# TUBERCULOSIS IN RUSSIA MOSCOW MEDICAL CONGRESS

# [FROM A SPECIAL CORRESPONDENT]

The Sixth All-Union Congress of Tuberculosis was held in Moscow from June 9 to 16. It was attended by more than a thousand specialists from the U.S.S.R. and by about sixty foreign physicians from more than twenty countries, including four from the United Kingdom. Simultaneous translation was provided into English and French, and we were given English summaries of the main papers. We were able to supplement what we learnt about Soviet methods in the conference proper by visits to institutions and private discussions with our Russian colleagues.

## **Tuberculosis Services**

The Congress dealt with the organization of the tuberculosis services in Russia, and the epidemiology, prevention, chemotherapy, and surgery of the disease. The primary unit in the tuberculosis services is the dispensary or chest clinic, which undertakes prevention, diagnosis, and treatment. In Moscow, at least, this service is highly developed, dispensaries serving populations of 100,000 to 300,000 people, an individual doctor within the dispensary being in charge of a sector of about 30,000. In general a dispensary has up to 100 beds of its own, from which most patients are sent on to sanatoria or, in difficult cases or in those requiring excisional surgery, to hospital. When the patient resumes work, at first part-time, he spends the remainder of the day at a "day sanatorium" attached to the dispensary, where he receives meals and possibly also chemotherapy. Miniature radiography is used on a large scale; 49 million people were x-rayed in the U.S.S.R. in 1955, and about a million in Moscow in 1956. A yearly chest x-ray examination is compulsory for teachers and others dealing with children, and for food-handlers, shop-assistants, and bus-conductors, among others. Schools, factories, and offices are regularly covered, but community surveys, we understood, are only now being undertaken. B.C.G. is given extensively to infants, children, and adolescents ; some six million received the vaccine in 1956.

A number of delegates from the peripheral republics made it clear in their contributions, however, that they lagged considerably behind the standards of the more highly developed areas. In general the type of organization aimed at seemed to be that already outlined, though there were suggestions of local variations such as treatment centres attached directly to collective farms. In the better centres brisk percentage falls in mortality and morbidity were reported. In the whole U.S.S.R., hospital deaths were said to have decreased by 70% since 1949 and new cases by almost the same amount. Few actual rates were mentioned. In conversation this was attributed to the fact that there has been no census since 1939 and the size of the population is uncertain. One mortality rate of 42.1 per 100,000 for 1954 was reported from Lithuania, and, in conversation, an estimated and unofficial mortality rate of 20 per 100,000 for Kiev in 1956. When we visited a dispensary in Moscow we were given absolute figures and rates for a district with a population of 300,000 containing the university and many factories. Mortality had fallen from 57 per 100,000 in 1949 to 14 in 1954 and 13 in 1956. Morbidity had shown a remarkable reduction from 905 notifications in 1949 to 235 in 1956.

# Oral B.C.G. and "Phthivazide"

Discussion on prevention mainly centred in B.C.G. and its methods of application. Oral vaccination is extensively practised in infants. Older children are vaccinated intradermally. A total of 6 million were vaccinated in 1956. One of the points discussed was the possible application of the method of large and repeated oral doses advocated by Brazilian authors. Trials of this technique were in progress, but it did not appear that any firm conclusions had yet been reached. No controlled trials seemed to be in progress. The discussion on chemotherapy lasted about two days. In Russia isoniazid is seldom used, being replaced by "phthivazide," a drug with comparable effect, approximately twice the molecular weight of isoniazid, and given in doses of 1-2 g. a day. The rather surprising merit claimed for phthivazide is its lesser toxicity. In general the speakers were employing combined therapy; usually daily phthivazide with P.A.S., thiosemicarbazones, or intermittent streptomycin. Recently many centres have begun using "prolonged" chemotherapy, which in most cases seemed to consist in treatment continuing for from four months to a year, seldom longer; the results appeared to be commensurate. These sessions were remarkable for an admirable review of potential drugs for tuberculosis by Professor PERSHIN, of the Institute for Chemical Pharmacy in Moscow, and a brilliant summary of United States practice by Dr. CORWIN HINSHAW.

In the sessions on surgery it appeared that resection was now being used extensively, and with considerable success, in the larger centres. Series were reported with low mortalities and a high proportion of satisfactory results. Extrapleural pneumothorax seems to be fairly often employed. A much wider use of surgery was advocated. Incidentally artificial pneumothorax, though less popular than formerly, is still employed far more frequently than in Britain; for instance, in 34% of admissions to one Moscow sanatorium in 1956.

## **General Impression**

To sum up, it was clear that in the U.S.S.R., at least in its more highly developed areas, preventive measures are being more intensively applied than in Britain. Considerable progress is being achieved in reduction of morbidity as well as mortality. On the other hand, our Russian colleagues have something to learn from us in therapy. Scientifically some experimental work appeared to be good, especially in the preparation of new drugs and their experimental use in animals. In the techniques of clinical research in tuberculosis Britain is probably ahead of other countries, and certainly the U.S.S.R. could benefit from our experience.

The standard of hospitality was of the highest order, and we particularly valued the opportunities for informal discussion with our Russian colleagues.

## HORMONE STUDIES

#### [FROM A SPECIAL CORRESPONDENT]

Here are recorded a selection from the papers read at the recent meetings of the Endocrine Society and the American Diabetes Association, held in New York from May 30 to June 2. The papers have been grouped by subject and are not necessarily in the order of their delivery.

#### Studies on Diabetes and Insulin

At the Diabetes Association's meeting Dr. S. A. BERSON and Dr. R. S. YALOW (New York) reported their further investigations on insulin antibodies produced by insulin administration. The sera of most diabetics who had received insulin for periods longer than three months contained these antibodies, and studies on the kinetic aspects of the insulin-antibody reaction showed, they said, that there were at least two types of insulin-antibody complex. Drs. H. RIFKIN and S. LIEBERMAN (New York) discussed the role of the adrenal cortex in diabetic retinopathy and nephropathy. A series of 30 patients with these diabetic complications had been studied by means of blood and urinary corticoid estimations, including the response to corticotrophin, and by following the fate of intravenous hydrocortisone. No clear evidence of increased adrenal cortical activity was found in these cases. The effect of experimental kidney disease on induced diabetes in rats had been studied by Dr. N. KALANT and his co-workers (Montreal). They presented evidence in support of the view that the nephrotic syndrome led to improvement in the diabetes and a