

Patient information

Penicillamine Challenge Test

What is a Penicillamine Challenge Test?

Your doctor has requested that you have an investigation known as a 'Penicillamine Challenge Test'. This test is performed once in order to find out if you have a rare genetic disorder known as Wilson's Disease.

What is Wilson's Disease?

People diagnosed with Wilson's Disease are unable to get rid of excess copper from the body. Copper is obtained from certain food, however, only a small amount is required to remain healthy. The liver filters excess copper and it is taken away via bile produced in the liver, which is then released into the gut. Too much copper in the body is poisonous and if there is a build-up in the liver, it is released into the blood stream and travels to other organs in the body such as the brain, kidneys and eyes. If treatment is started in the early stage of the disease, it usually works well and people diagnosed with this can expect to live a normal life.

Risks and complications

If you are allergic to Penicillin you will not be able to have this test.

In order to ensure that it is safe to give you Penicillamine, please inform the nurses looking after you of any medication you take or bring a list with you of any medication you are currently taking. It is especially important to tell us if you take antacid medication for heartburn or indigestion.

There are very few risks associated with Penicillamine when it is taken for the purposes of diagnosis. Occasionally some nausea and vomiting may be experienced. Please tell the nurse looking after you if you experience any symptoms.

Procedure

On the day of your test you will be asked to attend the Medical Treatment Unit (MTU) at 8.30am for approx 30 minutes. You may have fluids such as water and drinks without milk prior to attending but no food, as this prevents the Penicillamine being absorbed.

You will be given Penicillamine tablets to take at 8.30am and we will give you a further dose to be taken at home 12 hours after the first dose. When the first dose is taken at the MTU you will start a 24 hour urine collection. This is collected in a special 'acid washed' bottle, therefore, care must be taken when handling the bottle and men must not insert the penis directly into the bottle. You may be given more than one acid washed bottle if required.

Normal diet and fluids may be started 1 hour after the first dose of Penicillamine in the morning and continued throughout the day. Your final evening meal should be finished 3 hours prior to the 2nd dose. This is so that your stomach has 3 hours to empty prior to taking the final dose. One hour after taking the 2nd dose of Penicillamine in the evening, you may eat and drink as normal.

Continue to collect your urine for 24 hours after you started including through the night and the following morning.

After care/discharge advice

Please continue to collect your urine as described above until the 24 hour period is finished. On completion, please drop urine bottles into Pathology reception situated on the ground floor of West Suffolk Hospital. Alternatively you may drop them off at the specimen reception at the health center in Sudbury, if that is more convenient for you. You will not need to return to the MTU.

Results for this test take 4-6 weeks to come back as the test is done at Charing Cross Hospital in London. Your consultant will contact you by letter once they have been received.

Benefits

Penicillamine acts by binding copper in the body which is then excreted in urine. By collecting urine for 24 hours the laboratory staff can assess whether excess copper has been carried out of the body after you have taken Penicillamine. This information helps your doctor make a diagnosis.

Treatment

If you are diagnosed with Wilson's Disease it is essential that you have treatment for life; initially to clear the excess copper and then to prevent excess copper building up in your

body in the future. The earlier treatment is started the better and people diagnosed with Wilson's Disease can expect to live a normal life with treatment. Treatment consists of taking medication; this may be Penicillamine or a similar drug. Your doctor will discuss what is best for you.

Remember

We are here to help. If you have any worries or questions after reading this information, please do not hesitate to contact the Medical Treatment Unit (MTU).

MTU: 01284 712986

8:00am – 7.00pm Monday to Friday

If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the disabledgo website link below:
<http://www.disabledgo.com/organisations/west-suffolk-nhs-foundation-trust/main>