A STUDY OF TUBERCULOUS CASES ADMITTED TO MENIA CHEST HOSPITAL

(1972 - 1981)

THESIS

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By

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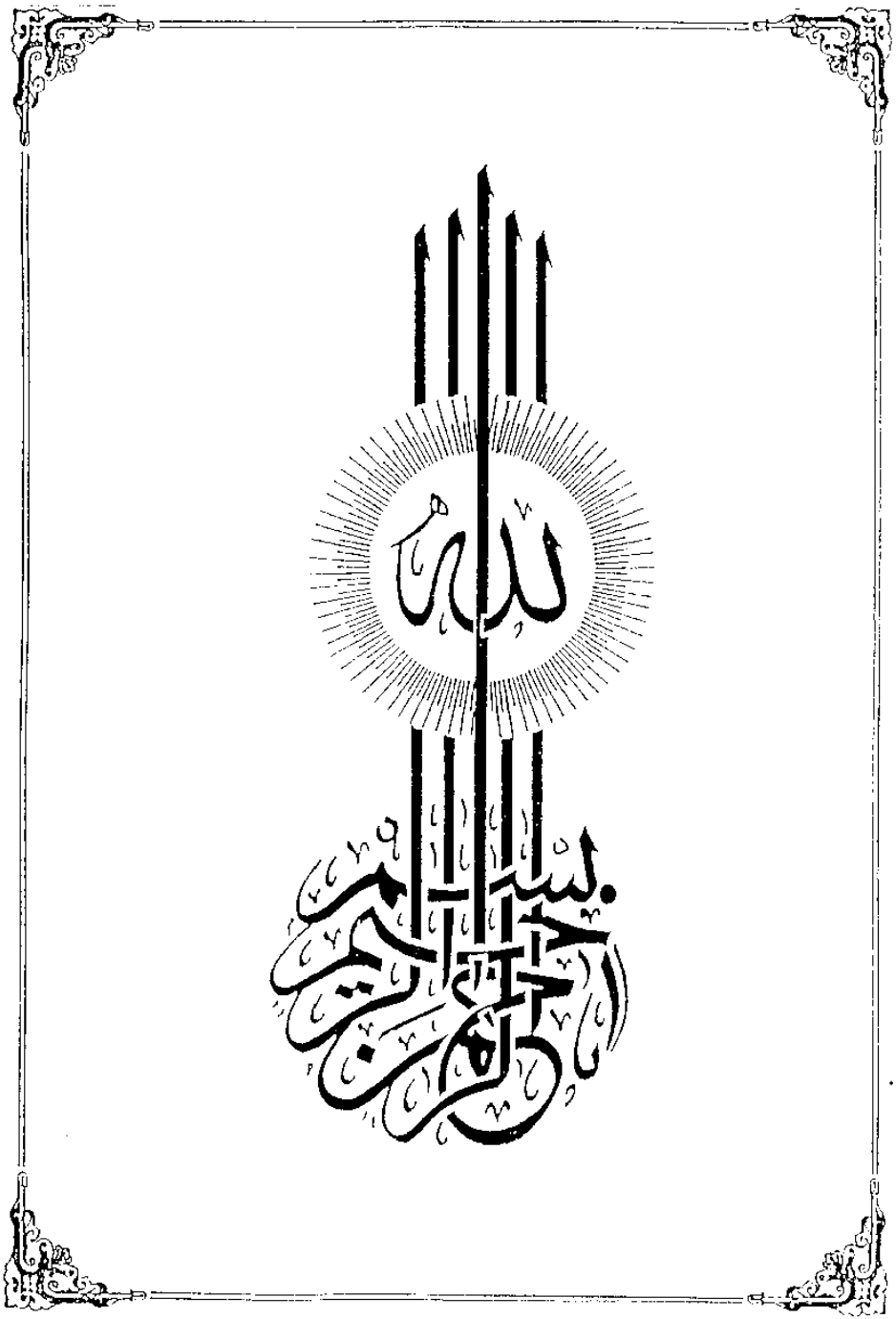

INTRODUCTION

I N T R O D U C T I O N

Tuberculosis is a very old disease of wide-world distribution, affecting all races, ages and both sex, in addition it affects animals. The remains of ancient skeleton revealing the characteristic changes of tuberculosis pathology indicates that man was affected with the disease some 4000 years B.C. and it was a common disease here in Egypt 1000 years B.C.(1)

In early writtings, it was called "consumption" because of its tendency to cause great wasting of its victims.

In Greek literature the word "phthisis" was used in early nineteenth century, termed as tuberculosis mainly from autopsy description by physicians as Laennic and Bayls.(2)

The disease was refered to as "The white plague" and reached its greatest peak in Europe during eighteenth century.

March, 24, 1882, Robert Koch (1843-1910) announced in Berlin that he had discovered the tubercle bacillus which has been considered as one of the most important discoveries, in bacteriology and in history of medicine.(3)

The BCG vaccination against tuberculosis was evolved by French scientists, Calmette and Guerin, international BCG campaign was initiated by Scandinavian countries in post war periode and its success led to world-spread of vaccination.(4)

In 1895 Rontgen discovered x-ray, which later proved valuable for diagnosis of tuberculosis.(5)

In 1907 Von pirquet described the tuberculin test as a mean of diagnosis.(6)

The major steps in the battle against tuberculosis was the discovery of effective chemotherapeutic agents, modern chemotherapy for tuberculosis started with the introduction of sulphone compounds after sulphonamides in 1935.(7)
Streptomycin was introduced by Waskman in (1944)(8,9)
para-aminosalicylic acid. (PAS) was introduced in (1946) by Lechman.

Isonicotinic acid hydrazide (INH) though synthesized in (1912) it was first used by Bernstein, in the treatment of tuberculosis in (1952).

INH is one of the most effective chemotherapeutic agents against mycobacterium tuberculosis and remains the key stone of original treatment of pulmonary tuberculosis.

The original studies of ethionamide were chiefly made by French workers (Liberman Rist and Crumbach 1956) and was clinicaly used by Brouet et al, 1959)[9].

Ethambutol (EMB) is the most useful companion drug replasing PAS in original treatment of cases of pulmonary T.B.[10].

Rifampicin (Rifampin)-RMP- is a new bactericidal drug which proved to be effective chemotherapeutic agents well accepted by patients and of low toxicity.[10]

Other chemotherapeutic agents were effectively used in different occasions with different combination regimens e.g. pyrazinamides, cycloserine, capreomycin, viomycin, kanamycin, thiacetazone, prothionamide.

All these drugs have revolutionizid the methods of tuberculosis control and treatment, in addition, it have given a hope that tuberculosis control would be attainable in a reasonable time.

The picture of tuberculosis has changed in many countries and is changing in many others where, tuberculosis situation has dramatically improved in the last 30 years especially in economically developed countries because of effective antituberculosis chemotherapy, B.C.G. vaccination and better socio-economic conditions.

In Egypt, T.B. is still a major public health problem, thus estimation of the extent of tuberculosis problem, yields valuable epidemiological data necessary for guiding the antituberculous campaign.

Egypt is one of the countries with moderate tuberculosis prevalence (which is the number of all tuberculous cases whether old or new at a certain point of time per total population examined), having an incidence (which is the number of only the new cases per total number of population examined) varying between 1 and 2% and sputum positive rate between 0.1 - 0.2%.[11]

AIM OF WORK

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In Egypt, tuberculosis is still a major public health problem affecting our community and its economics.

Many previous studies stressed the need of estimation of various epidemiological parameters for the country as a whole and in various areas.

Therefore, this work is meant to study the records of tuberculous patients admitted to Menia chest hospital throughout 10 years period from 1972 to 1981.

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MATERIAL AND METHODS

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The material presented in this study was collected from the records of Menia chest hospital, which had been established 1946, its capacity is 160 beds.

Menia is one of the governorates of the middle Egypt (The latter includes Assiut, Menia, Beni Sewef Giza and Fayom). It is about 250 Kilometers south to Cairo.

The population of Menia totalled about 2,200,000 individuals, a considerable proportion of them are agricultural workers.

There is another chest hospital in Malawi City which had been established in 1950, its capacity about 120 beds, Menia governorate, in addition to Menia City, includes 8 cities, four of them are south to Menia City which are Abou-Korkas, Malawi, Dir Mowas and El Adwa cities. These are served by Malawi chest hospital. The other four cities are north to Menia city which are Samalot, Mattai, Beni-Mazar and Maghagha, these are served by Menia chest hospital.

In addition to two chest hospitals there is a chest clinic in every city. Except in Malawi where

chest hospital had been established.

Collection of data was done throughout 10 years period (1972 - 1981).

The following data were estimated:

1. The total number of cases admitted, every year and during 10 years period of the study, their percentage per total symptomatising chest ailments.

2. Distribution of admitted cases according to whether pulmonary or extrapulmonary tuberculosis.

3. Distribution of pulmonary tuberculous cases according to type of lesion whether, primary, miliary or bronchogenic T.B.

4. Distribution of bronchogenic T.B. according to extent of lesion, whether, minimal, moderately advanced or far advanced.

5. Distribution of cases according to:
   A. Sex
   B. Age
   C. Occupation

6. Study of the bacteriological status of sputum as regard the direct smear microscopy, culture, and their percentages.

7. Study of the pattern of sensitivity tests.
8. Review of the drug regimen used
9. Death rate from pulmonary tuberculosis in relation to total pulmonary tuberculous cases admitted (Fatality rate).

The available data were tabulated, statistically analysed and presented in tables and charts in order to get a picture of the disease in Menia chest hospital between 1972 - 1981, taking in consideration the difference between 1972 and 1981 as to clarify any change.

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REVIEW OF ThE LITERATURE