Herely States

## DIAGNOSTIC VALUE OF DIFFERENT TESTS THAT DISCRIMINATE BETWEEN DIFFERENT AETIOLOGIC TYPES OF PLEURAL EFFUSION

Thesis

Submitted in Partial Fulfillment of Master Degree In Pediatrics

ву

Rasha Tarif Mohammed Hamz

Supervisors

Prof. Dr. KARIMA A. ABD EL-KHALEK

Professor of Pediatrics

Dr. MAHMOUD TAREK ABD EL-MONIM

Assistant Professor of Pediatrics

Dr. AMAL ZAGHLOUL ABD EL-HALIM

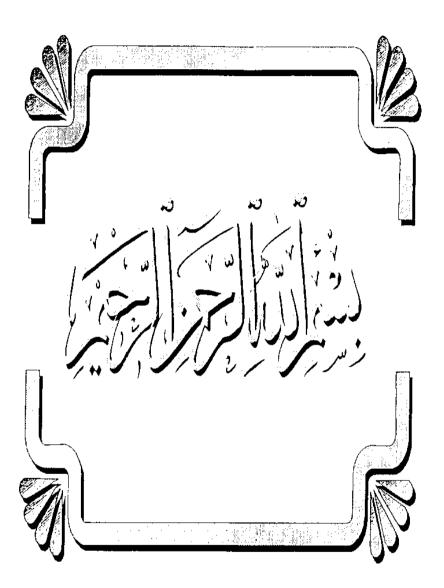
Lecturer of Clinical Pathology

Faculty of Medicine
Ain Shams University

1999









## **ACKNOWLEDGEMENT**

I would like to express my grateful thanks to **Prof. Dr.**Karima Abd El-Khalek, Professor of Pediatrics, Ain Shams University, whose guidance and understanding helped me to overcome any obstacles. Inspite of her overcrowded time and many responsibilities, she was never chary in giving me guidance and advice. She suggested the subject, supplied many facilities for the practical part, supplied me with some unavailable references and on the whole, she offered, as far as chances permitted, much of her unlimited experience in scientific research. These few words hardly do justice to thank Professor Karima.

I would like to express my supreme gratitude and deep appreciation to **Dr. Mahmoud Tarek Abd El-Monim**, Assistant Professor of Pediatrics, Ain Shams University, for his close supervision and continuous guidance throughout the thesis. He supervised all the details of this work, patiently revised it word by word, and instructively directed my attention to proper ways.

I owe special thanks to **Dr. Amal Zaghloul**, Lecturer of Clinical Pathology, Ain Shams University. She revised all the laboratory work throughout its various steps, suggested the statistical methods to be followed and helped in the preparation of tables and graphs.

Acknowledgement

To my Professors and Colleagues in Pediatric Department, I wish to express my gratitude personally for each. They supplied cases for the study and I felt all the time that all of them tried to remove the obstacles from my way. Acknowledgement

## LIST OF ABBREVIATIONS

AFB: Acid fast bacilli. A-G: Albumin gradient.

Bil: Bilirubin. Cholest: Cholesterol.

DE: Diagnostic efficacy.

Fig: Figure.

IU: International unit.

KD: Kilodalton.

LDH: Lactic dehydrogenase.

LDH-PF: Lactic dehydrogenase in pleural fluid.

LDH-R: Lactic dehydrogenase ratio.

PF: Pleural fluid.

PMNs: Polymorphonuclear leucocytes.

P-R: Protein ratio.

P/S: Pleural fluid to serum ratio.

R: Ratio.

SN: Sensitivity.
SP: Specificity.
T.protein: Total protein.

List of Abbreviations



## LIST OF FIGURES

Fig. (1):(4) Development of lung and pleura.
Fig. (2):(5)  The segments of the lungs.
Fig. (3):(7) Anatomy of the pleura.
Fig. (4):
Fig. (5):(12)  Dynamics of fluid exchange in the intrapleural spaces.
Fig. (6a):(38) Small free pleural exudate in the right pleural space.
List of Figures

Fig. (6b):
Fig. (7):
Fig. (8a):
Fig. (8b):(42  Diagrammatic projection of the shadows from a larg free pleural exudate.
Fig. (9):
Fig. (10):

List of Figures

	):(48,49,50) uns showing pleural effusion.
Fig. (12): CT sca	uns showing locculated pleural empyema.
•	proach to thoracocentesis in a child.
	proach to diagnosis of pleura effusion.
Fig. (15): Autom Beckm	ated Chemistry Analyzer Synchron CX5 from an.
	ate pleural effusion from a tuberculous case.
Cardio	megaly and right sided pleural effusion in a case gestive heart failure.

List of Figures

Fig. (18a):
Fig. (18b):
Fig. (19a):
Fig. (19b):(111)  Mean values of LDH and cholesterol in the pleural effusion of the studied groups.
Fig. (20):
Fig. (21):

Fig. (	<b>22):</b>
	Tallo in group II (I nountonio).
Fig. (	23):(128)
	Correlation between pleural fluid LDH and P/S LDH ratio in group III (Malignancy).

List of Figures

