WORLD HEALTH ORGANIZATION

REGIONAL OFFICE FOR THE EASTERN MEDITERRANEAN

الهيئة الصحية العالمية
المكتب الاقليمي لشرق البحر الأبيض

ORGANISATION MONDIALE DE LA SANTÉ

BUREAU RÉGIONAL DE LA MÉDITERRANÉE ORIENTALE

REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN

Ninth Session

Agenda item 17

EM/RC9B/Tech.Disc/8
1 September 1959

ORIGINAL: FRENCH

TECHNICAL DISCUSSIONS - SUB-COMMITTEE B

POLIOMYELITIS

PRESENT STATUS OF ACUTE ANTERIOR POLIOMYELITIS

Result of a Study Carried out at the Charles Nicolle Hospital

by

Dr. Bechir Hamza
Head of Service, Charles Nicolle Hospital, Tunis

It is well-known that poliomyelitis has a predilection for highly civilized countries, that is, those countries which, through improving their sanitation facilities have reduced their social scourges and have succeeded in doing away with slums and insanitary dwellings. If, for the time being, poliomyelitis is still not a social problem in Tunisia, spread of this disease may result in years to come with the successive efforts of the Public Health Department to prevent communicable diseases, and of the Government in providing better housing and improving health conditions.

The objective of this report is to give some statistical data on the disease, as well as on its distribution and rate of incidence. We shall purposely confine it to the epidemiological, diagnostic and therapeutical sides of the problem, as the virological and serological aspects have so far not been dealt with in Tunisia.

During the years 1954-1958 and up to June 1959, we collected information on 105 cases of poliomyelitis which had been admitted to the Paediatric Service of the Charles Nicolle Hospital.

In the course of 1950 and 1951, thirty-nine cases were admitted to the same Service.

The figures give but an approximation of the incidence of poliomyelitis in Tunisia. In fact, some children suffering from infantile paralysis attend the hospital out-clinics and are treated as out-patients. Many practitioners treat the patients not showing severe disorders outside hospitals. Such cases cannot be included in our statistics, but it may be assumed that the paediatric service of Charles Nicolle Hospital centralizes all severe forms of poliomyelitis in Tunisia.

The 105 cases studied by us are distributed as follows:

Number of cases	1954	1955	1956	1957	1958	1959 up to the end of June
	29	16	10	32	13	5

Interpretation of these figures: Since 1954, there has been no marked increase in Tunisia. With a generally low morbidity rate, a slight raise may be noted in 1957.

With regard to the seasonal character of poliomyelitis in Tunisia, its distribution is shown as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	7	6	11	10	10	5	9	8	12	14	7

It seems that the cases are distributed fairly evenly. The most numerous cases did not occur during the hottest months of the year. A slight increase is observed in the spring and the autumn.

The age distribution is given in the following table:

A g e	Number of Cases	Percentage
Less than six months	3	2.8%
Six months to one year	25	23.8%
One year to two years	45	42.8%
Two years to three years	17	16.2%
Three years to five years	9	8.5%
+ five years	6	5.6%

It results therefrom that 85.6% of the recorded cases occurred in children under three years of age. The disease is scarcely observed before the sixth month of life, and this may be due to an immunity gained from the mother. The disease becomes less common from the third year through an immunity progressively acquired by the child.

Distribution of poliomyelitis cases in the country: The disease occurs in any part of the territory. It was observed both in the coastal areas and in the steppe or desert areas. The most frequent cases were noted in Tunis and its suburb (seventy cases).

Diagnosis Problem

All the cases noted by us were paralytic forms of poliomyelitis. All the cases were diagnosed when paralysis was already established.

No case of non-paralytic poliomyelitis was diagnosed.

How the Diagnosis is Made

Clinically (meningeal signs - pains - fever - established paralysis).

Biologically - Examination of the cerebrospinal fluid. In ninety-four cases, the cerebrospinal fluid was found perturbed.

Electrically - in no cases did we have a bacteriological confirmation. The Tunis laboratories are still not able to isolate the poliomyelitis virus.

No serological study was made.

Clinical Forms

Out of the 105 cases, nine showed severe respiratory forms. The others were either:

tetraplegia cases

or paraplegia cases

or monoplegia cases.

Out of the 105 cases, there occurred six deaths.

Treatment Problem

During the acute or initial phase, the treatment is reduced to its simplest expression:

Rest - warming up

Re-hydration, if necessary

Vitaminotherapy.

All these forms of care are provided in the paediatric service, as there is still no specialized service for the treatment of poliomyelitis.

In the respiratory forms of the disease, we use aspiration and artificial respiration (iron lung). We still have no "artificial respirator", but we hope it will be made available in a few months.

Kinesitherapy is used early, as soon as the pain is alleviated. It is maintained for a long period thereafter, on an ambulatory basis.

Tunisia has still no centre for the "rehabilitation of the physically handicapped". A project for the development of such a centre is under consideration.

Some patients suffering from severe sequelae are sent to rehabilitation centres in France. However, such cases are very few.

Prophylactic therapy is resorted to at an individual level only. The vaccine used is that provided by the Pasteur Institute, Paris (Lépine vaccine). The number of vaccinated children in Tunisia is limited. This vaccination is not yet in use in children's communities.

Conclusion

The incidence rate of poliomyelitis in Tunisia is still not high. However, the control of the pests at present prevailing in Tunisia, the improvement of living conditions will result in an increase of the incidence of this disease, as everywhere. A serological survey is recommended for the development of a prophylactic work programme keeping pace with the health and social programme which is being carried out by the Tunisian Republic.