



Safety of inhaled corticosteroids (ICS)

FACT SHEET prepared by The Asthma Foundation

Inhaled corticosteroids (also known as inhaled steroids or ICS) are the most important and useful drugs in the management of people with asthma and airways disease. They are the most widely used “preventer” medicine and have been used extensively around the world for over 20 years. There is an enormous body of research showing that they are effective and very safe even when taken in the long term.

What is a steroid?

The adrenal gland in our body produces a steroid naturally every day called cortisol. Cortisol is involved in a variety of activities including production of glucose, which is the body's energy source, helping maintain salt and water balance and working with the body's immune system. The steroid used in inhalers is a man-made version of the body's natural cortisol. This helps to reduce asthma inflammation in the airways and reduce asthma symptoms.

The steroids used in preventer inhalers are very different to those taken by some athletes to boost their strength. Those are called anabolic steroids and have different effects on the body to the steroids used in the treatment of airways disease.

However, like all drugs inhaled steroids can have side effects and in general these are more likely to occur at higher doses.

What side effects might I have if I use inhaled corticosteroids?

Local irritation in the mouth and throat are the most common side effects – hoarse voice, sore throat and oral thrush. These side effects can be avoided by using a spacer with preventer medications and rinsing your mouth or cleaning your teeth after using preventer medication.

Side effects affecting the rest of the body are uncommon. These are due to tiny amounts of the drug being absorbed into the blood stream. The liver will clean up most of this but if very high doses of inhaled steroids are used there may be some side effects which include:

- ✦ thinning of the bones called osteoporosis
- ✦ thinning of the skin giving rise to easy bruising
- ✦ a reduction in the body's ability to respond to a severe medical illness

For children an additional problem can be minor growth suppression during the first year of taking the medication. However, studies show that children using inhaled steroids will go through a “catch-up phase” with their growth, and their final adult height will be the same as if they had never taken the inhaled steroid.

Side effects affecting the body are unlikely when moderate doses are used:

- ✦ up to 400mcg (children) or 800mcg (adults) per day of beclamethazone (Beclazone) or budesonide (Pulmicort)
- ✦ up to 250mcg (children) or 500mcg (adults) per day of fluticasone (Flixotide)

Remember side effects can be minimised through the use of a spacer device and rinsing your mouth and cleaning your teeth after inhalation.

What should I do if I am worried about side effects?

Anyone who is concerned about possible side effects from their medication should discuss this with their doctor. You can discuss whether or not a lower dose of ICS might be appropriate. If you do start to reduce your dose it is important to monitor your asthma symptoms and/or keep a diary of your peak flows. If your asthma starts to deteriorate at the lower dose you will need to increase it again.

Remember the risk of poorly treated asthma is far greater than the risk of serious side effects from inhaled corticosteroids.

The Asthma Foundation can help you

The Asthma Foundation is New Zealand's not-for-profit sector authority on asthma and other respiratory illnesses. We advocate to government and raise awareness of respiratory illnesses, fund research for better treatments and educate on best practice.

Check out our comprehensive website at www.asthmafoundation.org.nz