

## **THE INFLUENCE OF ISOTONIC SALINE NEBULIZATION ON SPIROMETRIC PARAMETERS IN CHILDREN SUFFERING FROM RESPIRATORY TRACT DISEASES.**

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**Introduction:** Isotonic saline nebulization are one of the most commonly used therapies in patients with various respiratory diseases such as asthma, cystic fibrosis, but also with chronic bronchitis or recurrent pneumonia. Such a broad usage of inhalation with isotonic saline raises questions about its efficacy.

**Objectives:** Determination of differences of spirometric parameters in patients suffering from respiratory diseases before and after isotonic saline nebulization.

**Methods:** The respiratory function test was performed in group of 40 children, aged 13 - 15, diagnosed with respiratory diseases. Measurements were performed directly before and up to 15 minutes after isotonic saline nebulization. This pattern was repeated for 6 days, always at the same time of the day. Tests were performed with the Lungtest Handy Spirometer of the MES company, following the requirements of a properly performed spirometry test with a required cooperation with the patient.

**Results and conclusions:** The research revealed differences in results of respiratory function tests between studies performed directly before and up to 15 minutes after isotonic saline nebulization. Investigation showed statistically significant differences in such a parameters like FEV1%VC, FEV1, PEF, MEF75 in children with Tiffeneau index <80%.