

Overview at Asthma

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Definition of Asthma

It is a chronic inflammatory disease that attack or take place in the respiratory airways, it is a common disease characterized by mutable and periodic symptoms, reversible airflow obstruction, and bronchospasm.

The main factors that play significant role in the incidence of asthma are either genetic factor or environmental factor or others. In case of environmental factor it will includes various sub-factors which play role in incidence of asthma attack like allergy (allergy to: dust, animal fur, cockroaches, mold, and pollens from trees, grasses, and flowers), air pollution, cigarettes, environmental chemicals, spray i.e., like hair spray, and different environmental chemicals.

While for genetic factor, it has been found that more than 100 genes associated with asthma, besides that these genes are related with the immune system or modulating inflammation that happened. Moreover, clinically it has been found that some of these genes will play a significant role in causing asthma only when combined with specific environmental conditions.

Others factors includes: medications like aspirin, non-steroidal and beta-blockers treatments, some food and drink contents like sulfites, physical exercises and some viral infections that take place in the upper respiratory tract such as flu.

Mechanisms of Asthma

First the muscles that around human airways will tighten up hardly and this will cause narrowing of the airway, and this will leads to reduction in the capacity of these airways to allow air to flow through them.

Secondly, increases in the incidence of inflammatory reaction which will lead to increases in the mucus production which will mainly cause a narrowing and obstruction for the respiratory airways.

Clinical Symptoms Associated with Asthma

The predominant clinical symptoms that associated with asthma are the following:

Coughing: The worst coughing happened among asthmatic patients, will take place either at night or early morning.

Wheezing: This symptom is described as whistling or squeaky sound which will be heard in combination with asthmatic patient breathing.

Tightness of chest: This symptom consider as the worst one since the asthmatic patient will feel like someone set on his or her chest.

Shortness of breath: Asthmatic patient describe this symptom by saying that they can't catch their breath or they feel out of breath.

Medical Treatments used for Asthma

The treatments used for asthma classified into various classes as follows:

Long-term asthma control medications

These includes,

- Inhaled corticosteroids.
- Leukotriene modifiers.
- Long-acting beta agonists.
- Combination inhalers.
- Theophylline.

Quick-relief (rescue) medications

These includes,

- Short-acting beta agonists.
- Ipratropium (Atrovent).
- Oral and intravenous corticosteroids.

Allergy medications

These includes,

- Allergy shots (immunotherapy).
- Omalizumab (Xolair).
- Allergy medications.

Conclusion

Therefore it is a very important point for the open access journals to encourage researchers and clinicians to work hard in order to clarify the main problems associated with asthma and the proper treatment used to treat this medical problem.

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