

Endocrinology department

Steroids and your cancer treatment

Why have I been given this leaflet?

You have been given this leaflet because you have been prescribed steroids as part of your care. Steroids include tablets called prednisolone and dexamethasone. They can be given as tablets or injections into a vein.

Steroids are a common treatment for people receiving treatment for cancer. They are often used to help with the side effects of cancer treatments. They may be given to help improve your appetite and may be given to help reduce inflammation, for example they are used in many common illnesses such as asthma and rheumatoid arthritis.

Steroids and side effects

A known side effect of steroids is hyperglycaemia or high blood glucose. This means if you are taking steroids you may experience higher blood glucose levels than normal.

Why does this happen?

Steroids increase the amount of glucose produced by the liver and this means that the body receives extra glucose that it does not need.

Steroids can also affect how well your insulin is working. Insulin moves the glucose from the blood into all the cells of the body, for example muscles, where it can be used as energy.

If your insulin cannot work properly then glucose stays in the blood and the blood glucose levels can get much higher than normal.

How will I know if there is a problem?

High blood glucose levels may cause the following symptoms:

- thirst or a dry mouth
- passing a lot of urine
- fatigue or tiredness
- genital thrush
- blurred vision



If you have type 1 or type 2 diabetes and need to take steroids

We know that if someone already has type 1 or type 2 diabetes and they are taking steroids, their blood glucose levels will be higher and the treatment for their diabetes may need to be increased or changed for the time they are taking steroids.

In type 1 diabetes, people need injections of insulin every day to use the glucose in the blood. Insulin acts like a key, it opens up the cells in the body to let glucose out of the blood and into the cells for energy.

In type 2 diabetes, people may need medication and/or insulin to help the body use the glucose in the blood.

Steroids will affect your blood glucose levels which will rise and therefore it is likely that you will need additional medication and/or an increase in your doses of insulin.

Sometimes people with type 2 diabetes who use oral medication to manage their diabetes may need to switch to insulin temporarily. If you have type 2 diabetes but do not currently need any medication it is likely that you may need to start medication. This may be in the form of tablets or insulin injection(s).

Blood glucose testing

If you are already testing your blood glucose levels at home it is important to continue, although you may need to increase the number of times you test.

If you have type 1 diabetes it is important that you are able to test your blood for ketones.

If you don't currently test your blood glucose levels and you do have diabetes, then you will need to start doing this. You will need to be given a blood glucose meter, be shown how to use it and how to record your blood glucose readings when steroid treatment is started. Please always ensure that you ask for one if it has not been issued.

I don't have diabetes, how will my care be managed if I need steroids?

We know that lots of people will need steroids as part of their treatment at The Christie. To help us identify who may develop high blood glucose levels, a test will be done to measure the amount of glucose in your blood.

Normal blood glucose levels are between 4-7mmol/l.

If anyone not known to have diabetes has a blood glucose reading above 8.1mmol/l then further blood glucose testing at home will be discussed and a home blood glucose meter will be provided with full instructions and a plan of care. Blood glucose monitoring will give much more information and insight into blood glucose readings at different times of the day and whether or not the steroids are having an impact on glucose levels.

What if the blood glucose levels are too high?

If the blood glucose levels are above normal and you have any of the symptoms described on page 1, then this is known as steroid induced diabetes and you may need treatment.

There are options available to improve and reduce the blood glucose levels and help your own insulin to work better. Most of the time tablets can be used to improve blood glucose readings but occasionally some people may need to use insulin which is given by an injection. Injections are usually given into the stomach area and full support is given by the diabetes nurses if this is necessary.

Who may be at risk of developing high blood glucose levels or steroid induced diabetes when taking steroids?

We know that some people may be at higher risk of developing type 2 diabetes and that steroids are likely to cause high blood glucose levels for these people.

The following groups can be at risk of high blood glucose levels when taking steroids:

- those with a family history of type 2 diabetes, for example, a parent or brother or sister
- those of certain ethnicities, in particular those of a South Asian origin
- people with a history of gestational diabetes (diabetes of pregnancy)
- people who are overweight or obese
- if you are a woman who has had a large baby over 4kg
- if you are a woman with a history of polycystic ovarian syndrome

Diabetes support at The Christie

The Christie has diabetes specialist nursing support from Monday to Friday. Your specialist oncology team may refer you to the diabetes nursing service if support or advice is needed during any part of your treatment.

If you wish to discuss any aspect of your care in relation to your diabetes or steroid induced diabetes, please contact the diabetes nurses on **07990 530161** or alternatively by email to **the-christie.diabetes@nhs.net**

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact **the-christie.patient.information@nhs.net**

For information and advice visit the cancer information centres at Withington, Oldham, Salford or Macclesfield. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for
urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week