سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

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التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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

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سامية محمد مصطفى

بالرسالة صفحات لم ترد بالأصل

SERUM CALCIUM AND PHOSPHORUS IN OBSTRUCTIVE AIRWAY DISEASES

THESIS

Submitted in Partial Fulfillment for Master Degree in Chest Diseases

By

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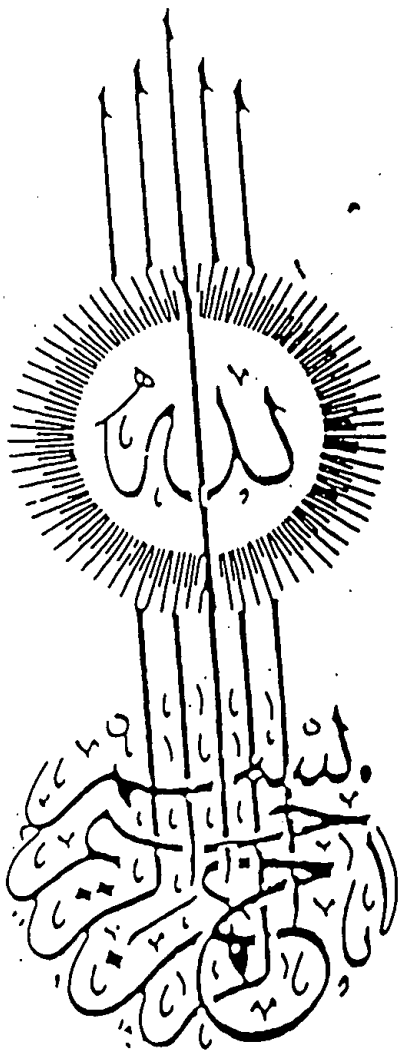
1993


بسم الله الرحمن الرحيم

ACKNOWLEDGEMENT

ACKNOWLEDGEMENTS

I would like to express my deep gratitude to the spirit of late Professor ***Abd El-hameed El-Helaly*** *who offered the idea of this work.*

I would like to express my warmest appreciation and deepest gratitude to prof. ***Mahmoud Amin Abdou*** *Prof. and Head of Department of Chest Diseases Cairo Faculty of Medicine for his sincere and continuous support and under his supervision I had the honour to do this work.*

I wish to express my special thanks to Dr. ***Ayman Abd EL-Rahman Youssif*** *Lecturer of Chest Diseases Benha Faculty of Medicine and Dr.* ***Shereif Ahmed Eissa*** *Lecturer of Chest Diseases Benha Faculty of Medicine for their invaluable directions, guidance and kind close supervision in every step to put this work to its best way.*

I am much obliged to Dr. ***Fouad El-Debeky*** *Lecturer of Biochemistry Benha Faculty of Medicine for his practical guidance and endless assistance in the completion of the laboratory work in this study.*

My very special regards and sincerest thanks to prof. ***Medhat Fahmy Negm,*** *Assist. Prof. and Head of Department of Chest Diseases Benha Faculty of Medicine for his continuous support and encouragement.*

I am especially indepted to prof. ***Amro Badr EL-Dein Hamdy*** *Assist. Prof. of Chest Diseases Benha Faculty of Medicine and Dr. Abd El-Sadek Hamed EL- Aarag Lecturer of Chest Diseases Benha Faculty of Medicine for their continuous encouragement.*

Heart felt thanks are offered to all the staff Members of Chest Department in Benha Faculty of Medicine and Benha Chest Hospital for their help and friendly attitude.

Finally, I would like to thank my mother for her personal support and encouragement.

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INTRODUCTION AND AIM OF THE WORK

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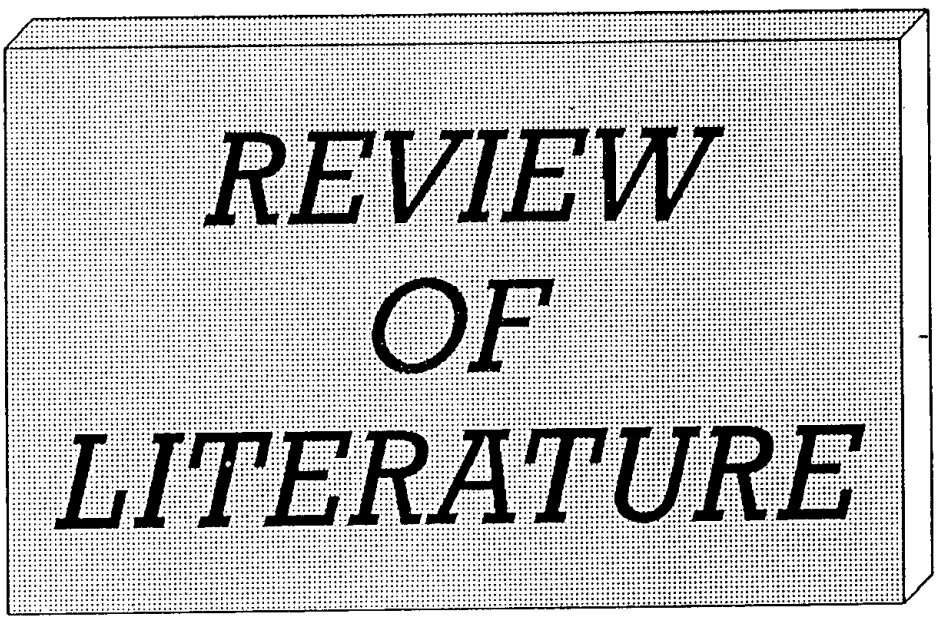
Recently, much effort has been done in the field of airways obstruction in an attempt to cover the various aspects concerning this entity, but little is known about the metabolic and biochemical changes that may accompany this condition.

It is established that calcium ion regulates a number of important physiologic and biochemical processes including neuromuscular excitability, secretory processes, membrane integrity, plasma membrane transport, enzyme reaction, release of hormones and neurotransmitters and the interacellular action of a number of hormones *(Granner, 1988)*.

It is also evident that calcium homeostasis is abnormal in many disorders, so this study has been conducted in an attempt to disclose any relation that might be exist between serum calcium and obstructive airway diseases. Also serum phosphorus estimation was included in this study owing to its intimate relation to serum calcium and also to show if it has any relation to the changes in serum calcium concentration that claimed to be present in these cases.


REVIEW
OF
LITERATURE

OBSTRUCTIVE AIRWAY DISEASES
THE SPECTRUM OF OBSTRUCTIVE AIRWAY DISEASES

Definition and Terminology:-

The term "Generalized Obstructive Airways Disease", "Chronic Obstructive pulmonary Disease", " Chronic Airways Obstruction", " Chronic Obstructive Airways Disease" have been introduced to cover the different disease entities in which slowing of airflow is the main feature. This was due to difficulty in separating the various disease entities which cause this slowing; these were mainly; chronic bronchitis, asthma and emphysema separately or in combination *(Thurlbeck, 1977)*

The common deniminator of the spectrum of chronic obstructive pulmonary disease (COPD) is the increased resistance to expiration *(Fishman, 1988).*

The term " Generalized Obstructive Airways Disease" (COAD) includes four conditions: bronchiolitis, chronic bronchitis, emphysema and asthma *(Thurlbeck, 1977).*

Airways obstruction includes: chronic bronchitis, emphysema, bronchial asthma and cystic fibrosis. Asthma, chronic bronchitis and emphysema all diffusely affect the bronchial tree and may give rise to the syndrome of wheezing cough and shortness of breath *(Snider, 1985).*

The term Generalized Obstructive lung Disease (GOLD) was first introduced by *Ciba Guest Symposium (1959)*.

The proposal of the Ciba Guest Symposium was to include all subjects with obstruction in the omnibus term generalized obstructive lung disease. This was a more logical approach from that in which asthma and chronic obstructive pulmonary disease are initially separated by clinical impression *(Fletcher, 1984)*.

The Spectrum of Chronic Obstructive Diseases of the Airways:

Cystic fibrosis	Asthma	Chronic bronchitis	Chronic bronchitis and Emphysema	Emphysema

(Spectrum of obstructive diseases of the airways)

Obstructive disease of the airways may be viewed as a spectrum ranging from that in which intrinsic disease of the airways is predominant disorder (Far left), to the other extreme where the airways are free of diseases but the parenchyma of the lung is full of enlarged airspaces produced by destruction of the walls (emphysema). Example of the disease at each extremity of the spectrum: cystic fibrosis for the left end of the spectrum; α1-anti- trypsin deficiency for the right, but pure forms of either ends of the spectrum, however, are uncommon. Indeed, especially for the middle of the spectrum (chronic bronchitis and emphysema), mixtures are the rule. Perhaps,