

**Acute Effect Of High Dose Inhaled Corticosteroids
In Management Of Bronchial Asthma**

Thesis submitted for the partial fulfillment of Master Degree in
Chest diseases & Tuberculosis.

Investigator

Assem Fouad El Essawy

(MB, B.Ch)

Principle Supervisor

Prof. Mohamed K. EL Sorougi

Professor of Chest Diseases

Cairo University

Co-supervisors

Assistant Prof. Ashraf M. Hatem

Assistant Prof. Of Chest Diseases

Cairo University

Dr. Yousri K. Akl

Lecturer of Chest Diseases

Cairo University

Faculty of Medicine

Cairo University

1998-1999

Abstract

The acute effect of budesonide was studied in this work:

This study included 30 asthmatic patients in acute attack, all patients manifested clinically by the presence of dyspnea, chest wheezes, cough, after exclusion of other chest diseases and by the presence of reversible obstruction in the pulmonary function tests (more than 15% in FEV₁). In both group the FEV₁/FVC was less than 75% thus showing the obstruction in the airway according to **Georage, et al; 1995**

Group "A" composed of 20 patients who received 1000g budesonide by nebulizer using facemask, the spirometric parameters (FVC, FEV₁, FEV₁/FVC, FEF 25-75%, FEF75-85% and PEF) were measured after ½, 2, and 6h of nebulization.

Group "B" composed of 10 patients who received 2cc normal saline solution 0.9% (as a control group) the same spirometric parameters were measured at the same interval as group "A".

Group "A" show improvement, which started 1/2h after nebulization. It reached the peak after 2hs, but started to declines after 6hs without reaching the base line. On the other hand, in group "B" the improvement reached the peak after 1/2 h, but after 6hs it reached the base line or even below.

The statistical comparison between the two groups according to the percent of change 1/2h following nebulization was highly significant in respect of FEV₁, FEF25-75%, FEF 50 with P<0.005 respectively, but insignificant in respect of FVC, FEF 75-85% although the mean value show difference from 23.55 & 32.4 in group "A" and from 10 & 17 in group "B".

Two hours following nebulization, there was highly significant difference in FVC, FEF 25-75%, FEF 75-85%, FEF 50 with $P < 0.001$, significant in FEV1 with $P 0.01$ and significant PEF with $P 0.03$.

After 6 hours there was highly significant difference in FEF 25-75%, FEF 50, with $P 0.002$ and significant in FEV1 with $P 0.01$.