

World Congress on
**NOVEL TRENDS AND ADVANCES IN BIOTECHNOLOGY,
CELL & STEM CELL RESEARCH &**
Joint Event On
15TH ANNUAL CONGRESS ON PEDIATRICS
November 28-29, 2018 Barcelona, Spain

Use of an ionized salt nasal solution in asthmatics with high respiratory infection and its impact on inspiratory and spiratory flow

Eduardo Antonio Lara-Pérez¹, Felix Guillermo Márquez-Celedonio² and Cesar Virgen-Ortega³

¹Director of Clinasma, Mexico

²Director of Research in Medicine, Colombia

³President college of pediatrics of tabasco, Mexico

Background: Bronchial asthma is a condition that affects up to 13% of the school population, is associated with reduced inspiratory and expiratory flows, rhinitis and respiratory infections. Ionic nasal saline solution is an adjuvant option for treatment with bactericidal and virucidal effects.

Objective: To determine the effect of the use of ionized nasal saline in the Maximum Inspiratory Flow (MIF) and pPeak Expiratory Flow (PEF) and the frequency of respiratory infections in school children with bronchial asthma.

Material & Methods: Pre-experimental study with baseline demographic, anthropometric measurements, frequency of respiratory infections and inspiratory and expiratory flows. Follow-up for four months with monthly evaluations of mif, pef and presence of respiratory infections. Inferential analysis with: chi square, mann-whitney, wilcoxon and student's t.

Results: We included 80 schoolchildren of 8.7 ± 2.1 years, height of 1.31 ± 2.1 m, 48 (60.0%) of male and 32 female (40%). The MIF evolved from 58.4 ± 19.3 l/sec initial and 104.7 ± 29.2 at four months ($p < 0.05$), PEF initiation 192.7 ± 58.7 to 222.3 ± 67.0 final ($p < 0.05$) respiratory infections 100% to 88.8% first month and 0.0% at the end ($p < 0.05$).

Conclusions: The administration of ionized nasal saline solution in asthmatic school children allows to recover values of MIF and PEF and to reduce the frequency of infectious airways, independently of the sex and category of acute or chronic infection.

lape5104@hotmail.com