شبكة المعلومات الجامعية

بسم اللّه الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

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قسم

نقسم باللّه العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

Pattern of Tuberculosis in El Maamora Chest Hospital, Alexanderia, Egypt, During the Period (2014-2018)

Thesis

Submitted for Partial Fulfillment of Master Degree In Chest Diseases

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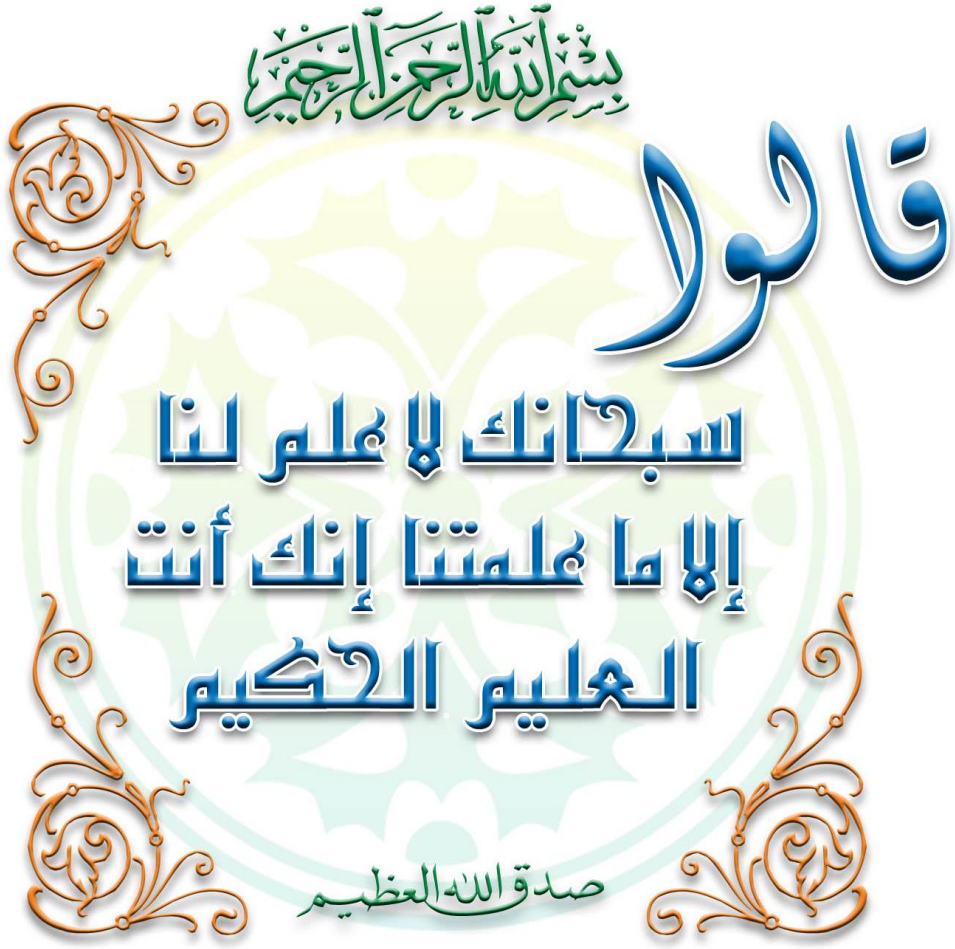

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Tamer Salem

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List of Abbreviations

Abb.	Full term
ADA	Adenosine deaminase
AFB	Acid-fast bacilli
APCs	Antigen-presenting cells
ART	Antiretroviral therapy
BCG	Bacillus-Calmette Guerin
BLT	Bone marrow, liver, thymic
CDC	Centers for Disease Control and Prevention
CNS	Central nervous system
DOTS	Directly Observed Treatment Short-Course
DST	Drug susceptibility testing
EPTB	Extrapulmonary tuberculosis
FDA	Food and Drug Administration
FNA	Fine needle aspiration
HIV	Human immunodeficiency
IFN-γ	Interferon-gamma
IGRA	IFN-γ releasing assay
IGRAs	Interferon-gamma release assays
IRIS	Immune reconstitution inflammatory syndrome
LED	Light-emitting diodes
LPA	Line probe assay
LTBI	Latent tuberculosis infection
MDR	Multidrug-resistant
MHC	Major histocompatibility complex
MLN	Mediastinal lymph node
MTB	Mycobacterium tuberculosis

List of Abbreviations Cont...

Abb.	Full term
NAA	Nucleic acid amplification
NAAT	Nucleic acid amplification test
NAT2	N-acetyltransferase
NTM	Nontuberculous mycobacterial
PAMPS	Pathogen-associated molecular patterns
PCR	Polymerase chain reaction
PRRs	Pattern recognition receptors
PTB	Pulmonary TB
Rpf	Resuscitation-promoting factor
SIV	Simian immunodeficiency virus
TA	Toxin-antitoxin
TB	Tuberculosis
TB-LAM	TB lipoarabinomannan
TDM	Therapeutic drug monitoring
TLRs	Toll-like receptors
TST	Tuberculin skin test
WHO	World Health Organization

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Abstract

Background: Tuberculosis is a major health problem, tuberculosis affects most of age groups, and this necessitates more attention in the tuberculosis (TB) control program targeting those age group. This study was carried out in El Maamora's chest hospital which is considered as the biggest chest hospital in Alexandria governorates, with a higher rate of outpatient clinic and admission so this study will give us a good analysis of the pattern of tuberculosis in Alexandria.

Objective: This study conducted to assess the TB pattern and to provide an insight into the type of TB infection in El Maamora's chest hospital.

Subjects: A total of 1413 TB patients were included in the study. We included patients diagnosed and treated as pulmonary tuberculosis (PTB), extrapulmonary tuberculosis (EPTB), patients with multidrug-resistant tuberculosis (MDR).

Methods: Data collected about patients included; full history taking, clinical and demographic characteristics, types of TB infection, affected organs, clinical presentations, methods of diagnosis, treatments, and outcomes were recorded.

Results: In the studied population, it was found that, the mean age of all patients was (39.5 ± 14.7) years, with the majority (79.3%) of patients were males; while (20.7%) were females. The average time of sputum conversion of all patients was (2.3 ± 0.8) months; with (51.2%) of patients had sputum conversion to -ve (after treatment). It was found that, (92.1%) improved or cured, (2.2%) had lost follow up, (0.4%) had ICU admission, (1.5%) suffered mortality, (0.8%) refused treatment. The improvement rate was (92.1%), and the deterioration rate (ICU admission and mortality) was (1.9%). There was a highly significant increase in time of sputum conversion in extra-pulmonary TB group; compared to other groups ($p < 0.01$). Comparative study between the 3 groups revealed a highly significant decrease in sputum conversion after treatment, in extrapulmonary TB group; compared to other groups ($p < 0.01$), and a highly significant increase in improvement rate in pulmonary and extrapulmonary TB groups; compared to MDR TB group ($p < 0.01$).

Conclusion: Tuberculosis (TB) is a global emergency posing a significant threat to people of all nations. Despite the advance of the DOTS program (Directly Observed Therapy Short Course), TB is still one of the leading causes of death worldwide particularly in developing countries, which have many patterns of infection as pulmonary, extrapulmonary, and MDRS.

Key words: Tuberculosis, prevalence, outcomes

INTRODUCTION

Tuberculosis is a contagious bacterial disease, that is a major health problem worldwide ***(WHO, 2020).***

Despite being a potentially curable disease, tuberculosis is the second leading infectious cause of death worldwide (after AIDS), killing around 2 million people per year. Tuberculosis can attack people of any sex, age, or socioeconomic class ***(Organization, 2005).***

In reality, tuberculosis is likely to claim its greatest toll from strata of the population, and it is important to identify these for planning and implementing TB control ***(Chapman et al., 2014).***

In 2014, there were an estimated 9.6 million new TB cases, more than 90%of the new cases and deaths occurs in developing countries**.**

Egypt has massively engaged in early case detection, provision of adequate chemotherapy, and prevention of transmission to new cases ***(WHO, 2013).***

The prevalence of TB in Egypt was 26 per 100.000 people according to the world health organization estimate in 2014, while the incidence rate of 15 per 100.000 people ***(WHO, 2015).***