The Basics of Childhood Asthma

Asthma is a potentially life-threatening illness that affects many children. Fortunately, there are a number of medications that can help control and prevent asthma attacks.

Text Dr Salehuddin Samsudin **Image** Courtesy of iStockphoto

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Asthma affects about 10 per cent of the population and for the majority it starts during early childhood. They often experience coughing, wheezing, and breathing difficulties especially at night or with exercise.

The symptom of asthma is caused by bronchospasm (narrowing of the airways in the lungs) and inflammation caused by overly sensitive airways. Asthma is often triggered by an allergen such as house dust mites or infection.

It is important to recognise the signs and symptoms early as children with asthma can deteriorate very quickly.

Poor asthma control may lead to below adequate lung function in the long-term.

Asthma can sometimes have deadly consequences. The WHO estimates around 250,000 people die from asthma around the world each year.

An allergy is a chronic condition involving an abnormal reaction to an ordinarily harmless substance called an allergen. Allergens can include inhaled allergens such as dust mites, mould, weed, and grass pollen. Allergies may also be triggered by food allergens such as milk, egg, soy, wheat, nut, or fish proteins.

Although most allergies are mild and recover quickly with steroids and antihistamines, in the most severe form, allergies can cause breathing difficulties, lead to collapsing or even death.

Children with severe life-threatening allergies (anaphylaxis) will be given an adrenaline injection device (EpiPen) in case of life-threatening reactions.

THE CONNECTION BETWEEN ASTHMA & ALLERGIES

There is a strong genetic link between asthma and allergies. Therefore, a history of atopy or sensitive skin, eczema, and allergies in the patient, parents or siblings would also be an important risk factor for asthma.

The risk of asthma or allergies in a child could be as high as 50 per cent if both parents have this condition. If only one parent or sibling have asthma or allergies, then the risk could be as high as 25 per cent or more that the child may develop asthma or allergies in their lifetime.

Although asthma may present at a very early age, it is particularly difficult to make an accurate diagnosis in children under the age of five years. This is because there are many other respiratory illnesses that can mimic asthma in this age group such as bronchiolitis, viral pneumonia, or mycoplasma pneumonia. A strong family history of atopy such as allergies, eczema, and asthma, makes the diagnosis more likely.

ASTHMA TREATMENTS

Medications used to treat asthma in children include inhalers that contain bronchodilators (Ventolin) which open up the narrowed airways, and also sometimes steroids which help to quickly reduce airway inflammation and swelling during an acute asthma attack.

Inhaler devices for children should always be used with a spacer device using the correct mask size as according to their age.

If used correctly it can be as effective as a nebuliser.

Sometimes nebulisers are used in severe asthma attacks but only when patients have not responded to the inhaled bronchodilator.

For children with frequent asthma attacks, additional treatments such as montelukast (Singulair) and inhaled steroid (flixotide) or a combination of both as well as long-acting bronchodilators (Seretide) may be needed.

Asthma treatment is harmless if given correctly but you should always consult a paediatrician or your family doctor in the event of an acute asthma attack, especially if the symptoms are severe, frequent, or not well controlled.

PREVENTION OF ASTHMA EXACERBATION

Children with asthma have a higher risk of getting severe respiratory infections. Please ensure they receive additional vaccinations such as the pneumococcal vaccine, annual influenza vaccine, and the Covid-19 vaccine as recommended.

Allergy testing would also be useful in cases of moderate to severe allergies and for certain patients with asthma that is poorly controlled.

Please do not hesitate to speak to your paediatrician if you think your child may have asthma or allergies.

Together we can overcome asthma and allergies and save more lives.