

Multiple Drug Resistant Tuberculosis In Abbassia Chest Hospital From January ٢٠٠٥ To December ٢٠٠٥

*Thesis Submitted For Partial Fulfillment Of The
Master Degree In Chest Diseases*

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Introduction

- Tuberculosis remains to be a global problem with the world Health organization. Estimating that one third of the world's is latently infected with mycobacterium T.B⁽¹⁾.
- The annual tuberculosis infection rate or annual risk of infection is the best single indicator of the status and trend of tuberculosis in both developed and developing countries. It indicates the proportion of the population that will be primarily infected or reinfected in the course of one year⁽²⁻³⁾.
- The mortality rate is approximately 2 million throughout the world annually. Effective regimens are available in drug sensitive tuberculous patients and should be high cure rate but T.B resistance to at least Rifampicin and Isoniazid is an international problem⁽⁴⁻⁶⁻⁷⁾.
- Treatment regimens for T.B resistance are complex and often associated with significant side effects profile, so patients should be treated with a directly observed therapy regimen (DOTS) in center with experience in management of MDR T.B⁽⁸⁾.
- The overall prognosis for T.B resistance is variable, but successful outcomes can be achieved in approximately 70%⁽⁹⁾.

Aim of the Work

- The aim of this study is to evaluate T.B resistant patients admitted to Abbassia chest hospital from January ٢٠٠٥ to December ٢٠٠٥ for:
 - ١- Primary & secondary resistance through diagnosis of resistance by:
 - Conventional bacteriological methods for laboratory diagnosis including:
 - Direct Zeihl Neelsen smear.
 - Culture on Lowenstein Jensen media.
 - Culture and sensitivity by proptional method on Lowenstein Jensen.
 - To study the effect of age, sex, Co morbidity e.g. D.M and the degree of extent of radiological finding on the problem of Multiple drug resistant tuberculosis.

Patients and Methods

- The subjects of the present study were selected from Abbassia chest hospital.
- All the patients were pulmonary TB. Resistant patients to at least rifampicin and INH admitted in Abbassia chest hospital from January ٢٠٠٥ to December ٢٠٠٥ the patients included in this work were submitted to the following:
 - ١- Meticulous History and thorough clinical examination.
 - ٢- Radiological examination: chest x ray.
 - ٣- Laboratory investigation:
 - CBC -ESR - Creatinene
 - SGPT - FBS - ٢HPP
 - Direct Zeihl Neelsen smear.
 - Culture and sensitivity on Lowenstein Jensen media.

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الدرن الرئوي المقاوم للأدوية المتعددة
في مستشفى صدر العباسية في الفترة
من يناير ٢٠٠٥ حتى ديسمبر ٢٠٠٥

رسالة

توطئة للحصول على درجة الماجستير
في الأمراض الصدرية
مقدمة من

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الملخص العربي

المقدمة:

يعتبر مرض الدرن الرئوي من المشاكل المعقدة التي تواجهها منظمة الصحة العالمية حيث أن ما يقرب من ثلث سكان العالم مؤخرًا مصابون بميكروب الدرن.

- معدل الوفيات ارتفع بشكل ملحوظ حتى بلغ حوالي ٢ مليون متوفي بسبب ميكروب الدرن.
- وعلاج الدرن الرئوي في هذه الأيام أصبح سهلاً وارتفعت نسبة الشفاء في المصابين وذلك في المرضى التي تستجيب للعلاج بأدوية الدرن المعتادة ولكن هناك بعض المرضى المصابون الذين يقاومون أدوية الدرن وأصبحوا مشكلة من أهم وأجدر المشاكل التي يجب مواجهتها.

ومع أن علاج مرض الدرن المقاوم للأدوية صعب ولكن يمكن شفاء ما يقرب من ٧٥% من المرضى، وعلاج الدرن الرئوي المقاوم للأدوية يجب أن يتم في مراكز لها خبرة في علاج هذا النوع من أنواع الدرن الرئوي.

الهدف من البحث:

عمل دراسة عن مرضى الدرن الرئوي المقاوم للأدوية الذين تم حجزهم في مستشفى صدر العباسية.

وذلك في الفترة من يناير ٢٠٠٥ وحتى ديسمبر ٢٠٠٥م.

وسوف تشمل الدراسة جميع المرضى التي تم عمل لهم:

١. تحليل بصاق.
٢. مزرعة درنية.
٣. حساسية للأدوية.

ويتم اختيار المرضى وعمل مقارنة بينهم من حيث:

العمر، النوع، تحديد هذا النوع من الدرن الرئوي أولى أم ثانوي، معرفة هل سبق علاج المرضى من الدرن أم لا، الأمراض المصاحبة، الأعراض التي تم حجز المريض في المستشفى على أساسها، الأشعة العادية، المضاعفات الناتجة، والحساسية للأدوية.

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List of Abbreviations

AAFB.....	Acid alcohol-fast bacilli
AIDS.....	Acquired immunodeficiency syndrome
ARTI.....	Annual risk of tuberculosis infection
ATS.....	American Thoracic Society
BCG.....	Bacilli calmette Guerin
BID.....	Twice daily
CDC.....	Center diseases and control
CLT.....	Central laboratories for tuberculosis
CMI.....	Cell mediated immunity
CXR.....	Chest X-ray
DOT.....	Directly observed treatment
DOTS.....	Directly observed treatment, Short course chemotherapy
DR.....	Drug resistance
DST.....	Drug susceptibility test
DTH.....	Delayed type hypersensitivity
EMB.....	Ethambutol
EPTB.....	Extra-pulmonary tuberculosis
F.B.S.....	Fasting blood sugar
FDC.....	Fixed-dose combination
GIT.....	Gastrointestinal tract
Hb.....	hemoglobin

HIV	Human immune-deficiency virus
IFN- γ	Interferon- γ
ILT.....	Intermediate laboratory for tuberculosis
INH	Isoniazid
ITP.....	Individualized treatment regimen
IUATLD	International Union Against Tuberculosis and Lung Disease
MDR-TB.....	Multidrug-resistant TB
MIC	Minimal inhibitory concentration
MTB	Mycobacterium tuberculosis
NTM	Non-tuberculosis mycobacteria
NTP	National tuberculosis control programme
P.P.B.S.	Post prandial blood sugar
PAS.....	Para amino salicylic acid
PIZ.....	Pyrazinamide
PTB	Pulmonary tuberculosis
R.BCs	Red blood cells
RIF	Rifampicin
RMP	Rifampicin
SCC	Short course chemotherapy
SM	Streptomycin
STR.....	Standardized treatment regimen