

Asthma Management Related to Obesity in Children

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Abstract: *Obesity and asthma are the most significant pediatric problems in the whole world, especially in the industrialized countries. In the last decades the prevalence of asthma and obesity in children is increased. The complexity of a daily regime of different medicines is a key factor in a patient with a low adherence which in fact influences asthma control. Patients with low control of asthma may require in a special manner an intensive education and a constant referral to the appropriate resources to assist in treatment observation.*

Keywords: Asthma, Obesity, Children

1. Background

The inappropriate control of asthma continues to represent a serious health problem, however there is made a huge progress in understanding the inflammatory base of asthma and an increase in attempting to implement the protocols of disease management (1). Regarding the recommended therapy related to GINA, the treatment has to progress in the next step if the control of the disease is not provided yet (2). It is very essential for medical professionals to not undervalue the influence of: "Adherence" in the administration of asthma control. Several comorbidities are associated with severe asthma or the asthma that is difficult to manage.

In that case, obesity and asthma are the most significant pediatric problems in the whole world, especially in the industrialized countries. In the last decades the prevalence of asthma and obesity in children is increased. (3, 4, 5). Since the 2015, CDC (Center for Control and Prevention of Diseases in USA) has categorized obesity as a risk factor for asthma in children (6, 7).

In children with asthma, overweight is associated with a decreased response towards medicines, resulting in a poor quality of life (8).

Nevertheless, obesity and asthma may simply coexist in several children, evidence in progress has shown the existence of the phenotype: "Obese Asthma", where the overweight influences and modifies the asthma characteristics (9, 10)

Case presentation of a 9 year old child with severe asthma associated with obesity.

Clinical symptoms and case history: Persistent cough and breathing difficulty

It is observed that the symptoms of obstructive bronchitis appear since 2, 5 years old. The medicines used in this case are inhalator corticosteroids till 5 years old. It is not noticed allergy, familiar history for allergy, not exposed to animals, or to passive smoking. Two weeks ago was his recent aggravation. At this time he was hospitalized and after a

week his clinical situation was improved. When he left the hospital, it was prescribed a maintenance therapy at home with ICS for 6 months and Sultanol for a week. His mother has referred that he is having his medicines regularly.

Clinical diagnosis, the course and the therapy

Obesity asthma: The patient is treated with Sultanol and oral steroids. He is educated for daily treatment, in order to provide his adherence towards therapy. He is consulted with the dietitian and is being held in follow - up for the overweight. The clinical course was improved and he left the hospital after 7 days. The maintenance therapy at home was: Budesonide 200mcg\2x1 times/day, for 3 months, Montelukast 5 mg/day for 3 months, Sultanol for a week. His parents were advised to monitor his symptoms,, his dedication to regular medical treatment, and toward his overweight. He has reserved a visit to his doctor for a follow - up after 3 months.

Final diagnosis: Obese asthma

2. Conclusions

Health staff is faced with important challenges when treating the patients with uncontrolled asthma or asthma in an aggravated status. The complexity of a daily regime of different medicines is a key factor in a patient with a low adherence which in fact influences asthma control. Patients with low control of asthma may require in a special manner an intensive education and a constant referral to the appropriate resources to assist in treatment observation.

Except the disponibility of the effective diagnostic tools, and the certain therapeutic medicines, that will allow the identification, monitoring and the satisfactory management of asthma, they alone aren't sufficient to provide the asthma control. The active parental involvement in the disease of their children, in the management and the disease therapy, is crucial to maintain asthma control. According to this perspective, adherence to the treatment plan is one of the major health issues of challenge in medical practice.

Other factors such as, the force of the association among the asthma and obesity influence a lot in the need for weight

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loss, making it a standard of the management and health care for asthma.

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