The effect of asthma and the terms of medication used in the treatment of respiratory diseases.

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Abstract

The respiratory system is the network of organs and tissues that help you breathe. It includes your airways, lungs and blood vessels. The muscles that power your lungs are also part of the respiratory system. These parts work together to move oxygen throughout the body and clean out waste gases like carbon dioxide.

Keywords: Respiratory system, Organs, Tissues, Blood vessels, Carbon dioxide.

Introduction

Asthma is a respiratory condition marked by attacks of spasm in the bronchi of the lungs, causing difficulty in breathing. It is usually connected to allergic reaction or other forms of hypersensitivity.

Causes

- Airborne allergens, such as pollen, dust mites, mould spores, pet dander or particles of cockroach waste.
- Respiratory infections, such as the common cold.
- Physical activity.
- Cold air.
- Air pollutants and irritants, such as smoke.

Long-term control medications

Many people with asthma need to take long-term control medications daily, even when they don't have symptoms [1]. There are several types of long-term control medications, including the following. Inhaled corticosteroids

These anti-inflammatory drugs are the most effective and commonly used long-term control medications for asthma. They reduce swelling and tightening in your airways [2]. You may need to use these medications for several months before you get their maximum benefit.

Inhaled corticosteroids include:

- Fluticasone (Fluent HFA, Annuity Elliptic, others)
- Budesonide (Pulmicort Flex haler)
- Mometasone (Amine Twist haler)
- Beclomethasone (Quark RediHaler)
- Ciclesonide (Invesco)

Regular use of inhaled corticosteroids helps keep asthma attacks and other problems linked to poorly controlled asthma in check. In children, long-term use of inhaled corticosteroids can delay growth slightly, but the benefits of using these medications to maintain good asthma control generally outweigh the risks [3].

Short-acting beta agonists

These inhaled medications provide near-instant relief during an asthma attack, and the relief can last for several hours. Short-acting beta agonists are the drugs of choice for treating exercise-induced attacks. Examples include:

Albuterol (Praxair HFA, Vent Olin HFA)

- Levalbuterol (Opened HFA)
- The more common side effects of these drugs include:
- Shakiness
- Excitability
- Headache
- Throat irritation
- Fast heart rate.
- Inhalers

Inhalers can help:

- Relieve symptoms when they occur (reliever inhalers)
- Stop symptoms developing (preventer inhalers)
- Some people need an inhaler that does both (combination inhalers).
- Read on to learn more about the different types of inhaler.

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Reliever inhalers

Most people with asthma will be given a reliever inhaler. These are usually blue. You use a reliever inhaler to treat your symptoms when they occur. They should relieve your symptoms within a few minutes. Tell a GP or asthma nurse if you have to use your reliever inhaler 3 or more times a week. They may suggest additional treatment, such as a preventer inhaler.

Reliever inhalers have few side effects, but they can sometimes cause shaking or a fast heartbeat for a few minutes after they're used [4].

Types of asthma medicines and treatments Quick-relief medicines

These medicines work quickly to relieve sudden symptoms. You take them as needed and at the first sign of symptoms.

Controller medicines

These medicines help control asthma by correcting the underlying changes in the airways, such as swelling and excess mucus. They can be one or a combination of medicines.

Combinations of quick-relief and controller medicines

These medicines are used for both short-term relief and control. (They are recommended in the current asthma clinical guidelines, but they have not yet been approved to be used in this way by the FDA.)

Biologics

This type of treatment targets a cell or protein to prevent swelling inside the airways. They are for people with certain types of persistent asthma and are given by injection or infusion.

The difference between these asthma treatments can be confusing. It is important to understand what each treatment does and how they help your asthma. Learning how to use each correctly can you help keep your asthma well-controlled. Always take your medicines as directed by your doctor and follow your Asthma Action Plan.

Other types of medicines and treatments

Biologics are shots or infusions given every few weeks. They work by targeting a cell or protein in your body to prevent airway swelling. They are for moderate-to-severe asthma that is hard to treat with ICS and other medicines, or people with asthma dependent on OCS [5]. They are for specific types of asthma and will not work for everyone.

Conclusion

Leukotriene modifiers are taken in pill form. They prevent your body from making or activating leukotriene. The FDA has strengthened existing warnings about serious behaviour and mood-related changes with montelukast (Singular and generics). Commonly sodium is nebulized. It is a mast cell stabilizer that prevents the release of certain natural chemicals, such as histamines and leukotriene's into the body.

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