

Carbon 13 Urea Breath Test

You have been advised to have a Carbon 13 Urea breath test to help find the cause of your symptoms. The purpose of this information sheet is to explain your forthcoming breath test and covers frequently asked questions.

What is a Carbon 13 breath test?

A breath test examines expired air for an increased concentration of carbon dioxide that indicates *Helicobacter pylori* infection. All foods contain a substance called Carbon 13 in varying amounts and can be detected in the expired carbon dioxide. The amount depends on the type of food you have eaten.

What should you expect?

The preparation

- Your stomach must be empty for the test. You are therefore asked to fast for 6 hours prior to the test. This means no food or fluids.
- You are also asked to stop your PPI for 2 weeks. This is the medication which protects your stomach including omeprazole, lansoprazole, esomeprazole and pantoprazole.
- You are asked to stop any therapy against bacterial infection (antibiotics) for 4 weeks.
- You should not smoke on the morning before the test.

The procedure

On arrival to the department, you will be asked to wait in the waiting area. If a relative has come with you, they may wait in the department. You will be escorted to a seating area for the breath test. Your admission nurse will first record any details and ask you a few questions. The procedure takes approximately 40 minutes and is not painful or unpleasant.

- First of all you will be asked to breathe into two test tubes.
- Then you will be asked to drink 200ml of orange juice or citric acid to delay stomach emptying. Immediately after you will be required to drink some water containing urea solution, this is around 30ml.
- The admission nurse will then ask you to wait for 30 minutes to allow the urea to be absorbed into the lining of the stomach.
- Following the 30-minute rest, you will be asked to blow into another two test tubes, and then the procedure is finished.

The results

If *Helicobacter pylori* is present in your stomach, the bacteria will break down the carbon 13 urea releasing carbon 13 into the carbon dioxide in your breath. The referring consultant will contact you regarding the results of your test.

Risks

- There are currently no known side effects for this test.

Benefits

- Non-invasive.
- Highly sensitive (98.7%).
- Reliable both for diagnostic and for confirmation following eradication treatment.

Alternatives

- Invasive gastroscopy with biopsy.

Additional information

- To view the Lister and New QEII site maps for navigating your way around our hospitals, please visit our Trust website - www.enherts-tr.nhs.uk
- If you have any questions regarding the procedure, please call the nurses' enquiry line (please see below).

Useful contact details

East and North Hertfordshire NHS Trust:

- Website www.enherts-tr.nhs.uk
- Telephone 01438 314333

Endoscopy Unit - Lister and New QEII:

- Lister: Telephone 01438 288603 - Option 1
- New QEII: Telephone 01707 247728

Nurses' Enquiry Line

- Telephone 01438 288603 (please ring between 8am - 10am and 4pm - 6pm) - Option 2



Leaflet information

You can request this information in a different format or another language; please speak to your doctor or nurse.

Date of publication: August 2024

Version number: 03

Author: Emma James

Reference: Endoscopy

Review Date: August 2027

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