

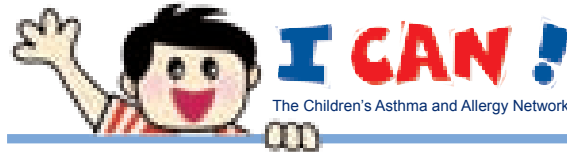
exercise induced ASTHMA



Does your child experience wheezing or coughing when he/she exercises? If your child has these symptoms, before may have

exercise induced asthma (EIA).

Children with EIA have airways that are overly sensitive to sudden changes in temperature and humidity, especially when breathing colder, drier air (which occurs during exercise). During exercise children with EIA develop abnormal narrowing of the airways resulting in symptoms.



"I CAN !" is a programme of the University Children's Medical Institute, National University Hospital. It is dedicated to the holistic care of children with asthma and/or allergies. The word "CAN" emphasizes the ability of every child with asthma and/or allergies to participate in all activities and lead a normal lifestyle while optimally controlling their condition.

The programme encompasses inpatient and outpatient services, including acute care services, together with up-to-date diagnostic and therapeutic facilities. We make available user-friendly and attractive educational materials and management aids, enhanced communication through our telephone hotline and website, organised outdoor/sports activities, public education symposia and workshops, working in close cooperation with our GP partners.

We hope that you will enjoy and benefit from the contents of this pamphlet and our many other educational aids and facilities of the "I CAN !" programme.

For more information and to contact us, please visit our website at: www.ican.com.sg

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The Children's Asthma and Allergy Network
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exercise
induced
ASTHMA
or EIA in children



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WHAT ARE THE SYMPTOMS OF EXERCISE - INDUCED ASTHMA (EIA)?

Children with EIA experience symptoms of coughing or wheezing shortly after exercise.

HOW IS EIA CONFIRMED?

EIA is suspected when there is a suggestive history. EIA is then confirmed with an exercise challenge test.

• EXERCISE CHALLENGE TEST

The child runs on a treadmill machine. To achieve at least 80% of his/her maximum heart rate and maintained for >6-8 min. The child's lung function is assessed before exercise and at various intervals after exercise. A decrease of at least 12%-15% in the lung function parameter measured is diagnostic of EIA. Children above 5-6 years old are usually able to perform this test reliably.



HOW IS EIA MANAGED?

- Exercise is an important part of the life in every growing child.
- It not only contributes to a healthy lifestyle but also enables the development of social and interpersonal skills. Every child with asthma and allergies can and should exercise.
- Exercise-induced asthma can be controlled by firstly achieving good control of the asthma +/- additional medication before exercise.
- Consult your doctor to manage your EIA instead of avoiding exercise.
- Some exercise are least likely to trigger asthma eg. swimming and this can be a good form of exercise to start with. A warm-up period of activity before exercise and warm-down after exercise can also prevent or lessen EIA symptoms.
- Inhaled medications taken prior to exercise are also helpful in preventing and controlling EIA. The medication of choice in preventing EIA symptoms is a short acting bronchodilator spray eg. Salbutamol, used 15 minutes before exercise. These medications can also be used to relieve EIA symptoms after they occur.



ATHLETES WITH ASTHMA

According to a recent study, at least 1 in 6 athletes representing the United States in the 1996 Olympic Games have a history of asthma. The prevalence of asthma amongst the 1996 US Olympians was even higher than that of the general population. The 1996 Olympians who had asthma or took asthma medications fared as well as athletes without asthma, winning team or individual medals in their Olympic events.

Singapore has many national athletes with asthma. They include Dr Benedict Tan – Asian Games gold medal sailor; as well as Gerald Koh and Nicolette Teo who were both SEA Games gold medal swimmers.

CONCLUSION

Exercise is a vital part of every growing child. With proper asthma management, all children with EIA can and should exercise and participate in sports like every other child. They can even excel.

YOUR CHILD CAN!

The "I CAN !" programme organizes regular sports events for children with asthma and allergies to aid in the introduction of sports into the lives of our children with asthma and allergies. Look out for our next sports event!