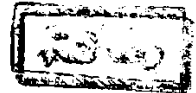


***Serum Level of Carboxyterminal  
Propeptide of Human Type I Procollagen in  
Asthmatic Children Treated with Steroids***

Thesis

Submitted for Partial Fulfillment of  
M.Sc. Degree in Pediatrics



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بسم الله الرحمن الرحيم

**قالوا سبحانك لا علم لنا إلا ما علمتنا  
إنك أنت العزيز الحكيم**

صدق الله العظيم

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TO

**My dear husband Dr. Mootaz  
My sweetheart Mahmoud  
and All my family members**

**Who offered me great help and gave me power, courage  
and support to complete this work.**

*Cherine*



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## **List of Abbreviations**

|                  |                                             |
|------------------|---------------------------------------------|
| Abd              | Abdominal                                   |
| ABG              | Arterial blood gases                        |
| ACTH             | Adrenocorticotrophic hormone                |
| ALP              | Alkaline phosphatase                        |
| ATP              | Adenosine triphosphate                      |
| B.A.             | Bronchial asthma                            |
| Beclom           | Beclomethazone                              |
| BVM              | Broncho-vascular markings                   |
| C.V.             | Circadian variation                         |
| Ca               | Calcium                                     |
| cAMP             | Cyclic adenosine monophosphate              |
| CXR              | Chest X-Ray                                 |
| Exp              | Expiratory                                  |
| F.H.             | Family history                              |
| FEF              | Forced expiratory flow                      |
| FEV <sub>1</sub> | Forced expiratory volume in 1 second        |
| GH               | Growth hormone                              |
| Gly              | Glycine                                     |
| Ht               | Height                                      |
| Hyperinf.        | Hyperinflation                              |
| IgE              | Immunoglobulin E                            |
| IGF-1            | Insulin like growth factor-1                |
| IGFBPs           | Insulin like growth factor binding proteins |
| IGFs             | Insulin like growth factors                 |
| Insp             | Inspiratory                                 |
| IPPV             | Intermittent positive pressure ventilation  |
| Lim. Ph.A.       | Limitation of physical activity             |
| M                | Mean                                        |
| mRNA             | Messenger ribonucleic acid                  |

|                        |                                                         |
|------------------------|---------------------------------------------------------|
| <b>N</b>               | <b>Number</b>                                           |
| <b>NS</b>              | <b>Not significant</b>                                  |
| <b>NSB</b>             | <b>Non specific binding</b>                             |
| <b>P</b>               | <b>Phosphorus</b>                                       |
| <b>P.F.</b>            | <b>Precipitating factors</b>                            |
| <b>PAF</b>             | <b>Platelet activating factor</b>                       |
| <b>PCO<sub>2</sub></b> | <b>Partial pressure of carbon dioxide</b>               |
| <b>PEFR</b>            | <b>Peak expiratory flow rate</b>                        |
| <b>PFT</b>             | <b>Pulmonary function tests</b>                         |
| <b>PICP</b>            | <b>Carboxyterminal propeptide of type I procollagen</b> |
| <b>PO<sub>2</sub></b>  | <b>Partial pressure of oxygen</b>                       |
| <b>R</b>               | <b>Range</b>                                            |
| <b>RR</b>              | <b>Respiratory rate</b>                                 |
| <b>RSV</b>             | <b>Respiratory syncytial virus</b>                      |
| <b>RV</b>              | <b>Residual volume</b>                                  |
| <b>S</b>               | <b>Significant</b>                                      |
| <b>S.V.</b>            | <b>Seasonal variation</b>                               |
| <b>Salb.</b>           | <b>Salbutamol</b>                                       |
| <b>Sc. Ach.</b>        | <b>School achievement</b>                               |
| <b>SD</b>              | <b>Standard deviation</b>                               |
| <b>Theophyl.</b>       | <b>Theophylline</b>                                     |
| <b>Wt</b>              | <b>Weight</b>                                           |

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