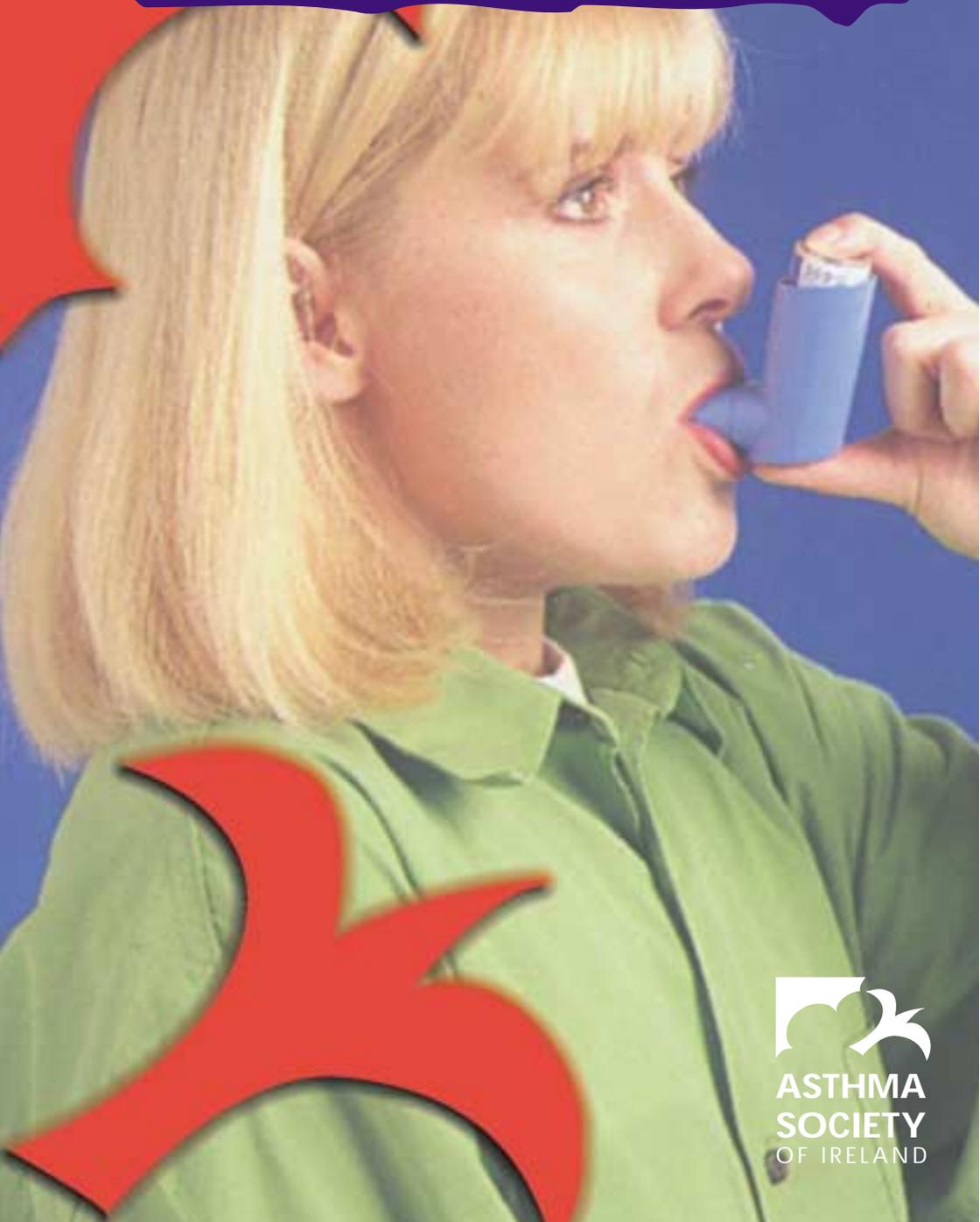


ASTHMA - *And Steroids*



ASTHMA
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ASTHMA – what is it?

Asthma is a condition that affects the airways – the small tubes that carry the air in and out of the lungs. People with asthma have airways that are almost always swollen and inflamed. When these inflamed airways come into contact with a trigger, symptoms of asthma appear (for example, coughing, wheezing, a tight chest). Common triggers are colds or flu, cigarette smoke, exercise and allergies to pollen, furry or feathery animals, or house dust mite.

How are steroids used in treating asthma?

Steroids are the most effective way of controlling inflammation in your lungs.

The steroids used in asthma are corticosteroids. They have been widely and safely used to treat asthma for many years. Corticosteroids are naturally made in our bodies by the adrenal gland. When you use a steroid inhaler or steroid tablets, you add to this natural corticosteroid.

- ❖ Corticosteroid treatment is used in asthma, eczema and some forms of arthritis.
- ❖ Corticosteroids are not the anabolic steroids used by some body builders and athletes
- ❖ You will not put on weight or become muscular from using inhaled steroids. Tablet steroids may increase your appetite and indirectly lead you to put on weight.

How do I take the steroids?

The steroids used to treat asthma are taken in two main ways: through steroid inhalers and through steroid tablets.

Steroid inhalers (preventers)

- ❖ Give low doses straight to the airways
- ❖ Need to be taken every day, even if you are feeling well, to

build up their protective effect.

- ❖ Don't give immediate or quick relief when you are breathless, but reduce long-term inflammation.
- ❖ Are usually brown, red or orange inhalers.

Steroid tablets

- ❖ Give large doses to reduce inflammation quickly, within a few hours.
- ❖ One steroid tablet gives 50 times the dosage of a puff from a standard steroid inhaler
- ❖ They are usually given as short courses, for up to two weeks, to control asthma attacks. A small number of people with severe asthma need to take daily regular steroid tablets as well as a steroid inhaler.

Very rarely, steroids may be given as injections. Injections are used in emergencies to treat severe asthma attacks, when swallowing is difficult. A doctor usually gives them.

The next pages tell you more about steroid inhalers. See page 5 for more information about steroid tablets.

Steroid inhalers

There are many types of steroid inhalers (preventers) made by several different pharmaceutical companies. For example beclomethasone (eg Becotide and Beclorforte), budesonide (Pulmicort), fluticasone (Flixotide). All these medicines act in the same way in the lungs.

When are they prescribed?

You should be prescribed a steroid inhaler if you:

- ❖ Are breathless, cough or have a tight chest during everyday activities more than two or three times a week.
- ❖ Need to use your reliever inhaler more than once a day.

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- ❖ Have sleep disturbed by cough or chest tightness each week.
- ❖ Have bad attacks of breathlessness when you have a chest infection or are in a smoky atmosphere.

Steroid inhalers come in a variety of different shapes and sizes

What will my steroid inhaler do for me?

As the protective effect of the steroid builds up, you will be less likely to have asthma attacks. You will be less likely to be breathless during the day and night and you will not need to use your reliever inhaler as often.

Why is my reliever inhaler not enough?

Reliever inhalers relax your airways, which help breathlessness, but they do not remove airway inflammation. As well as the relaxing effect of a reliever inhaler, you need the anti-inflammatory effect of an inhaled steroid. Once the airways are less inflamed they are less sensitive to triggers such as cigarette smoke and viral infections.

How long will it take to work?

It may take up to 14 days for your steroid inhaler to reduce inflammation and mucus in your airways.

Don't stop taking your steroid inhaler if nothing much happens for a few days. Gradually, chest tightness, night cough and wheeze should become less. You should notice that you need to use less reliever inhaler.

When should I see my doctor again?

Your doctor or nurse will probably want to see you with a month after you start using a steroid inhaler. S/he will be able to adjust your medication if your symptoms are not decreasing. Or, if your steroid inhaler works well for you, you may be able to cut down on the number of puffs you take each day, or the strength of the inhaler.

Do I really need to take my inhaled steroid every day?

Yes. To work properly, inhaled steroids need to be taken every day, usually morning and evening, even if you are feeling well.

The protective effects of inhaled steroids build up gradually. Once this protection is working, occasionally forgetting to take your daily inhaler will usually not have bad effects. But forgetting or stopping for several days at a time will mean our protection begins to disappear. If you stop using your inhaled steroid, chest infections are more likely to bring on an asthma attack.

Will my inhaled steroid treatment change?

Yes. It is likely that you will have to change your medication from time to time.

If your asthma gets really bad, you may need to increase the number of steroid inhaler puffs you take. Or you may need a short course of steroid tablets as well as your regular steroid inhaler.

When you begin inhaled steroid treatment, your doctor or nurse may want you to take a high number of puffs each day, or use a high strength inhaler. This will get your asthma under control quickly. As your symptoms improve, you may be able to take fewer daily puffs or move to a lower strength inhaler.

How do I know when to adjust my medication?

Your doctor or nurse should prepare a management plan for you which tells you when and how to vary your medication. S/he may also give you a peak flow meter to help you know when to do this. For example, if your asthma symptoms get worse, you may have to double the dose of your inhaled steroid for a few days.

IT IS VERY IMPORTANT NOT TO STOP YOUR STEROID TREATMENT WITHOUT DISCUSSING IT WITH YOUR DOCTOR OR NURSE FIRST

Do inhaled steroids have side effects?

The possibility of side effects is very low. Because the inhaled medicine goes straight down to the airways where it is needed, very

little is absorbed into the rest of the body.

There is a small risk of a sore tongue, sore throat, hoarseness of the voice and a mouth infection called thrush. Using your inhaler before brushing your teeth, and rinsing your mouth and spitting out afterwards will help you to avoid this. Using a spacer (see below) will also help reduce the possibility of thrush.

It is possible that prolonged high-dose use of inhaled steroids may cause other side effects (see page 6). That is why your doctor will want to keep you on the lowest dose to control your symptoms.

Spacers

What is a spacer?

A spacer is a large plastic container, which you attach to an aerosol inhaler. You puff the inhaler into the spacer and then breathe in the medicine through the mouthpiece.

Spacers

- ❖ Are one way of getting more inhaled steroid directly into the lungs where it is needed.
- ❖ They reduce the possibility of side effects. This is because they reduce the amount of medicine, which is swallowed and absorbed into the body.

Steroid tablets.

Most steroid tablets are small white or red 5 milligram tablets called prednisolone. For children Prednesol, which can be dissolved in water, may be used.

Steroid tablets are used to treat asthma in two ways:

- ❖ Short courses to treat acute asthma attacks
- ❖ Long-term regular use for daily control of severe asthma.

If you are prescribed tablet steroids for more than seven days, your doctor or pharmacist should give you a steroid card. This records

the dose and length of treatment with steroid tablets. This information will be important to your medical attendants if you are ever involved in a medical emergency.

Short courses of steroid tablets

Short courses of steroid tablets are used when inhaled steroids do not control worsening asthma symptoms. Because steroid tablets give high doses they work quickly to control inflammation. They usually begin to be effective within a few hours.

Steroid tablets are an essential emergency treatment in sudden acute attacks of asthma.

A typical short course of tablet steroids is 6-8 tablets a day. These are taken in the morning until symptoms or peak flow have returned to normal for 2-3 days. Usually for adults a course lasts 3-14 days. Children may need a course for only one day, but usually need 3-5 days.

If you finish a course of steroid tablets but are not back to normal, you should visit your doctor. You may need to continue the course for more days to get your asthma back under control.

Side effects of short courses of steroid tablets

There are few side effects from 3-4 short courses of steroids per year. However, steroid tablets do give much larger doses than steroid inhalers. It is important to keep the number of courses to a minimum by making sure you are using enough of your other regular inhaled treatments.

Possible side effects of short courses include mood swings (especially for children) and increased hunger.

For a small number of people steroid tablets can lower the body's resistance to chickenpox. You should contact your doctor if you or your child are taking (or have just finished) steroid tablets and come into contact with chickenpox. If your doctor thinks you are at risk s/he can give you an injection to protect you.

Long-term steroid tablets

A small number of people with severe asthma find that inhaled steroids and short courses of steroid tablets are not enough to control their asthma. They need to take steroid tablets for a longer period.

However, using steroid tablets regularly for long periods of time (months or years) can have serious side effects. For these reasons your doctor will always try to prescribe the smallest possible dose of daily steroid tablets. It is vital that all other treatments are taken regularly to keep the need for steroid tablets to a minimum.

In severe long-term asthma, you and your doctor will have weighed the risk of side effects against the benefits of controlling your asthma symptoms.

If untreated, severe asthma can lead to permanent lung damage.

Side effects of long-term steroid tablets

- ❖ Fattened face (moon face)
- ❖ Feeling hungry and wanting to eat more (this extra eating can lead to weight gain)
- ❖ Feeling 'hyped up' and over-active with difficulty sleeping
- ❖ Feeling depressed or having sudden mood swings
- ❖ Heartburn and indigestion
- ❖ Bruising easily
- ❖ Brittle bones (osteoporosis)
- ❖ Altering diabetic control or uncovering a tendency to diabetes
- ❖ Chickenpox may be more serious
- ❖ Risk of cataract increases

Steroid tablets do not have any side effects that damage the heart.

What can I do about side effects of steroid tablets?

- ❖ Most importantly, don't smoke. If you smoke, bone-thinning side effects are worse. Your general asthma control will be helped if no one in your household smokes. If your partner gives up smoking, it may mean you can cut down on your dose of steroid tablet.
- ❖ Taking steroid tablets first thing in the morning may have some benefit in decreasing side effects
- ❖ People who need to take regular steroid tablets can use daily calcium supplements, although there is no clear scientific evidence to prove that these are useful.
- ❖ Weight-bearing exercise, such as walking for 20 minutes each day will help protect against the bone thinning effect of long-term steroids.
- ❖ Hormone Replacement Therapy (HRT) in postmenopausal women reduces the risk of bone thinning. It may be advisable for women on long-term steroids. For more about HRT read our booklet *Asthma and Women*

Why do I need to keep taking inhaled steroids when I am taking steroid tablets?

The main reason why you should continue taking inhaled steroids is because that means your steroid tablet dose can be as low as possible.

Stopping regular steroid tablets: a warning

When you are taking regular tablet steroids your adrenal gland becomes lazy and makes less of its own natural steroids. This means you have less ability to cope with infections or deal with physical stress.

Long courses of steroid tablets (three weeks or more) can be stopped only by gradual reduction and under the guidance of a doctor. If they are stopped suddenly you will be very vulnerable to infection and less able to cope with any crisis such as an operation. For this reason the doses should be reduced slowly over weeks or months.

Children and steroid treatment

The Asthma Society of Ireland helpline receives between 1800 and 2000 calls a year. Many of these are from parents concerned about giving their child steroids to treat their asthma. Here are some examples of the kinds of questions they ask:

Is my child too young to start using inhaled steroids?

Almost certainly not. Inhaled steroids are now standard treatment for children with asthma from infancy. Children under six years should use a spacer attached to an aerosol inhaler. Children under three years will probably need a facemask as well.

Are there any other side effects from inhaled steroids for children?

Children sometimes have mood changes and may be grumpy. Like adults, they may have a sore tongue or throat. Using a spacer can reduce this risk. It is also a good idea to give your child their steroid inhaler before they brush their teeth

Will using a steroid inhaler stunt my child's growth?

A great deal of research has been carried out on the long-term effects for children of taking inhaled steroids. Children who have daily doses of 400 micrograms or less don't show any differences in growth.

At higher doses the picture is less clear. There is some evidence that the growth of children on high doses of inhaled steroid, or short courses of steroid tablets, may be slowed down in the short-term. However, these children often have their growth spurt later and will eventually reach their predicted height. Chronic untreated asthma in children will itself cause poor growth.

Should children take steroid tablets?

Yes. A short course of steroid tablets (1-5 days) is sometimes needed to treat asthma attacks in children. Your child should not have any side effects from occasional courses of steroids (one or two a year).

Will my child have to take inhaled steroids forever?

Probably not. Most wheezy infants and children who experience occasional wheeze (perhaps 75 per cent) will get better over the first 5-7 years of life and will be able to come off all treatment. Some, particularly those with allergy (eg eczema, food allergies) may continue to have asthma in later childhood and adult life. They will benefit from longer-term inhaled steroid treatment.

My child has symptoms with viral infections – do we really need a steroid inhaler?

Some infants who wheeze with viral infection benefit from inhaled steroids, and some do not. Your doctor will be looking to see if the inhaled steroid helps your child. If your child is significantly allergic (eg. Eczema, food allergies) then steroids are likely to be of benefit. For some children, who wheeze with viral infection, early inhaled steroids may be important in preventing asthma developing as they grow older.

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For further information on asthma visit our Website at:
www.asthmasociety.ie

Or phone our Asthma Line at 1850 44 54 64 for 24 hour pre – recorded information.

Or phone our Asthma Liveline to speak to an Asthma Nurse Specialist on 01 8788122. Monday, Wednesday and Thursday mornings: 9.30 am to 1.00 pm. (Times may vary – please contact our main office if you experience any difficulty.)

The Asthma Society is primarily an information service which aims to enhance and augment the information provided by your GP, asthma nurse and chemist.



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