STUDY OF CASES DISCHARGED FROM SUEZ CHEST HOSPITAL DURING THE YEARS 1978-1982.

THESIS

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BY

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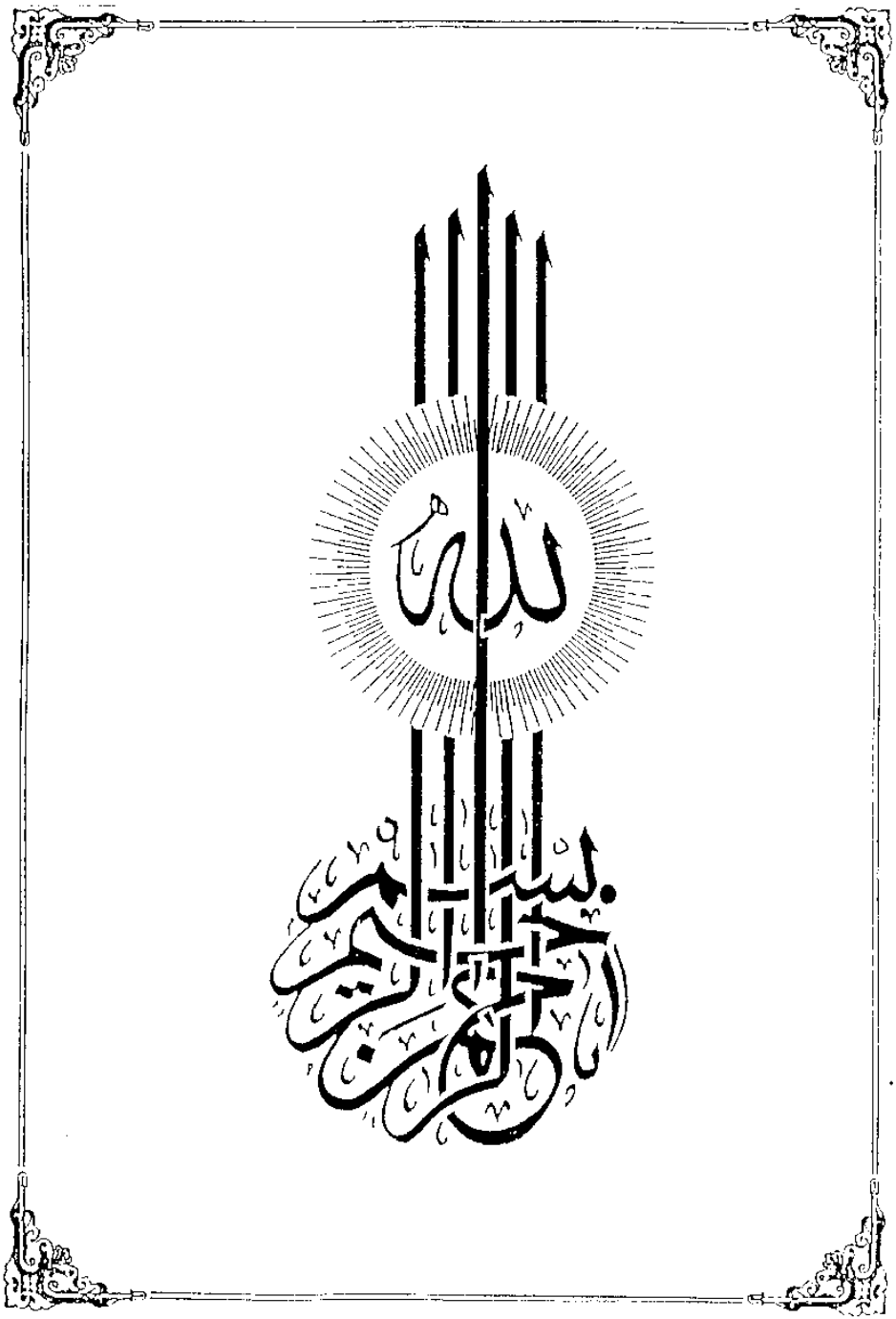

INTRODUCTION

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Tuberculosis seems to be a perennial associate of humans life. It existed in ancient Egypt, as revealed by the traces of pott's disease in mummies. Aperuvian mummy, certainly dating from pre-columbian times, showed a typical calcified tuberculous focus in the right lower lobe with its characteristic complement in the lymph node at the bifuraction of the trachea, Emara et al.(1981).

Various species of the genus Mycobacterium can cause disease of the lungs and pleura and by far the most important of these is M.Tuberculosis, which is responsible for 95 to 99 per cent of pulmonary mycobacterical infections, Fraser and paré (1978).

M. bovis formerly a common cause of disease usually in children and often involving the lymph nodes, gastrointestinal tract, and bones, has all but disappeared from North America and Britain as result of the control of the disease in cattle and the pasteurization of milk.

Disease caused by M.Bovis is still prevalent in areas in which public hygiene is inadequate to eradicate

the organism, and sporadic cases are still reported in North America ; Karlson and carr (1970), Damsker, Bottone and Schneierson (1974).

Pulmonary involvement occurs chiefly by dissemination from extra-pulmonary foci.

Pulnmary tuberculosis is much the most important manifestation of the disease. both because it is far the most common and because patients with pulmonary tuberculosis are the principal sources of infection; crofton and Douglas (1975).

Since the pathologic and roentgenographic manifestation of disease caused by M.bovis and M.tuberculosis are identical, no further discussion of the former appears warranted excepte to emphasize the importance of identifying the organism on culture in suspicious cases (Dreesen and Wood 1970), because of its insensitivity to drugs ordinarily employed in the treatment of tuberculosis. M.avium also is responsible for a few cases of pulmonary disease in humans, this organism has different cultural characheristics from M.tuberculosis and M.bovis and is highly pathogenic to birds and swine; culturally it

Strongly resembles Runyon's group III atypical mycobacteria; Wolinsky (1974).

With the control of M.tuberculosis and the improvement in methods of culture in recent years, several other mycobacteria-atypical. anonymous , or unclassified-have been recognized as infrequent causes of pulmonary disease.

The pathologic and roentgenographic changes they produce are virually identical to those of M.tuberculosis; Fraser and paré (1978).

In spite of the remarkable advances recently achieved in case-finding, treatment and prevention of tuberculosis, yet not a single country thoughout the world-even those enlighted countries which invaded the space and reached the moon-has been able to reach the target-point of control which represents less than 1% natural tuberculin posotivity among 14-year-age group children. In developing countries, however. tuberculosis still constitutes a major health problem with high prevelance of both infection and disease. Because tuberculosis is an infectious disease its reduction in the community is usually expressed in epidemilogical terms based on information concerning the magnitude of the problem, its trend and yield of specific control measures applied, T.O. Doina (1980).

With the development of modern transport and the frequency with which people now move about the world, no country can afford to regard tuberculosis as a purely parochial problem.

The relatively high degree of control of tuberculosis in economically developed countries is mainly due to the use of effective chemotherapy, and drug resistance at present is not a major difficulty-but in the economically developing countries drug resistance is becoming a very formidable challenge and, with movement of population, this problem could well spread to the economically developed countries and result in a type of tuberculosis which will be very difficult to control with present methods of treatment. The complete control of tuberculosis on a world-wide basis is therefore in everyone's interest; crofton and Douglas (1975).

AIM OF THE WORK

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In Egypt tuberculosis is still a major public health problem, the collection of data from various chest services are needed for evaluation of the control program.

This study of cases discharged from Suez Chest hospital in the years 1978-1982 is aimed to review:

1 - The cases admitted, their type, extent, cause of admission.

2 - Treatment given.

3 - Bacteriological studies of the cases.

4 - Condition on discharge.

REVIEW OF LITERATURE

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Tuberculosis is world-wide in distribution but occurs most often in condition of crowding and poverty. At the turn of the century it was the commonest cause of death in the United States, but the subsequent progress in both diagnosis and therapy has greatly reduced both the rate of infection and the mortality, particularly the latter.

In 1965, in the United States an estimated 35 million person were tuberculin sensitive; 320,000 were registered as having tuberculosis, including 105,000 with active disease; Reimann, (1968). Although these figures show that a problem still exist in the United States, the true magnitude of the impact of tuberculosis on society is more clearly evidenced by a consideration of the situation in countries such as India, where public health measures are still limited and a large proportion of the population is illiterate. Whereas less than 20 per cent of the U.S. population in 1965 had positive tuberculin skin tests, in India 27 per cent of children under the age of 5 years are positive reactors and 90 per cent of the 40-years-old are strong reactors

to tuberculin.

Of even greater singifacance is the observation that 1.5 per cent of the population of India is estimated to have tuberculosis on the basis of roentgenographic abnormalities in the chest; McCreary, (1968).

Acive pulmonary lesions were encountered in 17.0 per cent of 1.680 Coroner's necropsies in Delhi in 1970; Nayak et al., (1970). Although active pulmonary tuberculosis may develop at any age, infants, pubertal adolescents, and the aged are particularly susceptible.

Negroes appear much more susceptible to infection than caucasians. In women the incidence tends to level off or even fall slightly after the childbearing period, whereas in men it increases gradually into the late fifties. In recent years the older male has been recognized as a frequent source of tuberculous infection; Robakiewicz and Grzybwski, (1974).

The high incidence of active pulmonary tuberculosis in this age group is explained by the fact that these people frequently are indigent and poorly nourished and live in an environment lacking modren sanitary conveniences.

Undoubtedly they represent the survivors of a child population that was heavily infected early in the twentieth century and is now showing endogenous reactivation of the disease.

Circumstances that enhance susceptibility to infection and active disease were delineated in a study of one million U.S. Navy recruits, in whom the following were defined as risk factors: tuberculin sensitivity on entry, ethnic group , place of residence before entering the Navy, and a history of contact with tuberculosis; Comstock et al. (1974).

Concerning epidemiological aspects of pulmonary tuberculosis in Egypt. Tuberculosis in the general hospital, was reported on by sami 1948 he had published three reports on the tuberculosis problem in Egypt in 1953, 1955 , 1958. A most informative report however, as that of Gomaa, T and Alamy, 1964 which focussed on the tuberculous morbidity rate., by M.M.R. in the rural area of Qalyub and was found to be 1.1% for those above 5 years of age and 1.3% for all age groups.

The prevalence of extra pulmonary tuberculosis between 1959 and 1968 in Aabassia district has been studied by Warraki and Sultan (1970) . The annual trend of extra-pulmonary tuberculosis was on the increase during the 10 years, rising from 3.4% of total tuberculosis in 1959 to 23.4% in 1968.

In a previous study Youssef et al.(1972). studied the notification of pulmonary tuberculosis and the problem of drug resistance from the years 1958-1959 in Abbassia district. Also Youssef et al. at 1972, in a survey project in Arab El Mohamady , a slum quarter in Abbassia district, reported that the detection of active pulmonary tuberculosis more than double those recorded from this zone in the dispensary.

Also it is important to stress what had been reported previously by Youssef et al (1972), that though the total number of patients detected is diminishing yet the number of patients diagnosed as chronic pulmonary tuberculosis is increasing, this is a clear indication for the importance of the problem of drug resistance which is rising. Madkour et al. (1977), studied the