

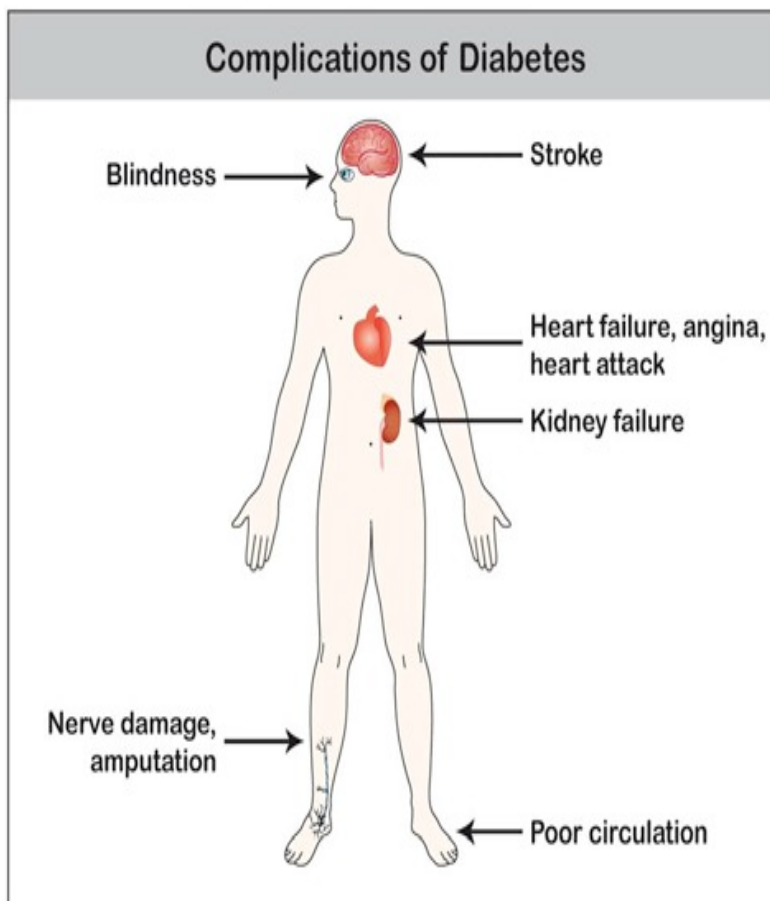
## Information for patients

### Metabolic Neuromodulation Therapy

**A procedure for people taking oral medicines for Type 2 diabetes who still have high blood sugar levels**

#### **Why is it important to get your blood sugar levels down if you have Type 2 diabetes?**

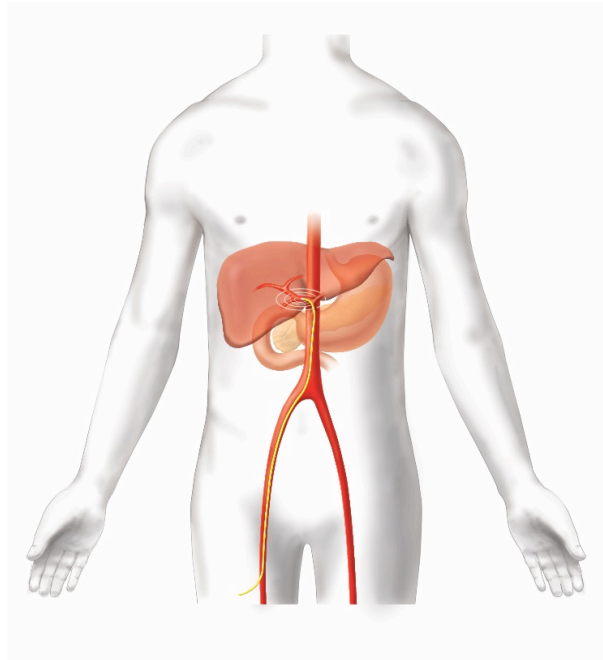
Some people with Type 2 diabetes find it really hard to get their blood sugar levels down even though they take their medicines, exercise and eat healthy food. If you have Type 2 diabetes and high blood sugar levels for a long time you are at a higher risk of getting other health problems such as:



## **What is Metabolic Neuromodulation Therapy?**

(You say *met-a-boll-lick new-ro-mod-u-lay-shun therapy*)

This is a new procedure for people on tablets for Type 2 diabetes who still have high blood sugar levels. You only have to do the procedure once. A catheter (very thin tube) is passed through the femoral artery in your right groin into the artery that leads to your liver. Something called radio frequency energy is passed through the catheter into the arteries (big blood vessels) in your liver. This energy scars the nerves leading to your liver. Radio frequency energy and catheters in blood vessels have been used in medicine for more than 75 years.



*A catheter (very thin tube which will be removed after the procedure) is passed through the femoral artery in your right groin into the artery that leads to your liver.*

## **Why are the nerves in my liver important?**

Your liver helps keep your blood sugar levels down by taking more sugar out of your blood when your blood sugar levels are high. Other research has shown that scarring the nerves in your liver helps your liver to take out more sugar. If this procedure works then your blood sugar levels will be lower which will help your diabetes.

## **What do I have to do to have this procedure?**

You will come into the hospital ward on the morning of your procedure. You will be seen by the doctors and nurses in the ward then you will be transferred to a place in the hospital called the Cardiac Catheter Suite. This place is where these sorts of procedures take place. You will be given some medicine that will make you feel a bit sleepy and then a local anaesthetic will be injected into your right groin. This will stop you feeling any pain when the catheter is put into your femoral artery and then up into the artery in your liver. Up to 8 lots of radio frequency energy go into the artery to scar the nerves that lead to your liver. This will take about two minutes. The whole procedure will take about one hour.

If you feel any pain tell the doctor and they can give you some pain medicines. When the procedure is finished a special seal called an angioseal is put on your groin where the catheter went in. If there is bleeding then the doctors will put pressure on your groin to stop it bleeding. You will need to stay in bed for at least four hours after the procedure. You will need to stay in hospital overnight. In the morning before you go home the doctors will check your weight, blood pressure and heart rate. The doctors will also take some of your blood before you have any food.

## **Could I have any side effects after the procedure?**

Tell the doctors if your tummy feels sore. They will give you some pain medicine for this. Where the catheter went into your groin you might have a very small amount of bleeding, or bruising or a small lump. The doctors will put a small dressing on your groin.

## **Are there any other risks from the procedure?**

The main risks are the same as similar treatments to arteries. Possible risks could be:

- damage to the artery in your liver
- kidney damage
- blood clots in your arteries
- bleeding

There may be other risks that the researchers do not know about or expect to happen. These other risks could be serious. If you have other questions talk to your GP or the doctor at the hospital or someone from the research team. They will answer your questions and give you more information.

Metabolic Neuromodulation Therapy is performed in a research study, the COMPLEMENT Study. More information can be found in the Participant Information Sheet and Consent Form, and through discussions with the study team.

**If you would like more information please call  
0800 004626**