AN EYE WITNESS ACCOUNT OF THE FIFTH INTERNATIONAL CONGRESS OF PEDIATRICS, NEW YORK

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The Fifth International Congress of Pediatrics was held in New York City ten years after the fourth in Rome in 1937. Exactly at 9 A.M. on July 14, 1947 delegates from various contries started assembling in the spacious and beautifully decorated lobby of the well-known Waldorf-Astoria Hotel of New York City. On the desk were booths for American, Canadian, Latin American, European and Asiatic countries. Courteous women volunteers handed over the badges, programme and other papers as soon as a delegate registered his or her name. There were also booths for mail, travel, excursion, scientific demonstrations and others, all for the comfort of the delegates and to get over any difficulty that a delegate may have. Women's hospitality committee had a special lobby to entertain delegates.

Standing on the lobby and watching delegates coming and going, one could hear strange languages being spoken. A ladv doctor from Barcelona enquired of me something to which I could listen only with an embrassed vagueness until another colleague volunteered to interpret and help us in overcoming our difficulties. and we both laughed. Such a situation was neither infrequent nor unwelcome as we all tried our best to make ourselves understood by spoken words, appreciative smiles or rythmic movements. The four official languages were, however, English, German and Spanish. At 4 P.M. all delegates gathered on the spacious ball-room of Waldorf-Astoria, where scientific sessions The ballroom was heavily carpeted, illuminated with concealed lighting; three rows of balconies with red velvet curtain hanging on either side overlooked the main hall; on one side was the large dias, on the rear of which were flying the National Flags of all the countries represented in the Congress in a semi-crcular manner round the map of the world. On the right hand corner of the dias were four glass booths housing the simultaneous translation apparatus. By means of this apparatus all the speeches could be broadcast to the hall in four languages at the same time. Delegates could either listen to the speaker directly or tune in with the help of the ear-phone to any one of the four transcriptions of the speech in English, French, German or Spanish. Below the dias stood all the officers of the Congress receiving the delegates. Light tea and refreshment were served. Delegates from 62 countries numbering about 2200 assembled in the hall and this informal reception ended at 7 P.M. (See Overleaf)

Concurrently with the formal programme of scientific discussion, over 150 exhibits of the finest quality that I have ever seen were presented; they reflected the high standard, which the American medicine has attained. The exhibits were displayed in ten specious rooms surrounding the main ball-room. Eac'n booth represented one subject and demonstrated by the staff of the special department who exhibited it. Charts, diagrams, specimens, photographs, rontgenograms, and actual experiments were carried out and a visit to the exhibits was an education by itself. It represented a variety of subjects too numerous for a narrative. Description of these exhibits covers 113 pages of the official programme. Every aspect of modern pediatrics has been shown, and they can be classified as follows:—

(1) Infectious Diseases—24; (2) Prematurity, the Newborn, Growth—14, (3) Biochemistry, Nutrition—16; (4) Pathology, Hematalogy, Physiology—34, (5) Endocrinology—3, (6) Surgery, Surgical specialities, Radiology—21, (7) Neurology, Psychology, Behaviour Problems—14, (8) Allergy, Miscellaneous—9, (9) Public Health, Medical education—16.

A series of pedagogic motion pictures were in continous display. For example, "Journey into Medicine" is a sound film depicting the course of a typical medical student through medical school, his internship in pediatrics and the development of interest in the prevention of diseases. His role as a public health-specialist in the control of an epidemic of diptheria is graphically shown. Another Film "Life with Baby" is a documentary film which delineates the methods of

The following is the list of countries and the number of delegates from each country.

| Argentina | 13 | Iceland | 2 |
|--------------------|----|------------------------|-------|
| Australia | 3 | Iran | 2 |
| Austria | 4 | India | 6 |
| Bahamas | 1 | Italy | 7 |
| Belgium | 6 | Lebanon | 2 |
| Bermuda | 1 | Luxembourg | 1 |
| Bolivia | 3 | Malaya | 1 |
| Brazil | 22 | Mexico | 45 |
| Bulgaria | 11 | Netherlands | 16 |
| Canada | 41 | New Zealand | 2 |
| Chile | 10 | ⁻ Nicaragua | 1 |
| China | 11 | Norway | 6 |
| Calombia | 12 | Palestine | 14 |
| Costa Rica | 3 | Panama | 3 |
| Cuba | 51 | Paraguao | 2 |
| Czechoslovakia | 22 | Peru | 7 |
| Denmark | 9 | Philippines | 7 |
| Dominican Republic | 6 | Poland | 9 |
| Ecuador | 6 | Portugal | 5 |
| Egypt | 1 | El Salvador | 2 |
| Eire | 4 | Siam | 1 |
| Finland | 8 | Spain | 5 |
| France | 16 | Sweden | 12 |
| Germany | 5 | Switzerland | 5 |
| Great Britain | 19 | South Africa | 4 |
| Greece | 13 | Syria | 2 |
| Guadalupe | 1 | Turkey | 2 |
| Guatemala | 3 | United States | 1,670 |
| Haiti | 1 | U.S.S.R. | 3 |
| Honduras | 1 | Uruguay | 6 |
| Hungary | 8 | Venezuela | 12 |
| | | | |

| Total | 2,177 |
|-------|-------|
| Iotal | 2,177 |

developmental diagnosis and development guidance of children. Of scientific value and of particular interest to me was the film "Locomotion of cells from actue splenic tumour and human leukemia compared with that of cells from normal lymph node and bone-morrow," because spleno-megaly is a commonplace in India. This film demonstrated myeloblast, lymphoblast and monocytes which can be differentiated from each other by their manner of locomotion. These are only three of the two dozens interesting films that were shown.

It is not possible within the compass of this brief report to describe all the exhibits but some of the more interesting and informative ones are described below.

EXHIBITS

Infantile congenital syphilis demonstrated by Tulane University School of Medicine is a series of Kodachrome pictures, comprising a brief review of pertinent diagnostic manifestations and effects of penicillin therapy.

Natural history of poliomyelitis (New York University) shows characteristics of poliomyelites virus, (a) relative size, (b) reaction of certain physicochemical agents., (c) host range, (d) histopathology, (e) immunology, (2) portals of entry in man, (3) distribution in man, (4) portals of exit, (5) extrahuman sources of virus, (6) modes of transmission, and possibly, (7) a theory for epidemics.

Streptomycin in Tuberculosis (Mayo Foundation) presented (1) The development of antituberculosis agents including antibiotics, the nature of the evidence obtained by the use of streptomycin in experimental tuberculosis in animals on which subsequent clinical use of the drug was predicated, (2) roentgenographic and other clinical data illustrating the results of streptomycin therapy in various types of tuberculosis in patients, (3) tabular material pertaining to the clinical experience with 150 cases and a summary of the present status of streptomycin in the treatment of clinical tuberculosis.

Virus Hepatitis demonstrated by the Department of Pediatrics University of Pennsylvania. Until the recent world conflict, there was a paucity of knowledge in regard to disease of hepatocellular origin. Jaundice presumably of infectious nature, had long been recognised, occurring in epidemics and sporadic outbreaks, but little more than clinical recognition was known. Such names as catarrhal jaundice, infectious jaundice, epidemic hepatitis or jaundice, and hepatitis epidemica had been attached to a disease picture which we now call infectious hepatitis. Receiving later recognition were many cases of jaundice seemingly resulting from inoculation of biologic products such as blood, plasma and vaccines, named variously as transfusion jaundice or hepatitis, postinoculation jaundice or hepatitis, and late postarsphenamine jaundice. At present it is thought that these latter are not single entities but one disease known as homologous serum hepatitis. Recent experimental evidence indicates the presence of at least two viruses one producing infectious hepatitis and the other homologous serum hepatitis.

It is the purpose of this exhibit to show some of the recent advances in knowledge of viral hepatitis as to etiology, properties and sources of etiologic agents, epidemiology, experimental transmission, clinical picture, pathology, immunity, use of gamma globulin in prevention, inactivation of virus and essential laboratory tests.

It has been conclusively shown that the virus of infectious hepatitis is present in the blood and feces during the pre-icteric and icteric phase of the disease, whereas in homologous serum hepatitis, the virus has only been found in the blood during the incubation period, preicteric and icteric phases.

An epidemiologic investigation of an outbreak of infectious hepatitis in a summer camp for children is presented. The water supply was shown to be responsible, due to fecal contamination from surrounding cesspools. Experimentally, water from this camp produced evidence of hepatic dysfunction in human volunteers.

The clinical pictures of infectious hepatitis and homologous serum hepatitis are practically indentical. The differences manifest themselves principally in the onset and incubation period. Infectious hepatitis usually has a febrile onset and an incubation period of twenty to forty days, while homologous serum hepatitis usually

has an afebrile onset and an incubation period of sixty to one hundred and twenty days. Homologous serum hepatitis apparently is common in all age groups whereas infectious hepatitis is most common in age groups below 30. The value of gamma globulin has been demonstrated. Coagulation, filtration, and a residual chlorine of 1 ppm apparently frees drinking water of the virus of infectious hepatitis.

Whooping Cough Passive immunization and treatment with hyperimmune serum and a Skin test for suseptibility. (Children's Hospital, Philadelphia)

Hyperimmune human serum has been found to be useful in the prevention and treatment of whooping cough. This serum is prepared from the blood of individuals who have received repeated doses of standard pertussis vaccine sufficient to produce an antebacterial antibody titer of 1:2,560 or higher. This titer is maintained by periodic single doses of vaccine. The serum is dispensed in the vaccum dried form in order that it may be reconstituted to a two or three fold concentration of its original volume. Such concentration facilitates intramuscular administration. The recommended dose for treatment is 20 c.c. given for at least three doses two days apart. In seriously ill children or infants 40 to 60 c.c. given intravenously has produced marked improvement in the symptoms. This dose should be repeated daily until the patient is out of danger.

For prophylaxis two 20 c.c. doses of serum should be given five days apart. It must be emphasized that if the susceptible individual is under continuous exposure the dose should be repeated about every two to three weeks.

No serious local or general reactions have been reported after the use of human hyperimmune serum.

Charts are shown summarizing the clinical results of the use of this serum in prophylaxis and treatment. The exhibit also includes photographs of some details of the preparation of the serum.

The early clinical investigation of a purified fraction of phase I H. pertussis which appears to be a reliable test for susceptibility to whooping cough was conducted through the Pailadelphia Serum

Exchange. Over 3000 children have been tested. Charts showing typical results from group testing and the study of institutional epidemics complete the exhibit.

Congenital Malformations induced by maternal riboflavin and "A" deficiency in experimental rats. (conducted by Children's Hospital, Cincinnati)

Congenital malformations of the skeleton can be induced in about one-third of the offspring of female rats raised and bred on diets deficient in riboflavin. These malformations are prevented when the diets are supplemented by liver or crystalline riboflavin. The exhibit contains tables describing the diets used and the photographs showing the external appearance of the abnormal offspring. Photographs of normal newborn rats are added for comparison. The abnormals have short mandibles, protruding tongues, short arms and legs and syndactylism.

The skeletons of 45 abnormal young can be compared with those of 5 normal newborn rats. Shortening of the mandible, shortening or absence of the tibia, fibula, radius and ulna, fusion of ribs and of the sternal centers of ossification can be seen in the abnormal young.

Congenital anomalies of soft tissues are found in the young of female rats raised and bred on diets deficient in vitamin A. A retrolenticular membrane is found in the eyes of about 75 per cent of the young who often have additional ocular abnormalities. In the chest of the young some fetal conditions persist and diaphragmatic hernias are seen frequently on the right side. The kidneys are hypoplastic and horse-shoe kidneys may be formed. The Wolffian and the Mullerian ducts may persist side by side and the development of the urogenital sinus is retarded. The ureters are frequently ectopic and join the urethra below its internal orifice instead of terminating in the bladder.

The exhibit contains tables describing the diets used and photographs showing the external appearance of the abnormal young as well as microphotograms of sections through the abnormal tissues. Reconstructions (wax models) of some of the abnormal structures are exhibited.

Water and Electrolyte Metabolism: (Yale University School of Medicine, Connecticot.) Different charts show that the water expenditure is related to the calorie, since production of energy affects water expenditure to about the same extent at all ages. Imperceptible loss, excluding sweet, is roughly '43 times calories and the substances which the kidneys excrete are roughly proportional to the food metabolized. The volume of urine which will contain urinary solids is inversely proportional to urine concentration. The water of both sweat and stools may be as high as 600 c.c. per 100 calories.

Tables also show the estimated composition of a normal baby, a baby with alkalosis, a baby with diarrheal dehydration and a baby with diarrhea treated with sodium chloride, sodium bicarbonate, glucose and water.

Congential Aromalies of the Heart and Great Vessels. Clinico-Pahologic Correlation. (Mayo Clinic, Rochester) Numerous congenital anomalies are demonstrated: cor biloculare, cor triloculare biatriatum with isolated dextrocardia, atresia of mitral orifice, persistant common atrioventricular canal, atrial septal defects, ventricular septal defects, Eisenmenger's complex, tetralogy of Fallot, complete transposition of great vessels, persistent truncus arterious, patent ductus arteriosus, atresia of aortic orifice, anomalies of the aorta, coarctation of the aorta.

Each anomaly is presented by: (1) models showing both the external anatomy and the internal structure; (2) roentgenograms of the thorax; (3) electrocardiograms; (4) drawings explaining the abnormal circulation; (6) pertinent clinical features pertaining to the patient from whom the model was made; (7) significant embryologic considerations contributing to these congenital anomalies; (8) the chief clinical features in the typical case of each anomaly.

(To be continued)