

BRITISH PAEDIATRIC ASSOCIATION

PROCEEDINGS OF THE ELEVENTH ANNUAL GENERAL MEETING

The Eleventh Annual General Meeting was held at the Grand Hotel, St. Andrews, on Friday and Saturday, May 20 and 21, 1938.

FIRST SESSION (MAY 20, 10.15 A.M.)

Business Proceedings : The President, Dr. J. Wilkie Scott (Nottingham), was in the Chair, and there were present 49 members and 11 guests.

The Minutes of the last Meeting were read and approved.

The following Officers, and Honorary, Corresponding and Ordinary Members were elected :

President : 1938-39, Dr. H. C. Cameron (London).

Secretary : Dr. A. G. Maitland-Jones (re-elected).

Treasurer : Dr. Donald Paterson (re-elected).

Representative for Scotland : Dr. S. G. Graham (Glasgow), in place of Dr. William Brown.

Honorary Member : Dr. Leonard Findlay (Past President).

Corresponding Member : Professor Dr. E. Gorter (Holland).

Ordinary Members : Dr. A. W. Franklin (London), Dr. J. H. Hutchison (Glasgow), Dr. D. N. Nicholson (Edinburgh) and Dr. C. T. Potter (London).

The Treasurer's Report was received and adopted.

The President then proposed from the Chair that, 'The Members of the British Paediatric Association offer sincere congratulations to Dr. Robert Hutchison upon his election as President of the Royal College of Physicians. They also desire to express their gratification that he has received this distinction, and their hope that his tenure of office will be a long and successful one.' This resolution was passed with acclamation.

After some discussion the Meeting then decided :

(1) That a letter be sent to the Canadian Society for the Study of Diseases of Children inviting members of that Society to join in the Annual Meeting of 1939 :

(2) That candidates engaged in the administrative side of Paediatrics or acting as Medical Officers to schools are eligible for membership of the British Paediatric Association.

(3) That the Executive Committee decide on a subject for discussion at the Annual Meeting in 1939 and invite members of the Association to take part in such discussion.

The place of meeting for next year was then discussed.

Scientific Proceedings :

1. PROFESSOR CHARLES McNEIL (Edinburgh) : 'Pleuro-pneumonia and empyema (pneumococcal).' The term 'meta-pneumonic empyema' suggested a complication occurring after the acute phase of pneumonia, but in such cases the morbid process which ended in empyema had begun during the phase of pneumonia as an acute pleurisy. The first stage of acute pleurisy was a sero-fibrinous effusion and might not go beyond this : the further stage of empyema was determined by an infiltration of pus cells into the fibrinous exudate and the passage of these pus cells into the serous effusion. It was suggested that cases of pneumococcal empyema showed on the clinical side a counterpart of these pathological stages : a first stage

of acute thoracic or abdominal pain, with unusual embarrassment of breathing and general distress and early physical signs of consolidation ; a second stage, corresponding to the separation of the pleural surfaces by effusion, when there was relief of pain and easier breathing ; and a third stage, generally meta-pneumonic, in which the serous effusion became purulent and in which the clinical counterpart consisted of persisting signs of consolidation and a slow decline in the general condition.

2. DR. H. C. CAMERON (London) : ' Spontaneous resolution in haematogenous staphylococcal osteomyelitis.' Staphylococcal osteomyelitis was certainly becoming rarer, probably also it was becoming less severe. Often the more striking symptoms of bacteraemia were absent. Rigor, sweats, delirium and the metastasis might appear only after a long delay. As in the comparable case of a perirenal infection, spontaneous resolution was by no means uncommon. The metastasis often involved a small and superficial branch of the periosteal or medullary anastomosis. Immediate drastic surgical intervention, before the outlines of the infected area had become established, destroyed more bone than was ultimately to suffer irreparable damage, removed together with the infected focus all the barriers which were being formed to localize and protect, and was apt to be followed by an exacerbation of the bacteraemia. Many surgeons now advised conservative treatment. The history was selected of three patients with osteomyelitis simultaneously under observation, all of whom had made a spontaneous recovery without operation. The first in the neck of the femur with arthritis of the hip-joint, the second in the neural arches of the lumbar vertebra with staphylococci in blood and cerebro-spinal fluid, and the third with severe staphylococcal fever without anything but the most transient pain and minimal swelling over the lower end of the femur.

3. DR. J. S. Y. ROGERS (Dundee) and DR. G. R. TUDHOPE (introduced by Dr. Rogers) : ' A case of hydatid cyst of the spinal canal with successful operation ' (see p. 269).

4. DR. JAMES H. HUTCHISON (Glasgow) (introduced by Dr. Stanley Graham) : ' The role of copper in iron-deficiency anaemia.' Nine cases of nutritional anaemia have been studied. In six cases large doses of ferrous sulphate were given orally for varying periods. This was then discontinued, and when the haemoglobin levels again became constant minute doses of copper sulphate were given and the effect on the haemoglobin recorded. In the other three cases small doses of ferrous sulphate were given for several weeks in an attempt to produce an iron-storage in the body without changing the haemoglobin level. The iron medication was stopped and after a variable time copper sulphate was given, and any mobilization of the stored iron for haemoglobin formation calculated. In each case the amount of iron stored in the body and the percentage of retained iron utilized for the formation of haemoglobin were demonstrated by an iron-balance study. The results of these researches on one typical case from each series were demonstrated, and showed that copper in the presence of adequate iron storage in the liver is capable of stimulating haemoglobin synthesis. Regarding the mode of action of copper it was suggested that a sufficient concentration of iron in the blood serum to meet the needs of the bone marrow was ensured by the catalytic action of copper, which liberated iron from the liver into the systemic circulation.

5. DR. T. COLVER (London) (introduced by Dr. Paterson) : ' Icterus gravis neonatorum.' The frequent reports of cerebral sequelae of icterus gravis neonatorum prompted a review and follow-up of the clinical material at the Hospital for Sick Children, Great Ormond Street. In the series there were included all those cases of haemolytic anaemia which were complicated by jaundice within the first 48 hours of life, and in which there had been excluded (1) infection, (2) syphilis, (3) congenital obliteration of the bile ducts, and (4) acholuric jaundice. The presence of erythroblastemia, itself a secondary sign, was not insisted upon. In the series nine cases were jaundiced at birth. This was the worst prognostic group, there being only one survivor. Haemoglobin levels below 60 per cent. (Haldane) were present in 90 per cent. of the cases in which an adequate series of blood examinations had been made. Erythroblastemia was present in 85 per cent. In seven cases (14 per cent.) there was a family history of ' icterus gravis.' Death occurred in 62 per cent. of cases. Figures could not actually be brought forward to support the therapeutic value of either blood transfusions or intramuscular blood injections. Quite sufficient to account for this was the fact that so many cases were admitted late in the course of the disease. It was clear, however, that many cases survived in the absence of treatment. The single survivor of the nine cases in which jaundice was present at birth received no treatment. This was a severe case and there has been complete recovery. The follow-up was successful in nine cases which survived the early stages. Of this group one is mentally deficient, one has a mild hemiplegia and six are healthy both mentally and physically. The ninth case died at the age of fourteen months from intercurrent infection.

6. DR. L. H. F. THATCHER (Edinburgh) : ' Acute leptomeningitis ; listerella monocytogenes

infection.' This little known organism may be the cause of acute suppurative meningitis, especially in babies; only eight cases have been reported, the first in 1933; seven of them were in America and one in Scotland (1935). With one exception, they died within a few days; she was alive ten weeks after the onset of illness, showing serious physical and mental changes. This ninth case, a boy aged seventeen months, died after an illness of a week's duration: clinically, it was a purulent meningitis; but surprisingly only about thirty cells in the high-power field (fresh uncentrifuged specimen) were found, polymorphs and lymphocytes being present in approximately equal numbers. A 'diphtheroid' organism was seen, but full investigation proved this to be *Listeria monocytogenes*; there were no suspicious contacts. The infection is of special interest because animals are likely to be the source of it. In 1926 there was a severe epidemic among the rabbits and guinea-pigs of the Cambridge Field Laboratories: the features were a monocytosis of the circulating blood and tiny areas of necrosis in the liver; a new bacillus was isolated. A little later, the same disease was recognized in small rodents in South Africa, and the name given to the causative organism after consultation between the workers in these widely separated fields. Other species may be infected: the organism has been found in sporadic encephalitis of cattle (America); in sheep with encephalitis (Australia, New Zealand and America); moreover, cases have occurred among laboratory chickens at Princeton University.

7. DR. R. E. SMITH (Rugby) (introduced by Dr. A. G. Maitland Jones): 'The late descent of the testicle.' (This will appear in full in a future number of the *Archives*.)

8. DR. C. PAGET LAPAGE (Manchester): 'A note on the treatment of thread worms.' The possibility of the parasites being cleared away by a bismuth or barium meal supplemented if necessary by a barium enema to fill the colon was discussed. This method had been tried in some fifty cases with good results in a large proportion of them. Bismuth is probably more effective than barium, though it is more expensive. The French writers have used bismuth in moderate doses for some time, but from a therapeutic rather than from a mechanical point of view. This mechanical action is the main basis of the idea of the bismuth meal, though bismuth appears also to have some toxic action on the thread worm.

SECOND SESSION (MAY 21, 10.30 A.M.)

9. DR. A. V. NEALE (Birmingham): 'A case of pineal tumour' (see page 241).

10. DR. J. H. EBBS (Birmingham) (introduced by Prof. L. G. Parsons): 'Oesophagitis in infancy' (see p. 211).

11. DR. A. G. V. ALDRIDGE (Birmingham) (introduced by Dr. J. M. Smellie): 'Blood transfusion in dehydration in infants.' At the Birmingham Children's Hospital a study has been made of the effect of blood transfusion in cases of dehydration, and it was found that blood transfusions not only did not cause improvement in such cases but actually often caused a deterioration of the patient's general condition. In cases of dehydration there is a varying degree of concentration of the blood, with increase in the red cell count, haemoglobin percentage, and haematocrit readings. Whereas the use of fluids such as normal saline or 5 per cent. glucose in normal saline when given parenterally (by subcutaneous or intravenous routes) caused a diminution in the concentration of the blood, it was found that the transfusion of whole blood caused an increase in blood concentration. In cases which in addition to being dehydrated were also toxic and in which blood transfusion would appear to be indicated, the use of plasma transfusion was suggested, and a small series of cases was treated in this way. In all cases the concentration of the blood was reduced, and in five cases out of eight immediate clinical improvement occurred, although all these infants were extremely ill. The suggestion was put forward that whenever possible the red cell count, haemoglobin estimation and haematocrit readings should be carried out in cases of dehydration in which the use of blood transfusion was considered, and in those cases which showed considerable concentration of the blood plasma should be used instead of whole blood.

12. DR. R. C. LIGHTWOOD (London): 'Dacryoadenitis: its occurrence in children and its clinical aspect.' Dacryoadenitis may be acute or chronic, unilateral or bilateral. Its etiology is much in dispute and in one-third of the reported cases the cause was undetermined. The literature is scanty. Primary infection causes bilateral involvement. Secondary cases may be due to general infections (bilateral) or 'neighbourhood' infections (unilateral). Primary dacryoadenitis may be a disease sui generis and has been attributed to an unknown virus with specific affinity for the lachrymal glands, analogous with mumps. Secondary dacryoadenitis, also bilateral, has complicated many common infections, such as mumps, measles, scarlatina, tonsillitis, influenza, tuberculosis, syphilis and gonorrhoea. Among the

focal infections which have caused unilateral dacryoadenitis are furuncle, stye, dental abscess, nasal sinusitis and conjunctivitis. Two illustrative cases of bilateral type, seen by the author, were mentioned. One appeared to have been caused by continued tonsillar infection and was eventually relieved by tonsillectomy. The other was associated with benign pulmonary tuberculosis and may have been due to it. In such cases the clinical features are pain, orbital oedema, chemosis and slight constitutional disturbances. A bilateral orbital oedema with its greatest development in the outer part of the upper eyelid is characteristic; and a 'satanic' appearance may be caused through raising of the outer end of the eyebrows. The palpebral part of the lachrymal gland may be swollen and injected, and the orbital part may be felt by the finger. The differential diagnosis includes all causes of orbital oedema: stye, conjunctivitis, sinusitis, orbital cellulitis, cavernous sinus thrombosis, orbital osteitis, Quincke's oedema and nephritis. The prognosis is good, though a few cases persist for a long time.

13. DR. W. R. F. COLLIS (Dublin): 'Anal stenosis.' An extreme case was described in a child of seven weeks who had not passed a proper motion since birth. Obstruction, incomplete and of a membranous nature, was found $1\frac{1}{2}$ inches above the anal sphincter. Recovery ensued after treatment including coloric lavage. Two types of anal stenosis appear to be described, one in which the stricture is found at the upper end of the rectum and the other with a stenosis of the anal sphincter itself. The case described belonged to the first group. The author described how in his work at the Rotunda Hospital Infant Clinic he had often met with cases of what he believed fell into the second group, of simple anal stenosis. The child was brought up by the mother for constipation; on questioning, however, it was learnt that the motion when passed is not hard or dry but quite moist or even liquid. When the anal canal was examined digitally with the little finger the opening appeared small and the sphincter tight. No membrane beyond the anal sphincter is encountered. The digital examination stretches the sphincter and on withdrawal of the finger a motion, of moist or liquid consistency, is passed. One or two such stretchings appear sufficient to cure the condition.

14. PROFESSOR C. W. VINING (Leeds): 'Faecal incontinence.' A group of children with this complaint were described. They were of school age and of normal mentality. The incontinence started after a period of normal control. There was a clear history of pronounced constipation since infancy in five of the children. Five of the cases presented themselves with palpable masses in the abdomen and in the case of two of the children the masses were sufficiently pronounced to stimulate an abdominal tumour. Films taken after barium enemata showed increased capaciousness of the pelvic colon and rectum as compared with control children. 'Follow through' investigation showed delay in reaching the rectum and in final discharge. It was submitted that the incontinence was the final result of the previous retention and not due to congenital anomaly. It was thought that the constipation in the earlier years was produced on the usual lines, but there were possibly additional or accentuated factors which caused a more severe grade of constipation. All the children had been cured by the simple treatment of emptying the colon completely with enemata, this sometimes taking as long as a week, and following this by some simple laxative to give added stimulus. It was also necessary to explain to the child what was happening. There was a tendency for these children to prevent themselves having the bowel moved in their endeavours to prevent the incontinence.

15. PROFESSOR N. MORRIS (Glasgow): 'The incidence of rickets in a large municipal hospital.' The incidence of rickets was investigated in 489 infants and children younger than three years admitted to the children's wards of a large municipal hospital (Stobhill, Glasgow). The tests for the presence of rickets were clinical, radiological and biochemical (high plasma phosphatase and low serum phosphorus). Of the patients 3.2 per cent. were sent in with diagnosis of rickets, while 49.1 per cent. had two or more signs of rickets. Of the last group the maximum incidence was found in the second year of life. A high plasma phosphatase was found in 49.8 per cent. of the cases; the maximum incidence occurred in the first six months of life, the minimum in the third year. These findings indicate that the demand for calcium was in many patients greater than the amount retained, as a result of defective supply of lime or vitamin D or both.

16. DR. W. W. PAYNE (London): 'Some observations on bilious attack.' 'Bilious attack' refers to the condition in which frequent attacks of vomiting, headache and abdominal pain occur. It is suggested that two stages in the attack occur—the first is due to over-secretion of adrenalin in response to fear, apprehension, excitement or fever. The adrenalin exerts its usual effects on the vascular system, such as pallor. It also affects the alimentary tract, causing relaxation of the gastric musculature and contraction of the pylorus; similar relaxations and contraction occur in the small and large intestines, and may be the cause of

pain. As a result of the disturbance of the stomach, nausea is felt and vomiting may occur. Food taken may remain in the stomach for as long as twelve hours or more, producing a state of starvation. Again, adrenalin causes the glycogen stores of the liver to be dissipated and acetone bodies to be formed. This ends the first period. Spontaneous cure may occur. In other cases the second stage begins. This is the well-recognized stage of marked ketosis with its attendant symptoms, and occurs as a result of the carbohydrate waste and starvation of the first stage. It is more likely to occur when the carbohydrate stores are low before the attack. If vomiting has not occurred in the first stage the acute ketosis by enhancing the nausea will produce it now, and thus increase the starvation.

Treatment in the first stage consists in removing the anxiety, avoiding further overloading of the stomach and in stimulating its activity. The treatment in the second stage is similar, but sugar must be given. Prophylaxis in stage 1 is psychological, but the maintenance of good carbohydrate stores should lessen the likelihood of stage 2 occurring.