

**NICOSIA GENERAL HOSPITAL
PULMONOLOGY CLINIC
Director: Dr. Tonia Adamides MDMSc, PhD**

BRONCHIAL ASTHMA

WHAT YOU NEED TO KNOW










**A GUIDE FOR PATIENTS AND
THEIR FAMILIES**
t.adamides@shso.org.cy

WHAT IS ASTHMA?

Is a chronic lung condition that affects the airways (bronchi) and is characterized by the contraction of the bronchial walls (narrowing of the airways), swelling (edema), and accumulation of mucus within the lumen, which is difficult to expel. These symptoms occur as a reaction to various stimuli (hyperresponsiveness). This clinical picture is typically observed during **asthma attacks**, whereas when asthma is **under control** the bronchi remain clear and there is no obstruction to the airflow within the lungs.

WHAT CAN TRIGGER ASTHMA?

-  **Animal fur or dander**
-  **- Cigarette smoke**
-  **Household dust**
-  **Tree pollen**
-  **Flowers pollen**
-  **- Strong odors and sprays**
-  **Weather changes**
-  **Common colds**
-  **Physical exercise**
-  **Hereditary factors**

Occupations involving pollutants, heavy labor, dust, or strong odors



WHAT ARE THE SYMPTOMS OF ASTHMA?

- Wheezing (a whistling sound during breathing, similar to the sound of kittens)
- Shortness of breath
- Chest tightness
- Sensation of heaviness in the chest
- Dry or productive cough
- Nighttime awakenings due to breathlessness and coughing

HOW IS ASTHMA DIAGNOSED?



Medical History obtained by the physician (including occupation, smoking habits, family history, allergy history, and type of symptoms)



Clinical Examination (especially during an asthma attack)



Spirometry (a test that reveals airway narrowing and evaluates response to medication).



Various allergy tests including skin testing and blood tests to assess allergic reactions



In specific cases, **specialized tests** such as the bronchial **challenge tests** - may be conducted to confirm the diagnosis of asthma

MEDICATION ADMINISTRATION FOR ASTHMA

- **Bronchodilators** (administered via inhalation to open narrowed airways and relieve symptoms. These include **β 2-agonists** and **anticholinergics**)
- **Corticosteroids** (inhaled to reduce inflammation and prevent attacks. During exacerbations, they may be given orally or by injection for a few days)
- **Leukotriene antagonists** (oral medications that reduce and prevent inflammation)
- **Theophylline-based medications** (used in more severe cases to relieve symptoms)
- **Antihistamines** (when significant allergic reactions are present)
- **Anti-IgE (Xolair), Anti IL5 (Nukala)** (newer therapies for patients with severe, uncontrolled bronchial asthma)

There are various devices available for the administration of asthma medications, and patients should be properly trained in their correct usage.



Inhaled medications are always the first-line treatment option in asthma management.



ATTENTION

- Asthma medications are classified into two categories: **reliever** and **preventive**. A patient experiencing frequent asthma attacks must use preventive medications consistently and should never discontinue them without consulting their physician.
- Reliever medications should not be overused.
- The physician always provides the patient with precise instructions on how to use the medications and their respective devices, both when the condition is stable and during an asthma attack.
- The patient must always inform their doctor regarding an asthma episode and should never underestimate its severity.
- In general, the patient should self-manage their condition and use a peak flow meter to monitor their breathing (a simple device into which the patient exhales to measure airflow).



HOW TO PREVENT ASTHMA ATTACKS?

- Remove pets from home, if you are allergic to their fur.
- Do not smoke and avoid exposure to secondhand smoke.
- Keep strong odors, heavily scented cosmetics, and air fresheners away from home.
- Remove carpets and rugs from house.
- Dust with a damp cloth or ask someone else to do it.
- Avoid using multiple pillows; wash them frequently or use special plastic covers.

- Refrain from using feather mattresses and pillows.
- Ventilate your home and workplace as often as possible.
- Stay indoors on days where air pollution and dust levels are elevated.
- Avoid painting, spraying, cleaning with strong detergents, and cooking with intense odors.
- Always follow your doctor's instructions.

ALWAYS REMEMBER THAT ASTHMA PATIENTS CAN LEAD A NORMAL LIFE IF THEY LEARN TO MANAGE THEIR CONDITION PROPERLY, AVOID TRIGGERING FACTORS, AND CONSULT THEIR PHYSICIAN FREQUENTLY.

