BRITISH PAEDIATRIC ASSOCIATION

PROCEEDINGS OF THE TWENTY-THIRD GENERAL MEETING

The twenty-third annual meeting of the British Paediatric Association was held at Windermere on April 30 and May 1 and 2, 1952.

BUSINESS PROCEEDINGS. The President, Professor N. B. Capon, was in the chair and the following members were present:


The Association had the honour of entertaining Professor Robert Debré, of Paris, who gave the Windermere Lecture, and 50 guests.

The minutes of the last annual general meeting were approved.

The following alterations in rules were moved on behalf of the executive committee and carried nem. con.: (alterations are in italics).

RULE 3 to read: The business of the Association shall be conducted by an Executive Committee, consisting of a President, a Treasurer, a Secretary and twelve Ordinary Members. All these officers shall be elected at an Annual General Meeting.

RULE 4 (part of) to read: The twelve Ordinary Members shall hold office for three years. Four shall retire annually and shall not be eligible for re-election until after the lapse of three years. Not more than two of the twelve Ordinary Members of the Committee shall be resident in any one town, except in the case of London.

RULE 5 (to replace old Rule 6) to read: The Executive Committee shall have power to set up sub-committees from time to time and, for this purpose, may co-opt members of the Association other than those on the Executive Committee and also such other interested persons as they may deem advisable. The Executive shall appoint from among its members a Chairman of each sub-committee.

RULE 8 (old Rule 9) to read: The Executive Committee shall be responsible for the arrangements of the General Meeting, and shall meet at such times as may be convenient. Six shall form a quorum. It shall be part of its duties to consider the names of all candidates proposed for election to the Membership of the Association and to nominate to the General body of Members such candidates for election as it may consider desirable.

Rules 5 onwards have been renumbered because old Rule 5 has now been taken into Rule 4.

RULE 11 (old Rule 12) to omit: Two such Members may be elected annually.

ELECTION OF OFFICERS. The following were elected by ballot for the year 1952-53.

PRESIDENT. Professor J. M. Smellie.

TREASURER. Dr. R. C. Lightwood.

SECRETARY. Professor Alan Moncrieff.

EXECUTIVE COMMITTEE (new members):

Dr. D. Court
Professor J. Craig
Professor W. S. Craig
Dr. D. Gairdner
Professor W. Gaisford
Dr. R. E. Steen

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

(a) HONORARY MEMBERS:
Professor N. B. Capon
Dr. P. Henderson

(b) ORDINARY MEMBERS:
Dr. J. Apley (Bath)
Dr. N. S. Clark (Aberdeen)
Miss Isabella Forshall (Liverpool)
Dr. A. Holzel (Manchester)
Dr. D. McCarthy (Aylesbury)
Dr. S. Yudkin (London)
The Treasurer's Report was received and approved.

The Report of the Executive Committee was received and approved and is printed below.

Next Meeting. A proposal to visit Porthcawl was discussed, and, as an informal vote indicated an almost exact division of members between accepting this or returning to Windermere, the matter was left to the Executive Committee.

Report of the Executive Committee 1951-52
1. The Association will wish to congratulate Sir Robert Hutchison on his eightieth birthday and Dr. Donald Paterson on his election as Clinical Professor in the Department of Paediatrics in the Faculty of Medicine of the University of British Columbia.

2. The Executive Committee has met on three occasions since the last Annual General Meeting in Windermere in April, 1951, and some account of the business transacted is summarized in this report.

3. Visit of Dutch Paediatricians. Many letters of thanks were received after last year's meeting and the gift of an episcopic from the Dutch visitors to the Association was much appreciated. The old lantern has now been sold and a dialscope attachment purchased for the new machine which will be in use for the first time at the 1952 meeting.

4. Leonard Parsons Memorial Fund. It has been decided to open a special fund for the Association and, as a recent circular indicated, ideas for the form of the memorial have been invited.

5. International Paediatric Congress. Few details regarding the 1953 Congress are available. It will be held in Havana, opening on October 12 and lasting three to four days. There are to be five plenary sessions and a scientific exhibition, but no private communications. A series of simultaneous 'Round Table Discussions' is being arranged. No success has yet been obtained in securing transport by a chartered ship. It may be necessary for the Association to subscribe funds to send a delegate to the meeting.

6. Archives of Disease in Childhood. It was recommended to the Editorial Committee that Dr. John Craig and Dr. Kenneth Tallerman should replace Dr. A. W. Franklin and Mr. T. T. Higgins for 1952; and that Mr. Mason Brown and Mr. R. B. Zachary should replace Professor S. Graham and Professor Alan Moncrieff for 1953.

7. Convalescent Homes. The Sub-Committee has met four times during the year and has arranged two pilot surveys to be carried out on the results and type of convalescence in children. Members of the Association are asked to assist this committee in providing criteria on which to judge the value of convalescence and the average time necessary after various diseases.

8. Prematurity. The joint standing committee with the Royal College of Obstetrics and Gynaecology has continued to meet. The report on the care of the premature baby was published in the June, 1951, issue of the Archives of Disease in Childhood and proved so popular that after all available reprints had been distributed the Ministry of Health asked for permission to have further copies duplicated to deal with many requests received. An investigation into the aetiology of retrolental fibroplasia has been started by the Medical Research Council at the instigation of the joint committee. An enquiry into the most profitable lines of investigation into the causes of prematurity has been started and three additional members have been appointed by the R.C.O.G. on account of this; particular attention will be paid to the prevention of birth injury and asphyxia in the premature baby. Professor W. Gaisford has been nominated to a steering committee investigating certain aspects of premature delivery and work during pregnancy, sponsored by the National Birthday Trust.

9. Alteration in Rules. The Executive Committee has given careful consideration to the constitution of this committee and its relation to various sub-committees. Alterations in rules have been agreed upon and are being proposed at the Annual Meeting.

10. Senior Registrars. After information had been obtained from each region on the minimum number of additional consultant posts in paediatrics required to give an adequate paediatric service, a strongly-worded protest was drawn up and sent to the Ministry of Health on the small number of senior registrar posts in paediatrics which had been actually allocated.

11. Paris Meeting. An invitation was received for a limited number of members to attend a meeting in Paris of the Association of Paediatricians of the French language, and the Paediatric Section of the Royal Society of Medicine received a similar invitation from the Paediatric Society of Paris. Arrangements have been made to accept this invitation.

12. Winter Meeting. A request was received for a winter meeting in London and it was decided to discuss this informally during the Annual Meeting and reconsider it again in the autumn.

13. Central Midwives Board. The Executive Committee has noted with satisfaction the election of a paediatrician as vice-chairman of the Central Midwives Board.
14. Other Activities. The sub-committees which prepared a memorandum for the Ministry of Education on the maladjusted child gave verbal evidence before the special committee in September, 1951. The secretary attended a meeting in Zurich during October to discuss paediatric abstracts, but the deliberations were mostly concerned with the provision of abstracts outside the English-speaking world. The Executive Committee has under consideration the purchase of a presidential badge. Inquiries during the year which were dealt with by the Committee or by the officers included one from the Ministry of Health on poisoning by nitrites in drinking water and another on evidence concerning the relation of milk prices and quality.

15. The Executive Committee has welcomed Dr. Dorothy Taylor as observer from the Ministry of Health in place of Dr. G. I. Brodie who has retired.

16. The Association has heard with sorrow of the deaths of Dr. H. Chodak Gregory, an honorary member, and of Professor Geoffrey Fleming, original member and past president.

Scientific Communications

Professor Robert Debré, of Paris, delivered the Windermere Lecture for 1952 entitled ‘Miliary Tuberculosis’.

Dr. A. D. Barlow, introduced by Dr. B. E. Schlesinger, F.R.C.P., ‘Antidiuretic Substances in the Blood in Nephrosis’.

Heparinized plasma from the antecubital veins of normal children has no antidiuretic effect when injected subcutaneously or intravenously into rats. Plasma from an internal jugular vein has antidiuretic activity which varies with the state of hydration of the child from which it was taken.

Plasma from the antecubital veins of five children with Type II nephritis (Ellis) was strongly antidiuretic.

It is unlikely that the substance in the peripheral blood of these nephrotic children is the antidiuretic hormone of the posterior lobe of the pituitary. If it were vasopressin, there would be levels equivalent to 0-1-0.2 m.u./ml. plasma, and in the presence of so much, it seems unlikely that a small injection of posterior lobe extract would have any further effect. A slow intravenous injection of a few m.u. vasopressin does, in fact, reduce the rate of urine flow in Type II nephritis.

The antidiuretic tests have been performed by Dr. S. E. Dicker using the method of Dicker and Ginsberg (Brit. J. Pharmacol., 1950, 5, 497), and that of Jeffers, Livezey and Austin (Proc. Soc. exp. Biol., N.Y., 1942, 50, 184).

Dr. A. W. Franklin (London). ‘Chloramphenicol in the Treatment of Bronchiectasis.’ Thirty-two children, 24 severe and eight mild cases, were studied to discover the smallest dosage of chloramphenicol that could help children with bronchiectasis, cutting cost and the risk of moniliasis. The bacteriological investigations were made by Professor L. P. Garrod and his assistant, Miss Waterworth. Twenty cases, aged 5 to 10 years, in the Meath School of Recovery at Ottershaw, and 11 older children were given varying doses of the drug by mouth. H. influenzae was present in all sputa and alone in 14. Doses of 20-30 mg. per lb. daily given in three eight-hourly parts, caused dramatic lessening of the quantity of sputum on the third or fourth day and sterilization of the sputum on the sixth day. Although bacteria usually returned within 10 days of ending treatment, in mild cases symptoms were minimal for periods of weeks. Several courses of treatment could be given to the same child without loss of effectiveness. With less than 20 mg. per lb. per day infection was not controlled. A weekly dose of 20-30 mg. per lb. given in three doses on one day produced a sterile sputum on the day following but the occasional H. influenzae later in the week. Acute febrile illness may follow sudden withdrawal of full doses. In vitro bacteriological findings suggest that H. influenzae remain sensitive to concentrations of 1-0 μg. per ml. even after several courses of treatment without developing resistance. Pneumococci required concentrations of 2-5 or 5 μg., rising to 10 and 15 μg. per ml. as time passed. Staphylococci were only found late, and in seven such cases required the high concentration of 50 μg. per ml. Chloramphenicol has a real value for bronchiectatics before operation on the upper or lower respiratory tract, bronchoscopy and bronchography. Secondly, the drug may, if used in the treatment of infant pneumonia, primary or complicating whooping cough, or pink disease, prevent the initial infection. Thirdly, mild unilobar cases with tubular dilatation may be kept for long periods in good health and on full activity with occasional doses or courses of treatment. Fourthly, in the severe disabling cases, periodical courses of treatment may give the unfortunate patient periods of respite from the most unpleasant features of the disease.

Dr. Donald Court. ‘The Extent and Character of Whooping Cough in Newcastle upon Tyne, 1947-1951.’ For the past four years, the character and spread of whooping cough has been studied in 919 representative families in the city. The disease has been continuously present without showing epidemic tendencies. Its progression through the
group has been remarkably regular, and of the
919 children, 314 (34%) had had whooping cough
by their fourth birthday. Five per cent had
started the disease before they were 6 months old.
Family infectivity was high, with eight out of 10
susceptibles contracting the disease. A watery
nasal discharge was present from the beginning,
and in some for several days before the cough,
in over half of the children. Although the cough
has no specific characteristics in the first week,
it is more severe than one would expect from the
nasal discharge alone, and this disproportion is a
help in early diagnosis. Whooping was only
present in 64%. Paroxysmal sneezing dominated
the picture in the first two weeks in 13 children.
Wheezing was notably absent even in asthmatic
children.

The main query, however, concerned the clinical
consistency of the disease. Our experience is
similar to that of the Medical Research Council
(Brit. med. J., 1951, 1, 1483), and suggests that
although there are considerable variations in the
intensity of the disease, the traditional picture can
be recognized in over 90% of cases, and the
marginal fringe of mild or atypical pertussis is
small. Among the 314 affected children, there
were six pneumonias with three deaths. All the
deaths occurred in the first year of life. Two
children have segmental collapse which has lasted
for more than 18 months, without clinical
bronchiectasis.

Although the complications appear less formidable
when set in the total context of the disease,
the distressing nature of the illness makes prevention
a desirable procedure in early childhood, if it can
be done with safety.

DR. R. A. McCANCE (with Nathalie Naylor),
'The Excretion of Administered Water by Young
Infants.' After eight to 12 hours without fluid
adults and infants (6-39 days old) were given 5%
of their body weight of water. Adults excreted
a volume equal to this within six hours whereas
infants excreted only 60% of the dose before the
urine flow subsided. In both adults and infants
the peak of the urine flow was one and a half to
two hours after the water had been administered.
At low rates of flow the urine of the infants was
much less concentrated (in terms of m.osmols/litre)
than that of the adults. At high rates of flow there
was little, if any, difference in concentration between
the urines of the adults and infants. Interference
with the infants checked the flow and in one case
attempts to take blood were followed by a large
but temporary fall in flow rate and rise in urine
concentration. This effect was probably produced
by a release of postpituitary hormone and indicates
that the kidney of some infants can respond well
to the hormone, given the appropriate stimulus
and conditions.

Mr. I. J. Carre (Birmingham). 'The Natural
History of the "Short Oesophagus" in Child-
hood.' A review of the literature on the subject of
the 'short oesophagus' and partial thoracic
stomach in childhood tended to convey the
impression that the condition was uncommon and
that the development of an oesophageal stricture
was of frequent occurrence.

Yet during 1951, 18 cases were diagnosed in
infancy at the Birmingham Children's Hospital.
As there was no reason to expect a recent increase
in the condition many cases unrecognized in the past
must have subsequently remained asymptomatic.
These deductions received support from a follow-up
of patients attending the Birmingham Children's
Hospital between 1940 and 1950. Forty-five
previously unrecognized cases had been brought
to light. Nearly all of them were free of symptoms
when seen.

A total of 111 radiologically diagnosed cases
had been studied at the Birmingham Children's
Hospital. A review of the clinical histories of the
older children suggested that a useful guide to
the future progress might be the effect on symptoms
of weaning to solids. Sixty cases for which adequate
detailed clinical histories were available had been
followed up for over two years since the onset of
symptoms. These were divided into two groups
on the following basis of the effect of weaning:
(1) improvement, (2) no change or worse.

On analysis it was found that in children
belonging to Group I the condition was essentially
benign and that the symptoms had usually ceased
by the age of 2 years without recurrence in later
years. In Group 2, on the other hand, the majority
of children had persistent symptoms, i.e. daily
vomiting, periodic vomiting attacks or dysphagia,
up to 4 years or so, and in many instances for
considerably longer. Within this latter group
also fell all the cases which developed complicating
oesophageal strictures. These observations con-
formed, therefore, that the effect of weaning onto
solids provides a useful guide to the future course
of the condition in childhood. They also served to
differentiate three clear-cut clinical types. The
relative proportion of all cases falling into each
of these types was assessed as follows: Benign
asymptomatic clinical course, 75%; prolonged
course with persistence of symptoms, 20%; develop-
ment of complicating oesophageal stricture, 5%.

Dr. Beryl D. Corner (Bristol). 'Lipoatrophy
Diabetes.' The association of diabetes mellitus
and portal cirrhosis with the rare condition of
generalized lipodystrophy has occasionally been described. Lawrence (1946) in suggesting the name lipodystrophic diabetes emphasized the lack of ketosis, and the presence of normal plasma insulin and pancreatic islet tissue. A case was described of a 14-year-old girl who had progressive generalized lipodystrophy since pertussis at 10 months of age. When first investigated she was symptom-free and well developed, but had not menstruated. Her muscles were strikingly powerful. Blood pressure was persistently raised and there was moderate albuminuria. Blood plasma was lipoaemic with 3.5 g/100 ml. total lipids, but sugar and insulin tolerance were normal. A right abdominal swelling proved at laparotomy to be a large but otherwise normal kidney, and a moderately enlarged liver, a biopsy of which showed early portal cirrhosis with heavy fat infiltration of liver cells and normal glycogen content. Three months later heavy glycosuria and hyperglycaemia appeared which rapidly became insulin-resistant. During the 18 months of observation there had never been ketosis, the fasting lipaemia had increased to 6.9 g./100 ml. and the liver had rapidly enlarged to below the umbilicus. The B.M.R. is +45% in the absence of signs of thyrotoxicosis and the respiratory quotient is low. Despite the signs the patient feels fit and continues normal activity.

The whole problem of fat metabolism is raised by this case. The low respiratory quotient and lack of ketosis suggest that fat is being excessively but efficiently oxidized, and the muscle metabolism would seem adequate.

It seems unlikely that the lipaemia is entirely due to circulating ingested fat, therefore it is possible that liponeogenesis from carbohydrate is proceeding but that an unknown enzyme mechanism of retention of fat in adipose tissue has failed, so the excess lipids eventually choke the liver and produce cirrhosis. Only at this stage does the utilization of carbohydrate become impaired owing to the excessive demands for metabolism of fat. Hence hyperglycaemia, which cannot be controlled by insulin, develops.

Dr. J. L. Emery (with H. B. Stonier and H. J. Whitely) (Sheffield). ‘Observation on the Activity of the Adrenal in the Newborn.’ Cytochemical studies had been carried out on 72 newborn and stillborn infants. Based on size, shape and distribution of doubly refractile and fatty material in the ‘adult’ cortex two types of response were seen: (1) complete discharge of lipids, (2) partial discharge with continued activity.

Sixty-one infants dying aged 2 days and under, showed no response of the cortex. The youngest child showing response was aged 4 days. An increasing proportion showed response over that age.

The response in the very young child tended to be discharge rather than continued activity.

Based on a large series of routine adrenals it was found that the thickness of the ‘adult’ cortex increased slowly in the first 4 days of life, it then grew extremely rapidly for a period of about a week and following this remained fairly stable for many months.

Complete discharge and inactivity of the adrenal cortex in children given ‘eucortone’ was demonstrated and also hyperplasia when A.C.T.H. was given.

When related to published work on the excretion of ketosteroids and corticoids and the response to A.C.T.H. in the newborn, the findings suggested that the newborn adrenal was held in check in the first few days of life by the corticoids that it had received from the mother. When these had been eliminated a rapid growth of the cortex occurred.

The clinical administration of corticoids in the newborn was likely to postpone the growth of the adrenal cortex, and, unless a stimulant to growth such as A.C.T.H. were given, a severe developmental endocrine imbalance might occur.

Dr. R. McLeod Todd (Liverpool). ‘The Treatment of Primary Pulmonary Tuberculosis with Para-Amino-Salicylic Acid.’

Sixty-nine children with primary pulmonary tuberculosis were admitted to hospital during 1951 and for the purposes of this investigation the patients were divided into four age periods (0 to 1 year, 1 to 3 years, 3 to 7 years and 7 to 15 years). Alternate (‘trial’) patients in each age group received 0.5 g. para-amino-salicylic acid (P.A.S.) per lb. weight daily for three months, while the remaining patients (‘control’) received no specific therapy. All patients were in hospital for a three months and were given adequate rest, diet and vitamins.

In 70% of the cases in the trial group and in 80% of the control group the estimated age of the primary complex was three months or less, and in other respects (contact history, positive gastric lavage, x-ray appearances) the trial and control groups were comparable.

Progress was assessed clinically, by serial blood counts, sedimentation rates, radiographs and by weight gain. These criteria provided evidence of similar progress in the two groups. Complications developed in 10 patients in the trial group and eight in the control group, the most serious being tuberculous meningitis in two children (control group), miliary tuberculosis in one child (control), renal tuberculosis in one child (trial), tuberculous
peritonitis in one child (trial), and all these children were under the age of 4 years. Other complications were extension of the local pulmonary lesion, gastro-enteritis and P.A.S. sensitivity.

It was concluded that P.A.S. was of little or no value in the treatment of primary pulmonary tuberculosis in children over the age of 3 years. In infants under this age, because of the frequency of generalized complications, it would seem reasonable to give streptomycin and P.A.S.

Dr. P. MacArthur (Glasgow). 'Foetal Vaccinia and Vaccinia Gravidarum.' A healthy young woman, who had a primary vaccination when three months pregnant, was spontaneously delivered of a premature infant three months later. The infant was suffering from generalized vaccinia, acquired in utero, and died 15 hours after birth. The diagnostic investigations were described and the case was compared with the only previous recorded example of foetal vaccinia (Lynch, 1932).

The recognition of this case led to further enquiries to establish the frequency with which vaccination during pregnancy had a harmful effect on the foetus. These enquiries were described. The outcome of 203 pregnancies in women who were successfully vaccinated during pregnancy was analysed and the incidence of foetal loss was compared with that which might occur in a normal, unvaccinated series. Statistical analysis of the results showed that there was a highly significant increased mortality among the foetuses of women who were vaccinated during the first trimester of pregnancy.

It was suggested that women should never be vaccinated during the first trimester of pregnancy as part of routine public protection and that these women should be vaccinated only if they had been in contact with a case of smallpox.

Dr. O. Wolff (with Dr. W. C. Smallwood, Birmingham). 'The Effects of Meningococcal Meningitis on the Intelligence and the Hearing.' The survey is of cases treated from 1937 to 1943 and from 1946 to 1949. During this period 179 children were discharged from the Birmingham Children's Hospital having survived an attack of meningococcal meningitis.

One hundred and thirty-eight (80%) were re-examined. The shortest time interval which elapsed between the attack and the re-examination was approximately two years.

The mean intelligence quotient of the 26 children whose attack occurred under the age of 6 months was 76.3; 15% of this group had quotients of 30 or under, i.e. they were idiots.

The mean intelligence quotient of the 27 children whose attack recurred during the second six months of life was 90.8.

The mean intelligence quotient of the 81 children whose attack occurred over the age of 1 was 96.8. This mean does not differ significantly from the normal mean of 100.

Complete audiographic tests were performed on 124 children. In 26 instances (approximately 20%) there was evidence of nerve deafness; in only three of these was the hearing loss sufficiently severe to warrant admission to a deaf school.

Of the children whose attack of meningitis occurred under the age of 1 the hearing was impaired in 28% of cases while of the children who had the attack over the age of 1 only 16.6% suffered hearing loss.

Impairment of the intelligence and the hearing is not uncommon following an attack of meningococcal meningitis in the first year of life.

Dr. W. W. Payne (London). 'The Blood Chemistry in Idiopathic Hypercalcaemia.' Besides the raised blood calcium and urea and the normal phosphate, phosphatase, chloride and bicarbonate, there was in these cases a raised plasma protein, the ιι and γ globulins being increased. The increase in the serum calcium occurred in the ultra-filtratable fraction but the cerebrospinal fluid calcium was normal. The daily calcium and phosphorus retention was normal. The urinary calcium was low early in the disease but later rose to just above normal. The renal function was depressed in the active phase but returned to normal in convalescence.

The cause was discussed and it was concluded that neither hyperparathyroidism nor hypervitaminosis D and none of the other known causes of a raised calcium could adequately account for all the findings.

Dr. Reginald Lightwood (London). 'Idiopathic Hypercalcaemia in Infants with Failure to Thrive.' In a previous study of 31 infants with primary renal acidosis, hypercalcaemia occurred in two. Attention was then given to the clinical features of 10 hypercalcaemic infants without concurrent renal acidosis forming an apparently homogeneous and 'idiopathic' group. They did well until 3-7 months when symptoms began, anorexia, vomiting, wasting and constipation, suggesting a diagnosis of renal acidosis. The physical state also matched this condition, marasmus, hypotonia and faecal masses often felt per abdomen, although the hypercalcaemic infants were even more constipated and rather more alert. Dehydration occurred in about one half, also thirst, polyuria and spikes of fever. The blood urea was increased. After lasting from five months...
to more than 15, slow spontaneous recovery took place, though only after the return to normal of the calcium and urea levels; sometimes, however, a short secondary rise in the serum calcium occurred.

Since leucocytes, epithelial cells and sometimes bacteria might appear in the urine, pyelonephritis was often considered but the clinical condition was not materially altered by treatment for pyelonephritis and so any infection was probably acquired secondarily. X-ray examination showed nephrocalcinosis in two infants.

Clinically the cases were indistinguishable from renal acidosis, the differential diagnosis being actually made by examining the urine and blood.

Dr. J. O. Craig (Birmingham). 'Accidental Poisoning in Childhood.' The communication was a record of 482 cases of poisoning in childhood occurring in the period 1930-1951. Two hundred and fifty-six cases were seen at the Royal Hospital for Sick Children, Edinburgh, and 226 in the Royal Aberdeen Hospital for Sick Children. The work on the Aberdeen cases was done by Dr. M. S. Fraser. Cases of coal gas poisoning and ‘food poisoning’ were excluded.

Poisoning commonly occurs between the ages of 1 year and 4 years. The sex incidence shows a male : female ratio of 1.46 : 1.

It was shown that the rise in poisoning cases seen at each centre had been fivefold over the period of study. It could not be assumed that this reflected the number of cases of poisoning that occurred in the general population, but it stressed the importance of accidental poisoning to those working in hospital.

The main group of poisons to cause trouble was the ‘medicine’ group. The fatalities occurring in the whole of Scotland were discussed, and the importance of ferrous sulphate, both numerically and in the production of severe symptoms, was emphasized. Certain points were discussed in detail. The importance of pneumonia in kerosene poisoning was stressed, and also the occurrence of convulsions in camphor poisoning. It was pointed out that barbituric acid poisoning often manifested itself with excitement. The antihistamines were mentioned. Attention was drawn to the possible dangers of boric acid as a local application in cases of napkin dermatitis.

Dr. Frank Falkner (London). ‘Measurement in Growth and Development Studies.’ Scientists of many branches required information on growth; the doctor specially required to know if a child was growing normally. There was a lack of proper data and national studies were needed with international co-operation. Growth was a highly complex form of movement. There were two basic methods of studying it: the cross-sectional, or distance, study where many individuals were measured at different ages, and the longitudinal, or velocity, method, where the same individuals were measured, ideally from birth to maturity. To know the pattern and rate of growth was more valuable than knowledge of the point of growth reached. Three up-to-date cross-sectional sets of data on height and weight were available in this country but all were open to some criticism. No ‘longitudinal’ data were available here, but three such studies were in progress.

Height and weight did not indicate the distribution of fat, muscle or bone, which all grew at different rates, nor body build. The necessity of anthropometric measurements other than these two was stressed and a plea made for accuracy. The complexity of growth required that, in every detailed study, estimations be made of bone and mental development, and of biochemical and endocrine changes. Recording of genetic, disease, nutritional and environmental influences was necessary.

Experimental lines of research into growth were discussed together with the application of somatotyping as a method of denoting body-type. There was, as yet, no simple satisfactory test of normal growth in the human child.