

## ASTHMA

### What is Asthma disease?

Asthma is a chronic lung condition that causes inflammation and narrowing of the airways. Your airways (bronchioles) are tubes that carry air in and out of your lungs. If you have asthma, the inside walls of your airways become sore and swollen. This makes them very sensitive and they may react strongly to things that you are allergic to or find irritating. When your airways react they get narrower and your lungs get less air. The airways may get inflamed and the lining of the airways increases the production of phlegm.

### What causes it?

The airway obstruction is the end product of three processes in the airways:

- Inflammation of the lining of the airways(the lungs' smaller breathing passages)
- Increased mucous production in these airway
- Constriction of the muscles surrounding the airways

The processes that cause Asthma are triggered by various things:

- Allergy such house dust mite, grass or tree pollens, mould and mildew, cockroaches, feathers, animal hair or fur, industrial chemicals or sprays, certain food or food additives
- Exercise such as running , particularly in cold weather
- Infections of the respiratory tract such as cold or flu
- Stress, emotions and hormonal changes such as over- excitement in children, laughter or emotional upsets
- Environmental conditions such as pollution, cigarette smoking, car exhaust fumes and chemical gases
- Some medicines such as aspirin, some types of arthritis medicines and beta- blockers used to treat high blood pressure can also causes Asthma

### What are the symptoms?

The narrowing of the airways causes the typical symptoms of Asthma:

- Coughing
- Wheezing
- Breathlessness
- Tight Chest

An important aspect of Asthma is that symptoms may vary from time to time- you may have long periods without an Asthma attack and then suddenly experience a series of Asthma attacks.

Urgent warnings sign of an acute asthma attack are:

- Being too breathless to talk normally
- Your reliever is not easing your symptoms
- The need to use your inhaler more frequently
- The relief given by your inhaler is short lived

An acute, severe Asthma attack is a medical emergency and you need to contact your doctor or go to a casualty department of the nearest hospital.

### How is it diagnosed?

Asthma is diagnosed by your doctor, who will take a full history of your symptoms including family history and examine you for signs of wheezing. Your doctor may also do a lung function test called spirometry to confirm the diagnosis of Asthma.

### How can Asthma affect my health?

Each asthmatic is different in terms of the mildness or severity of his/her Asthma.

- Asthma symptoms may vary from long periods without an asthma attack then suddenly experience a series of attacks
- Asthma symptoms may be worse at night than during the day
- Some people with mild asthma may only have symptoms during the day
- Sometimes coughing or wheezing may only occur when you are performing some physical activity i.e. running or exercising
- Breathlessness may be experienced with difficulty breathing out, but some people may have a problem breathing in as well
- A severe asthma attack may require hospitalisation for oxygen, intravenous medicines and close monitoring of the lung's functions

## Treatment

Asthma is a chronic condition with acute episodes and therefore requires continuous care, even if there are no symptoms. Your asthma treatment will depend on your age and on how often you have symptoms. The goal is to:

- Abolish symptoms
- Restore normal lung function
- Reduce the risk of a severe asthma attack
- Minimise absence from school or work

The management of asthma can range from avoiding triggers, taking allergy medication, using inhalers to control your asthma symptoms such as relieving the airway tightness and controlling inflammation in the airways. You usually use your Asthma treatments daily if your asthma is more severe or you experience asthma symptoms more frequently. You should also have an action plan devised by your doctor to manage for an acute asthma attack.

Medicines for Asthma:

Three types of Asthma medicines:

- Relievers: help to treat symptoms when they occur and are not usually taken regularly. Examples include Ventolin, Berotec
- Preventers: are taken regularly to prevent asthma symptoms from occurring- even if you don't have symptoms. Examples include Budeflam, Flixotide, and Beclate
- Controllers: are long-acting medicines that reduce symptoms and act to keep the air passages to the lung open and relaxed. Examples include Foratec, Serevent, Sandoz theophylline and Singulair

Your asthma control may be assessed by your doctor at each doctor visit, and control is dependent on how often you experience symptoms and on the presence of Asthma symptoms at night. This assessment will indicate to your doctor how well your asthma is controlled.

The table below can be used to assess asthma control.

Assessing Control	Well controlled	Partially controlled	Uncontrolled
In the past four weeks have you had:	None of these	1-2 of these	3-4 of these
Asthma day time symptoms more than 2 x week			
Asthma night time symptoms			
Needed to use your reliever more than twice per week			
Asthma impacts on your daily activities			

## Your role in managing this condition

You can assist with the control of your asthma by actively participating in you asthma management plan.

1. You should have and use a peak flow meter to monitor the stability of the asthma.
2. You and your doctor should work out a long term self-management plan for your asthma.

This should include written information on various things such as:

- Use of your medicine, dose, frequency and guidelines on changing a dose
  - How to recognise warning signs of worsening asthma as early as possible and how to modify your treatment to manage the symptoms
  - A list of steps to take in an acute asthma attack
  - When and how to seek emergency care
3. Identify and avoid asthma triggers. Total avoidance is not easy to achieve but the following avoidance measures are recommended:
    - House dust mite triggers: Clean rooms regularly and dust with a damp cloth, cover mattress with plastic protector, use synthetic pillows and duvets, wash linen and soft toys regularly
    - Pets: Keep pets outside especially out of bedrooms. Avoid pets that are specific triggers e.g. cats
    - Cigarette smoking: Avoid, especially in enclosed spaces
    - Mould and dampness: control mould with chlorine bleach and adequate ventilation
    - Staying well is very important. Treat respiratory quickly and keep up to date with flu and pneumonia vaccines
    - Step up preventer medicine usage during a cold or flu
    - Pollens: Stay indoors when pollen counts are high
    - Learn how to control stress and anxiety by using relaxing techniques to gain control of your breathing. Pursed lip breathing and muscle relaxation may assist you when stress is affecting your asthma control
    - Exercise: Manage exercise induced asthma by using 1-2 puffs of your reliever medication 10-15 minutes before exercising. Use your reliever if an asthma attacks occurs whilst exercising. Do warm up exercises before starting more strenuous exercises
  4. Medications: Know how to take your medicines correctly, at the correct dose and use them regularly as your doctor has instructed you to take them.

You can lead a normal life with asthma and you can achieve the goals of successful asthma treatment.

## Disclaimer

The reader should always consult a doctor if they believe they may be suffering from this medical condition. The information contained herein is intended to assist understanding and should not take the place of your doctor's advice or instructions. Whilst every effort has been made to ensure the accuracy of the information contained herein, Universal Care does not accept responsibility for any errors or omissions or their consequences, and shall not be liable for any damages suffered arising out of the use of this information.

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