting place.

COMMITTEE ON ADOPTION. Members were invited to send in any comments on adoption which they wished brought before the Committee on Adoption now sitting at the Home Office.

The presidential badge of office and the candelabra purchased in memory of the late Sir Leonard Parsons were used for the first time at this meeting. Dr. B. Schlesinger presented to the Association an illustrated book on the work of Louis Oscar Roty, the artist responsible for the medallion from which the presidential badge was made.

Report of the Executive Committee 1952-53

1. The Association will wish to congratulate Professor R. A. McCance and Professor A. Moncrieff on the award of the C.B.E., Dr. C. F. Harris on election as Dean of the Faculty of Medicine in the University of London, Professor C. McNeil on his nomination for Hon. LL.D., Edin-
burgh, and Dr. W. Sheldon on his appointment as Physician-Paediatrician to H.M. the Queen.

2. The Executive Committee has met three times since the last Annual General Meeting and the following is a summary of matters with which it has been concerned.

3. Leonard Parsons Memorial and Presidential Badge. A sum of £136 was collected to provide a memorial to Leonard Parsons. It has been decided to expend a portion of this on a pair of Sheffield plate candelabra, suitably engraved, which will decorate the top table at the Annual Dinner. It was also decided to purchase an antique medallion showing a mother and child, and to have this mounted to make a presidential badge of office. This would also be paid for out of the memorial fund. The Association is indebted to Dr. B. E. Schlesinger for his efforts in finding suitable articles in each case.

4. International Paediatric Congress. Members have been circulated with the preliminary programme of the proposed congress in Havana. It is hoped that some delegates will be able to go from the United Kingdom.

5. Archives of Disease in Childhood. It was decided to appoint Dr. J. D. Hay and Professor A. V. Neale to the Editorial Committee for 1954 in place of Professor R. S. Illingworth and Professor J. M. Smellie.

6. Meeting with French Paediatricians. Twenty delegates from the Association and the Paediatric Section of the Royal Society of Medicine visited Paris in June, 1952, for a successful joint meeting with French colleagues. A visit of French paediatricians to London, has been arranged for May 7 to 10, 1953, with the Association and the Paediatric Section of the R.S.M. as joint hosts.

7. Pre-registration Posts in Paediatrics. It has been agreed to postpone discussion on this subject for the present except to suggest that the first six months after qualification is not a suitable period for a paediatric resident appointment.

8. Future of Children’s Hospitals. A memorandum on this subject received from members in Sheffield was forwarded to the Royal College of Physicians where the Paediatric Committee has begun consideration of this subject. A sub-committee of the Association has been set up to prepare evidence to submit to the College Committee.

9. Regional Paediatric Societies. Careful consideration has been given to the question of meetings of the Association other than the annual meeting and it has been decided that for the time being it is better to foster the development of regional societies.

A list of these was published in the February issue of the Archives of Disease in Childhood.

10. Annual Meeting Arrangements. The Executive Committee will suggest at the Annual Meeting that Windermere should be regarded as the regular meeting place. Further consideration is to be given to the whole policy of the choice and number of guests.

11. Visit to Holland, 1954. A cordial invitation has been received from the Dutch Paediatric Society for a visit of 25 members to Holland in May, 1954. Further details will be circulated in due course.

12. Paediatric Education. The Association is collaborating in a survey of paediatric education in Europe organized by the International Paediatric Association and the World Health Organization. Professor W. Gaisford has undertaken to collect information and he visited Zurich in March to discuss details.

13. Work of Sub-committees. The most important work during the year was the preparation by the tuberculosis sub-committee of a revised version of the pamphlet on the prevention of tuberculosis in childhood issued by the Joint Tuberculosis Council. The nursing joint sub-committee has learnt with interest that their nurse colleagues have changed their name to ‘The Association of British Paediatric Nurses’. A special sub-committee was set up to answer certain questions for the Ministry of Health on the future arrangements for the supply of vitamin C.

14. Royal College of Obstetricians and Gynaecologists. Agreement has been expressed with a resolution of the Council of this College regarding the responsibility of the obstetric house surgeon for the care of the newborn baby to the paediatrician or his deputy.

15. The Association has suffered the loss since the last Annual Meeting of Hugh Ashby and Catherine Chisholm.

Scientific Communications

Professor A. C. Frazer delivered the George Frederic Still Memorial Lecture for 1953 entitled ‘Absorption from the Intestines’.

Dr. R. H. Dobbs (London). ‘Treatment of Gastro-enteritis with Antibiotics.’ The results of the Medical Research Council’s trials on antibiotics in the treatment of gastro-enteritis were presented. These indicated that chloramphenicol and sulphadiazine were effective in significantly reducing the duration of the disease, and that over 90% of both mild and severe cases made straightforward progress compared to control groups in which progress was
delayed in one-third of mild and two-thirds of severe cases.

Aureomycin appeared to be a less effective drug, but there was evidence that this may have been more apparent than real.

In the discussion evidence was presented which suggested that these drugs varied in their effectiveness from time to time, and this variability was associated with the sensitivity of organisms of the Bact. coli group isolated from stool culture.

DR. O. P. GRAY (Cardiff), introduced by Professor A. G. Watkins. 'Hydatid Disease in Childhood.' The cases of hydatid disease seen in Cardiff were reviewed.

The cysts occur commonly in the liver and slightly less frequently in the lungs. Cysts have also been encountered in the brain and mesentery. All the children in the series with hepatic cysts had enlargement of the liver. Symptomless abdominal enlargement caused by the hepatomegaly was the usual presentation. Lower chest pains occurred with an infected cyst. Surgical treatment of the cysts is advocated.

Pulmonary hydatid cysts are usually diagnosed by radiography. Simple cysts appear as rounded opacities. Rupture of a cyst leads to characteristic radiographic appearances. Partial rupture is associated with a small crescent of air around the cyst, termed the perivesicular pneumocyst. With partial rupture of a cyst the membranes rest on top of the fluid, giving the appearance of the 'water lily' cyst. Pulmonary hydatid cysts are dealt with very satisfactorily by operation.

Intracranial hydatid cysts are situated in the cortex. They cause convulsions and hemiparesis with the signs of a space-occupying lesion.

The Casoni reaction is useful in diagnosis if care is taken to use fluid of known standard antigenic potency.

The Welsh sheep are more infected with hydatid cysts than sheep in other parts of Great Britain. The crowded mining villages are very close to grazing land; moreover, the sheep form part of the communal life of the village. This partially accounts for the fact that hydatid disease is endemic in Wales.

DR. J. P. M. TIZARD (London). 'Sensory Defects in Infantile Hemiplegia.' Dr. Bronson Crothers and the author recently re-examined 52 patients of varying age and intelligence with infantile hemiplegia. About three out of three had severe sensory defects. Methods of testing sensation in children were described. A film was shown comparing the mapping of visual fields by confrontation methods with unilateral and bilateral stimuli. Out of 38 patients who could be tested adequately, 19 had field defects, mostly homonymous hemianopia. Twenty-two out of 34 patients had defects of cortical sensory modalities (position sense, two-point discrimination, stereognosis) in the affected limbs and about half of these had also some loss of appreciation of light touch, etc. Of 41 patients whose limbs were measured, sensory abnormalities were found in all 29 who had undergrowth on the affected side. Nearly all had peripheral cortical sensory loss and more than half had visual field defects. Some of the 12 without shortening of the limbs had severe motor defects, but apart from one with hemianopia, no sensory abnormalities.

Hemianopia appears to cause little disability, possibly due to frequent, rapid, involuntary, lateral movements of the eyes towards the blind side. Loss of position sense in the affected arm seemed, as might be expected, to make attempts at 'muscle training' useless.

DR. J. G. MILlichap (London), 'Nephrotoxic Effects and Other Attributes of Drugs Used in the Treatment of Petit Mal.' Of 20 children with minor epilepsy who were treated with a new compound, 'milontin', 10 showed microscopic urinary abnormalities.

A similar nephrotoxic effect, hitherto unreported, was also observed in children given moderate doses of 'tridione' and 'malidone'.

Since leucopenia, a side-effect common to both these drugs, has not yet been reported with 'milontin', its clinical trial was continued. Its efficacy, at least equal to that of other agents, was significantly related to the type of minor seizure. Pure petit mal was controlled four times more effectively than the akinetic form. The latter, in the majority of patients, was combined with grand mal, and better response was obtained with the anti-convulsant, 'mysoline'.

Rather than a variety of petit mal, an akinetic attack should be regarded as a minor manifestation of major epilepsy, in which milontin and other related drugs are contraindicated.

The mode of action of milontin on the diencephalon, the site of origin of the petit mal discharge, was studied in rabbits by the use of radioactive isotopes. Its effect on the brain capillaries was similar to that observed on the renal glomeruli. The permeability was increased in both.

DR. J. H. Hutchison (Glasgow). 'Radio-Active Iodine Studies in Goitrous Cretinism.' The results of radio-active iodine studies in 12 cases of non-endemic goitrous cretinism were described. The ages of the patients ranged from 2 to 20 years. Eight were members of one family group; two were members of another family; three were unrelated to them or to
each other. In none of the patients was there evidence of iodine deprivation or of the action of any known goitrogen.

The thyroid glands accumulated radio-iodine more rapidly than normal and in excessive amounts, which were not discharged by potassium thio-cyanate. The total plasma radio-activity and the protein-bound iodine levels were above normal and within the range usually considered diagnostic of hyperthyroidism. In two patients the plasma was examined by a butanol extraction method, which revealed persisting radio-activity in the butyl alcohol extract although it was at a lower level than in the protein-bound iodine. This finding indicated that only some of the protein-bound iodine in these patients was diiodotyrosine; the chemical basis of the remainder was unknown. It could not be thyroxine because the patients responded normally to thyroid treatment. By contrast, the urine excretion levels of radio-iodine were those usually found in hypothyroidism.

These findings indicated that the thyroid glands of these goitrous cretins were able to take up inorganic iodine from the blood and convert it into an organic form. An organic iodine compound, not thyroxine, was then released into the circulation. It was then excreted in the urine, presumably because it could not be utilized by the tissues. It was suggested that in the 12 patients there was an intrinsic, possibly familial, defect in the final synthesis of the thyroid hormone.

Dr. James Crooks (London). 'Non-inflammatory Laryngeal Stridor in Infants.' To be published in full.

Dr. John Apley (Bristol). 'The Infant with Stridor: a Follow-up Survey of 80 Cases.' Because in infants with stridor so little has been recorded apart from laryngeal abnormalities, in this survey the emphasis was on the patient rather than the larynx. In 80 consecutive cases with stridor from early infancy mental and physical assessments were repeated at intervals for periods up to several years.

There was a moderately high familial incidence, with 11 siblings affected in five families. In the whole series there was a preponderance of males (50 boys to 30 girls). The average birth weight of males with stridor was significantly higher than that of females with stridor or of unselected infants. Seven patients had congenital heart disease, and 16 were mentally defective, though the only criterion of selection was the occurrence of stridor. The surprisingly high incidence of these associated anomalies was not apparent at the earliest examinations but became established during the follow-up period. Chest deformities were common but almost invariably transient. Irrespective of the cause of stridor, pulmonary complications occurred frequently and were often serious. In this series 11 patients, with stridor of varying aetiology, died (eight with pulmonary complications), and in 10 post-mortem examination was carried out.

Dr. D. V. Hubble (Derby). 'Some Disorders of Growth in Childhood.' A boy with presumed hypopituitary dwarfism had been given 20 units of protamine zinc insulin over a period of three months. No growth occurred, but he gained 14 lb. with considerable deposition of fat. Best has shown that protamine zinc insulin will produce normal growth in hypophysectomized rats. It was assumed that in the presence of corticosteroids insulin increased lipogenesis but did not encourage protein deposition. Insulin, however, in an eight-day balance, produced considerable nitrogen retention. It was shown in a boy with glycogen storage disease by eight-day nitrogen balances that a high protein intake with a night feed of protein caused nitrogen retention where nitrogen deficit had previously been demonstrated. Protein breakdown occurs in glycogen storage disease because there is a deficiency of available carbohydrate for nocturnal endogenous metabolism. It was suggested that a similar nocturnal protein breakdown occurs in some children with diabetes when long-acting insulins are not used. Three cases of the Mauriac syndrome were described (dwarfism, obesity, hepatomegaly from glycogen deposit, and 'full-moon' face), and it was shown, again by nitrogen balances, that the protein breakdown could be corrected either by long-acting insulin or by a high protein diet.

Dr. R. E. Smith (Rugby). 'Improvements to Mechanical Respirators.' Improvements to both respirators as reported in the Lancet of April 4, 1953 were described. Since then a new device facilitating the change, if necessary, from electrically driven to manual pumping had been added.

Further improvements were unlikely and two different new types were described. The first was the so-called 'alligator', the upper half of which could be raised on a hinge at the end, and the patient could be nursed in the prone and supine positions. Access to the patient was much simpler. The second was a cylindrical respirator containing a bed which was pulled out as in the 'both' respirator. This could be revolved through 180° so that the patient if slung in a hammock could be turned painlessly when postural drainage was desired.

The models produced were made by Captain G. T. Smith-Clarke who had freely given of his time and his engineering skill. The second type described was inspired by Dr. W. H. Kelleher.
It is suggested that the acute involution of the left liver described is a probable cause of the transitory hepatic inadequacy immediately following birth and the cause of physiological icterus.

DR. R. J. PUGH (Leeds). 'Liver Damage and Congenital Galactosaemia: An Attempt at Clinico-pathological Correlation.' Three examples were described, all presenting in the first week of life with anorexia, drowsiness and vomiting. There was an excessive initial weight loss and progressive hepatomegaly with evidence of disturbed liver function. The earliest case ran its course over four weeks, unmodified by lactose omission, to terminate with clinical and histological evidence of liver failure with cirrhosis. Clinical progress in the two other patients was modified by lactose omission with dramatic subjective improvement, and with objective evidence of more adequate liver function, but without prolonging life beyond two months and three months respectively. Comparison of the liver histology of the treated cases with the unmodified one showed that at necropsy the former demonstrated relatively insignificant structural damage. In addition, the most recent example was subjected to liver biopsy before lactose omission revealing extensive early pericellular fibrosis, which had undergone remarkable resolution by the time of death eight weeks later. The cause of the hepatomegaly was seen at biopsy to be attributable to fatty change in the parenchyma and not to glycogen deposition, which was scanty. Both treated cases exhibited a gross aminoaciduria throughout life without modification when liver function improved.

DR. MARTIN BODIAN (London). 'Some Observations on Children with Cytomegalic Inclusions.' The morphological features of the cytomegalic inclusions in nucleus and cytoplasm were discussed and their finding in the salivary glands of 10% or more of stillborn and liveborn children regardless of the cause of death was noted. The inclusions in these tissues of predilection cause no symptoms and are presumed to reflect a carrier state of the salivary gland virus.

More or less widespread haematogenous dissemination of the virus is found in about 1% of all children’s necropsies. Nine cases of the disseminated disease were presented. The pathological and clinical manifestations of this condition may be erythroblastosis foetalis with purpura in the absence of blood group incompatibility, neonatal hepatitis, interstitial nephritis, interstitial pneumonitis, encephalomyelitis with encephalomalacia sometimes leading to hydrocephalus and focal calcification of the brain, myocarditis, and other features are seen more rarely. The predisposition to disseminated
cytomegalic inclusion disease in debilitating disorders, such as diarrhoea and vomiting, bacterial infections especially pertussis, and fibrocystic disease of the pancreas was also noted.

Mr. R. B. Zachary (Sheffield). 'The Non-Operative Reduction of Intussusception.' A method for the non-operative reduction of intussusception, employing a barium enema under X-ray screen was described. Some excellent results had been obtained by this means and the difficulties and dangers of the method were discussed.

Dr. W. Walker (Newcastle upon Tyne). 'Studies in the Incidence, with Results in Haemolytic Disease of the Newly Born.' The incidence of haemolytic disease of the newborn in the North of England is probably 5 per 1,000 total births.

Ten per cent. of all affected infants are stillborn whether first affected or not, and whether the mother has been immunized by pregnancy or transfusion. Of the liveborn infants, 40% recover without transfusion whereas 60% require treatment sooner or later.

The 'Newcastle cases' that formed part of the national investigation provided a valid comparison between exchange and simple transfusion in the babies of mothers allowed to go to spontaneous delivery. Exchange is significantly superior to simple transfusion both as regards survival and the prevention of kernicterus.

It is recommended that all babies likely to be affected should be delivered in hospitals providing special facilities for their care, and all requiring treatment should be treated by early exchange transfusion. The following criteria for exchange transfusion were suggested: (1) Cord Hb. value 14.8 g. or less; (2) cord Hb. value 14.9 to 17.7 g. associated with cord bilirubin value of more than 2.7 mg.%

With this machinery working relatively smoothly, 109 liveborn affected babies were born in the Newcastle group of hospitals in 1952. Sixty were treated by early exchange transfusion, five by late simple transfusion, while 44 survived without treatment. No baby left without early treatment died. There were three deaths in the exchange group but two of these deaths were in premature babies moribund at birth with Hb. values of 4 g. and therefore regarded as non-viable.

Two hundred babies were treated by exchange transfusion with an overall survival rate of 86%. There was only one case of kernicterus in a mature baby, whereas four out of 15 premature babies treated by adequate early exchange developed kernicterus.

Professor W. Gaisford (Manchester). 'B.C.G. Vaccination in the Newborn.' The pros and cons of B.C.G. vaccination in the newborn were discussed and the results reported of some 4,000 infants vaccinated in the past three years. As tuberculous meningitis was most dangerous in the first two years of life, and as experience had shown the success of B.C.G. vaccination in the prevention of tuberculous meningitis, it was logical that, if protection was to be provided, it should be given as soon after birth as possible.

The results showed that successful vaccination had been obtained in 100% of newborn infants and that only half the dose used for older children was necessary. The response varied with the type of vaccine used. With Swedish and freeze-dried vaccine the results were less certain, the reactions less marked and the conversion time longer. With Danish vaccine successful conversion had been obtained in as little as 14 days with 0.05 ml. of vaccine.

Complications were so frequent when the inoculations were made in the thigh that they were soon discontinued. With injections into the arm in the region of the insertion of the deltoid muscle the incidence of complications had been reduced to 0.3%. No serious or systemic complications had been encountered; local abscesses, regional adenitis and abscess formation were the only untoward occurrences. Calcification in the axillary, supraclavicular and inguinal glands was a common finding some months after vaccination, but no case of hilar calcification had been seen.

All the infants examined at the first yearly follow-up were still tuberculin positive and no deaths from tuberculosis had occurred in vaccinated infants during this period.