**What is Metformin?**

Metformin is used for the treatment of Type 2 diabetes. It is been used in humans since the 1950’s and is generally the drug of first choice for Type 2 diabetes. Metformin is a very safe drug if taken properly. It may be prescribed alone or in combination with other medicines for diabetes.

**What does Metformin do?**

Metformin lowers your blood sugar levels by making your body more sensitive to the insulin that your own pancreas produces. It also reduces the production of glucose by your liver.

Metformin can help some people lose weight, but is not recommended solely for this purpose.

**How is Metformin given?**

Metformin is usually given as a tablet. It is started at a low dose (one or two tablets daily) and the dose is slowly increased over several weeks. In this way your body gets used to Metformin and this reduces the chances of getting any unwanted side effects.

**What are the side effects of Metformin?**

Metformin is generally well-tolerated and most people do not get any side effects. However, it can cause side effects in some people. A full list of possible side effects is provided in the ‘patient leaflet’, which is found in all tablet boxes.

More than 1 in 10 people can feel sick or actually be sick after starting Metformin. Metformin can also cause diarrhoea, stomach pain and loss of appetite. If you experience these side effects, your doctor or nurse may advise you to reduce the dose or in certain cases may advise you to stop the medicine. Taking Metformin with meals can help reduce these side effects and usually they settle in most people after a few weeks. A slow-release version of Metformin, which is taken once a day, is sometimes recommended to people who are unable to tolerate the standard preparation.

Some of the other less common side effects of Metformin include: taste disturbance, reduced vitamin B12 levels, abnormal liver function results, skin rash and severe itching.

Please speak to your doctor or nurse if you have side effects that are not improving. Metformin has been associated with a rare condition called ‘lactic acidosis’. ‘Lactic acidosis’ is associated with the build-up of acids in your blood and is most commonly seen in people admitted with severe illness and/orinfection.

**You should stop taking Metformin if you become very unwell, especially if you have vomiting and/or diarrhoea or are not eating and drinking.** You can start taking Metformin again once you are back to normal health. You should inform your doctor or nurse at the earliest opportunity that you have stopped your Metformin.

The risk of ‘lactic acidosis’ is increased if your kidneys do not work well. Your doctor or nurse will monitor your kidney function periodically by doing a simple blood test. Your doctor or nurse may ask you to stop taking your Metformin if your kidneys are not functioning well. Metformin may also be stopped temporarily if you get admitted to hospital for some other reason or if you are due to get a scan that involves the injection of a dye (contrast).

**When should Metformin not be used?**

Metformin is usually only given to people with Type 2 diabetes. People who have severe kidney or liver problems should not take Metformin.

Metformin is safe to be taken in pregnancy and while breast feeding.

**Getting the most from your treatment**

Continue to take Metformin regularly unless your doctor tells you otherwise. It is important that you keep your regular clinic appointments. If you have been advised by your doctor or nurse about changes to your diet, stopping smoking or taking regular exercise, it is important that you to follow this advice.

Generally if you are on Metformin alone you do not need to check your blood sugar levels, unless otherwise recommended by your doctor or nurse.

**NOTES**

****

**Edinburgh Centre for Endocrinology and Diabetes**

**Metformin**