

Metformin for Hidradenitis Suppurativa (HS)

Information for patients

This leaflet aims to answer any questions which you might have about taking metformin for the treatment of Hidradenitis Suppurativa (HS).

If you have any further questions or concerns, please speak to the healthcare professional caring for you.

Please read this leaflet along with the manufacturer's leaflets for metformin, which will be provided with your medicines. Copies of these leaflets are also available to access from www.medicines.org.uk/emc (Please be aware that the manufacturer's leaflets may not mention HS – see paragraph below, "Taking an unlicensed medicine".)

What is Hidradenitis Suppurativa (HS)?

Hidradenitis Suppurativa is a long-term (chronic) and recurring inflammatory skin condition of the sweat glands. These glands are found in the armpits, breasts, groin, buttocks, and folds of the tummy. It causes blockage of the hair follicles that then results in boil-like lumps, abscesses (painful and swollen areas of pus) and scarring. These areas can result in pus leaking out from open areas.

The cause is unclear and involves multiple factors including hormones, bacteria, smoking, obesity and the immune system. It is important to mention that HS is not caused by poor hygiene and is not contagious. It can be linked to other health conditions including inflammatory bowel disease (such as Crohn's disease and ulcerative colitis), acne and some types of scarring hair loss. Finally, it can mean that you are at increased risk of other health conditions such as high cholesterol, high blood pressure and diabetes.

HS most commonly occurs around the age of puberty and is more common in women and people with skin of colour. It is estimated that this condition affects 1% of the population.

HS can have significant effects on your day-to-day life and impact on your mental health.

What is metformin?

Metformin is an oral medication, commonly used in the management of Type 2 Diabetes Mellitus to treat high glucose levels in the body. Metformin is also used off-label in the treatment of Polycystic Ovarian Syndrome (PCOS) and Metabolic Syndrome. Metformin has been shown to be effective in the treatment of HS, although it is not fully understood how the drug works to treat HS. It is known that HS is associated with PCOS, a condition in which there is commonly an androgen (hormone) imbalance. It has been suggested that in HS, metformin changes the way the body responds to insulin. It acts mainly by blocking the activity of these androgen hormones and reduces glucose resistance.

Taking an unlicensed medicine

Metformin is licensed in the UK for the treatment of Type 2 Diabetes Mellitus. However, its use in the treatment of HS is 'unlicensed', which means that it has not been officially approved (licensed) for HS. As there is considerable evidence for effectiveness of metformin in HS the British Association of Dermatologists recommends its use. Your healthcare professional will discuss with you why they are

recommending metformin, so please ask them if you have any questions. Read the manufacturer's printed information leaflet supplied with the medicine before you start treatment.

How do I take the medicine?

Take metformin exactly as directed by your healthcare professional. Metformin is a tablet taken by mouth and it comes in two different preparations: immediate release which is taken three times a day and modified release which is taken twice a day. Usually, for the treatment of HS, patients are advised to start with one (500mg immediate release or 500mg/750mg modified release) tablet a day and after one to two weeks may increase the dose as directed by their healthcare professional.

To reduce the likelihood of side effects, you should take metformin with or just after food or a meal. You should swallow the tablets whole with a glass of water and must not crush or chew them.

What should I do if I forget to take the medicine?

If you miss a dose of metformin, you should skip the missed dose and take the next dose at the usual time. Do not take two doses to make up for a forgotten dose.

Are there any side effects?

The manufacturer's information leaflet that comes with the medicine will list all known side effects associated with metformin. Please refer to this for further information.

Some of the more important or common side effects are discussed below.

IMPORTANT

You MUST seek urgent medical attention if you suffer from any of the following:

- Wheeziness, difficulty in breathing, swelling of eyelids, face or lips, rash or itching (especially affecting the whole body).

These may be signs of a severe allergic reaction.

- Dyspnoea (difficult or laboured breathing), muscle cramps, abdominal pain, hypothermia (low body temperature), vomiting or asthenia (abnormal weakness or lack of energy).

These may be signs of lactic acidosis.

Very common metformin side effects may include:

- Nausea or upset stomach
- Diarrhoea
- Loss of appetite.

These side effects are most frequent at the start of treatment and normally resolve spontaneously. They may be reduced by taking metformin with food and by spreading the doses out over the day. If side effects continue or are not tolerable, speak to your doctor.

Other side effects may include:

- Changes in taste (common)
- Vitamin deficiencies, particularly vitamin B12 (common)
- Skin reactions including redness (erythema) or itching (urticaria) (very rare)

- Abnormalities in liver function tests of hepatitis, resolves spontaneously with cessation of treatment (very rare).

Metformin does not cause hypoglycaemia (low blood sugar) when taken alone but may contribute to this when combined with other antidiabetic medications.

If you experience any other symptoms which you think may be due to metformin or you have any concerns about side effects, please speak to your doctor, nurse or pharmacist.

Will I need to be monitored?

You will need to have your renal (kidney) function checked before commencing metformin and at least annually thereafter. This is checked with a simple blood test. If you have risk factors for renal impairment or if your renal function begins to deteriorate, you may need to have it checked every six months.

Is there anything else I need to know?

If you become dehydrated (e.g. from severe diarrhoea or vomiting, fever or reduced fluid intake), metformin should be temporarily discontinued and you should contact your GP.

Metformin may need to be temporarily discontinued if you are undergoing a scan which requires the injection of a diagnostic dye into the veins or if you are undergoing surgery under general, spinal or epidural anaesthesia. Your kidney function may need to be checked before metformin is restarted. Your doctor will tell you when to restart your metformin.

Avoid excessive intake of alcohol whilst taking metformin as this may increase your risk of lactic acidosis. Similarly, certain medicines e.g. pain killers such as aspirin, ibuprofen, diclofenac, blood pressure medication or water tablets may increase the risk of lactic acidosis when used together with metformin.

How do I get a repeat prescription?

Your dermatologist will make a decision to start this treatment at your dermatology outpatient appointment. They will then ask your GP to prescribe the medicine for you. You will continue to be followed up regularly at the hospital.

Useful sources of information:

The **Hidradenitis Suppurativa Foundation** is a UK registered charity dedicated to raising awareness, understanding and support for those with HS and can be found at:

www.hs-foundation.org/



If you require further information on HS, please visit the British Association of Dermatologists website at:

www.bad.org.uk/pils/hidradenitis-suppurativa/



Contact us

If you have any queries, please contact the Dermatology team, Lauriston Building, Edinburgh on **0131 536 3520 (Monday to Friday, 9am to 5pm)**.

Please leave an answer phone message with your details (including hospital number if you have this, or else date of birth, and telephone number) with a brief explanation of the problem you are experiencing. You can expect a call back, but please note that this would be a call from an UNKNOWN or PRIVATE telephone number, so do pick up the call as it is likely to be the team getting back in touch with you.

Out of hours

If you think your problem cannot wait until the next working day, please contact an out of hours GP or attend the Emergency Department if you think your issue is life threatening.

NHS Inform provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Website: **www.nhsinform.scot**

NHS 111: You can call 111 when you need medical help fast but it's not a 999 emergency. The service is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. Tel: 111.

Acknowledgements

This leaflet has been adapted from the following resources and references:

https://www.stgeorges.nhs.uk/wp-content/uploads/2023/05/DER_MHS_LP.pdf

Metformin hydrochloride | Drugs | BNF | NICE

Metformin - For the dermatologist - PMC (nih.gov)

How and when to take metformin - NHS (www.nhs.uk)

Metformin 500mg (PL 16363/0111) tablets - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk)

Metformin use in hidradenitis suppurativa - PubMed (nih.gov)

Metformin for the treatment of hidradenitis suppurativa: a little help along the way (piel-l.org)

Hidradenitis-suppurativa-PIL-May-2021.pdf (bad.org.uk)

