STEROIDS can be used to treat a number of conditions, including rheumatoid arthritis, lupus and gout.
Introduction

Steroids are drugs that can help prevent your condition causing damage to your body. You can discuss the benefits and risks of taking steroids with your healthcare professionals before you start treatment, so you’re able to make an informed decision.

What are steroids and how are they used?

Steroids are a man-made version of chemicals, known as hormones, that are made naturally in the human body. Steroids are designed to act like these hormones to reduce inflammation.

They’re also known as corticosteroids, and are different to anabolic steroids used by bodybuilders and athletes.

Steroids won’t cure your condition, but they’re very good at reducing inflammation and will ease symptoms such as swelling, pain and stiffness.

Usually inflammation is the body’s natural reaction to infection or bacteria. Your immune system produces extra fluid to fight infections or bacteria, which causes swelling, redness and heat in the affected area. You might have noticed this if you have had a cut or wound on your skin.

In some conditions, such as rheumatoid arthritis, the immune system produces inflammation in the joints or other parts of the body by mistake, which can cause permanent damage if left untreated. Steroids can be used to reduce this immune reaction.

Steroids can be taken in a number of ways for many different types of arthritis and related conditions, as shown in the table opposite.

<table>
<thead>
<tr>
<th>How is the steroid taken?</th>
<th>What does it do?</th>
<th>What conditions is it used for?</th>
<th>What is a common name for this type?</th>
</tr>
</thead>
<tbody>
<tr>
<td>By mouth – tablets, liquids, dissolvable tablets, also known as oral steroids</td>
<td>Reduces inflammation throughout the whole body.</td>
<td>Rheumatoid arthritis, lupus, gout, other types of inflammatory arthritis or autoimmune conditions.</td>
<td>prednisolone, betamethasone, dexamethasone</td>
</tr>
<tr>
<td>By injection – into a joint, muscle, the blood or spinal area</td>
<td>Reduces inflammation in the area of the body where the injection is given.</td>
<td>Rheumatoid arthritis, lupus, gout, other types of inflammatory arthritis or autoimmune conditions.</td>
<td>methylprednisolone, triamcinolone, hydrocortisone</td>
</tr>
<tr>
<td>By eye – as drops or ointments</td>
<td>Reduces inflammation in the eyes.</td>
<td>Uveitis.</td>
<td>prednisolone</td>
</tr>
<tr>
<td>Applied to the skin as a cream or gel, also known as topical steroids</td>
<td>Reduces inflammation on the skin.</td>
<td>Psoriatic arthritis and psoriasis.</td>
<td>hydrocortisone, mometasone, betamethasone, clobetasol</td>
</tr>
</tbody>
</table>
Steroids are usually only given for a short time to quickly treat flare-ups of your condition. Depending on which condition you have and what dose you’re prescribed, you may notice an improvement in your symptoms within a few days.

This information covers steroids that can be taken as tablets, liquids, creams and eye drops and ointments.

For further information on injections, see the Versus Arthritis booklet ‘Steroid injections’. Visit www.versusarthritis.org/about-arthritis/

See Versus Arthritis booklets ‘Rheumatoid arthritis’; ‘Psoriatic arthritis’; ‘Lupus’; ‘Gout’. You can view all our information online at www.versusarthritis.org

Are there any reasons why I won’t be prescribed steroids?

You might not be able to start steroids if you have an infection, or if you have any wounds on your body, as steroids might delay these getting better or cover up some of your symptoms.

Steroids might affect some medical conditions, such as diabetes, heart or blood pressure problems, or mental health issues. If you have any of these conditions, the person treating you will need to make sure the steroids aren’t making the condition worse.

If you have systemic sclerosis, prednisolone could cause problems with your kidneys at certain doses, so you might not be able to take this type of steroid.

You won’t be able to have steroid creams or gels if you have an infection that affects your skin. Some other skin problems, such as rosacea, acne and ulcers, can be made worse by steroid creams so you might not be able to take them if you have any of these conditions.

If you normally wear contact lenses, you might need to avoid wearing these while having treatment with steroid eye drops.

When and how do I take steroids?

Steroids are taken in different ways, and the dosage may vary depending on the condition you have. The table below gives an idea of how often you might need to take steroids.

You should always take medication as prescribed by the person treating you.

<table>
<thead>
<tr>
<th>Type of steroid</th>
<th>How is it taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablets, liquids and soluble tablets</td>
<td>• Usually once a day.</td>
</tr>
<tr>
<td></td>
<td>• Preferably in the morning.</td>
</tr>
<tr>
<td></td>
<td>• Either with or after food to prevent stomach problems.</td>
</tr>
<tr>
<td>Creams and gels</td>
<td>• Usually once or twice a day for a few weeks.</td>
</tr>
<tr>
<td></td>
<td>• Your doctor might suggest taking them less often but for a longer period.</td>
</tr>
<tr>
<td></td>
<td>• Should only be used on affected areas of the skin.</td>
</tr>
<tr>
<td>Eye drops and ointments</td>
<td>• May need to be taken regularly throughout the day.</td>
</tr>
<tr>
<td></td>
<td>• Usually one drop in each eye each time you take it.</td>
</tr>
</tbody>
</table>
You will be given the lowest possible dose for the shortest possible time, to reduce the risk of side effects. Your dose will probably be reduced gradually as your symptoms improve, or your doctor might suggest a weaker medication.

It’s important that you don’t stop taking steroids without speaking to the person treating you first.

If you’ve taken steroid tablets for more than a few days, they can cause side effects known as withdrawal symptoms if you stop suddenly. You might be given a small dose, known as a maintenance dose, for a long time to make sure your symptoms don’t return.

**Possible risks and side effects**

As with all medicines, some people will have side effects. These are more likely if you’re on a high dose or if you’re taking steroids for a long time.

The person treating you will make sure you’re on the lowest possible dose to keep your condition under control. You might also be given a drug called a proton pump inhibitor or another medicine to protect your stomach.

Some of the side effects of steroids are shown in the table opposite.

Treatment with steroids may cause changes in mood – you may feel very high or very low. This may be more common in people with a previous history of mood disturbance. If you’re worried about this, talk to the person who is prescribing your steroids.

Taking steroid tablets for a long time can make you more likely to get infections. If you feel feverish or unwell, or develop any new symptoms after starting steroids, it’s important to tell your doctor or rheumatology nurse.

<table>
<thead>
<tr>
<th>Type of steroid</th>
<th>Side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablets, liquids and soluble tablets</td>
<td>• weight gain and increased appetite&lt;br&gt;• stomach pains, indigestion or heartburn&lt;br&gt;• sleep problems&lt;br&gt;• changes in mood&lt;br&gt;• bruising easily&lt;br&gt;• thinning of the skin&lt;br&gt;• stretch marks</td>
</tr>
<tr>
<td>Creams and gels</td>
<td>• stinging or burning where the cream has been applied&lt;br&gt;• changes in skin colour&lt;br&gt;• thinning of the skin&lt;br&gt;• stretch marks&lt;br&gt;• increased hair growth where the cream has been applied</td>
</tr>
<tr>
<td>Eye drops and ointments</td>
<td>• stinging or burning in eyes after putting drops in&lt;br&gt;• a funny taste in the mouth after putting drops in</td>
</tr>
</tbody>
</table>

See your doctor or the person treating you straight away if you develop chickenpox, shingles or measles, or if you come into contact with someone who has any of these illnesses. Sometimes these diseases can be severe in people who are taking steroids, and you might need to have other treatment before you start to get better.

Steroids taken for a long time can also cause your muscles to become weaker, and they might occasionally affect periods in women.
Other complications
Steroid creams and eye drops don’t usually cause serious side effects, but if you take them for a long time or at a high dose, the medication could be absorbed into your blood and increase the risk of side effects that normally only occur with steroid tablets.

Steroids can sometimes affect diabetes, high blood pressure or epilepsy, so you’ll have your blood pressure and blood sugar levels checked from time to time. The person treating you might change the dose of your medications if needed. Steroids can sometimes cause diabetes or raised blood sugar in people who haven’t previously had this condition.

Steroids can affect the eyes, for example by making glaucoma worse or causing cataracts. They can also cause a problem with your eyes known as serous chorioretinopathy (see-russ core-ee-oh-ret-in-op-ath-ee), which happens when fluid collects in part of the eye. If you notice any changes in your eyesight, such as your vision becoming blurry, be sure to let your doctor know as soon as possible.

Sometimes steroids can cause another condition known as Cushing’s syndrome. This can cause thinning of the skin, stretch marks, and the face to become rounder, but it usually clears up once steroids are stopped.

In children and teenagers, steroids can sometimes cause growth to slow down, so they’ll need to have their height checked regularly. If growth is slowed, they might be referred to a specialist doctor for advice.

Managing side effects
Because steroids can cause you to put on weight or have an increased appetite, it’s important to keep an eye on your weight while taking them. Making sensible food choices and including some physical activity in your daily routine should help you avoid putting on weight.

Steroids can weaken bones, which can lead to a condition known as osteoporosis. This condition makes it more likely that you’ll fracture your bones, sometimes after very minor falls or bumps.

Your doctor may advise you to take drugs called bisphosphonates, or calcium and vitamin D supplements, along with the steroids to help prevent this. Regular exercise, especially things that involve your bones carrying the weight of your body, such as walking, can also help to reduce the risk of getting osteoporosis.

You should also make sure you get enough calcium in your diet, and avoid smoking and drinking too much alcohol.

Taking other medicines
Steroids can be taken along with other drugs. However, some drugs can interact with steroids, so you should discuss any new medications with your doctor before starting them, and you should tell anyone else treating you what you’re taking.

Don’t take over-the-counter preparations or herbal remedies without discussing them first with your doctor, rheumatology nurse or pharmacist.

Some of the following drugs may interact with steroids, so let your doctor know if you’re taking any of these drugs:

• blood thinners or anticoagulants, such as warfarin
• drugs for epilepsy, such as phenytoin or carbamazepine
• drugs for diabetes
• Xofogo, a drug used to treat prostate cancer.
If you’re taking high doses of steroids, or if you’re on them for more than three weeks, you’ll need to carry a steroid card. This will have information on your dose and how long you’ve been taking them for.

Your doctor, rheumatology nurse or pharmacist can give you a steroid card. Make sure whoever is prescribing your steroids writes any changes in your dose on the card.

This is so that if you become ill, or are involved in an accident in which you’re injured or become unconscious, the doctors treating you will know that you’ve been taking steroids and will be able to carry on your treatment. Sometimes steroid treatments can stop your body producing enough natural hormones which can be dangerous if you’re ill or injured.

**Vaccinations**

If you’re taking steroid tablets you might need to avoid live vaccines, such as yellow fever. Sometimes a live vaccine may be necessary, but if this is the case your doctor will discuss the possible risks and benefits of the vaccination with you, and it could depend on the dose of steroids you’re taking.

If you’re using a steroid cream it’s fine to have vaccinations, but you’ll need to tell the person giving you the injection to avoid the area being treated with the cream.

If you’re offered the shingles vaccination, known as Zostavax, you should speak to your doctor or rheumatology team – you may be able to have the shingles vaccine if you’re on a low dose of steroids.

The vaccine against the most common cause of pneumonia and yearly flu vaccines don’t interact with steroid tablets, as they’re not live vaccines. It’s important that you have these vaccinations to reduce your chances of getting these infections.

**Having an operation**

If you’re having an operation, you might need to stop your steroids. Don’t do this without speaking to your doctor or surgeon first though, as in some cases you might be able to carry on taking them, and you may need to have your dose changed before the operation.

The decision will depend on how long you’ve taken them for, what dose you’re on, and where on your body you’re having surgery.

**Alcohol**

Both alcohol and steroid tablets could upset your stomach. If you have indigestion or other stomach problems after starting steroids, then alcohol is likely to add to the problem, so you may want to cut back on how much alcohol you drink.

You shouldn’t drink any more than the UK guidelines of 14 units a week. You shouldn’t save these units up to drink all in one go, so try to spread your units across the week and have some alcohol-free days.

You can find out more about units of alcohol at www.drinkaware.co.uk

**Fertility, pregnancy and breastfeeding**

Current guidelines say that some steroid tablets, including prednisolone, can be taken during pregnancy. They’re often used to treat flare-ups in women who are pregnant.

If you’re planning a family, you should discuss this with your doctor, as it’s important that a mother stays healthy during pregnancy and that flare-ups are avoided. If you get pregnant while you’re on steroids, don’t stop taking them before you’ve spoken to your doctor.
Although small amounts of steroids could pass into breast milk, there's no research that has shown that it's harmful to your baby, so guidelines say that people can breastfeed while taking steroid tablets. You should discuss the risks with your doctor if you have any concerns.

Steroid creams are safe to use during pregnancy, but if you're breastfeeding you'll need to make sure any cream is wiped off before feeding. Very strong topical steroids aren't usually prescribed during pregnancy and breastfeeding.

This leaflet is a guide to steroids, their benefits and potential side effects. If there's anything else you'd like to know about steroids, just ask the healthcare professionals in charge of your care.

Thank you!
A team of people helped us create this booklet. We would like to thank Debbie Bond, Dr Asim Suleman, Dr Fiona Wood and Lesley Harrison for helping us review this booklet.

We would also like to give a special thank you to the people who shared their opinions and thoughts on the booklet. Your contributions make sure the information we provide is relevant and suitable for everyone.