

24 hour Blood Pressure monitoring

Introduction

Your doctor has advised you to have your blood pressure monitored over 24 hours. This leaflet gives you information about what the test will involve.

About 24 hour blood pressure monitoring

The test involves taking multiple blood pressure (BP) readings instead of a single reading, using a cuff around one of your arms. Your blood pressure is not constant and tends to vary from minute to minute and day to day. It sometimes increases a lot with exercise, excitement or in highly stressful situations and it is usually lower when you are at rest or asleep. These monitors are fitted at both Cheltenham General and Gloucestershire Royal Hospitals within the Cardiac Investigations Departments.

Why do I need to have the test?

There are various reasons for having the test and hopefully your doctor has already discussed with you, why it would be helpful in your situation. Some examples include fainting, high or low blood pressure (hypo or hypertension).

The results from monitoring your blood pressure over 24 hours will allow the doctor treating you to see how your blood pressure reacts and plan the treatment for your symptoms.

Sometimes the test is used to investigate whether 'white coat hypertension' has been responsible for your high blood pressure readings.

This means that your blood pressure is higher when it is taken in a medical setting compared to when taken at home. The doctor would recognise this when examining the test results and may mean that unnecessary treatment can be avoided.

Reference No.

GHPI1075_08-24

Department

Cardiology

Review due

August 2027

Patient Information

What will the test involve?

When you arrive at the hospital, you will need to report to the department's reception desk as noted on your appointment letter. The staff will then call you through into a clinic room and take some initial readings and check that the monitor is working correctly. Please bring a list of your current medication with you.

You will be shown how you can take extra blood pressure readings at home. This is important for patients who are having the test because of specific symptoms such as dizziness or palpitations. If these symptoms happen during the 24 hour monitor it is useful to take a reading at that moment in time.

When the fitting of the monitor and attached cuff is complete the monitor will be placed either on a belt (see diagram below), which you will need to wear around your waist throughout the test, or into a pouch.

At night you may undo the belt and place the monitor under your pillow. The cuff and the monitor will stay attached to you for the next 24 hours.

You will need to make sure that you can attend the clinic at the same time the following day.

The appointment to fit the blood pressure cuff will take about 20 minutes.

When you return the following day, the monitor removal appointment usually takes about 15 minutes.



Figure 1: The image above shows how the monitor is set up on your body. The cuff will be wrapped around your arm and a lead will connect this to the monitor, which sits in a pouch on the waist belt.

**Patient
Information****Are there any risks?**

- The cuff can become quite tight when inflating to take a measurement. This may cause minor, short-term discomfort but should not be excessive. The device has a safety mechanism which makes sure that the cuff does not remain inflated for more than 2 minutes.
- It is common to have some itching around the cuff as it is kept in place for 24 hours. Once the cuff is removed at the end of the test, any itching at the cuff site should disappear.
- It is expected that you will experience 'pins and needles' in your arm and hand during inflation and deflation of the cuff. This is normal and the sensation should disappear soon after the cuff has deflated.
- Rarely, some people notice tiny red or purple spots on the skin of their forearm. This is due to the pressure of the cuff and may take 1 to 2 days to disappear.
- Some people may have difficulty dressing and undressing while the monitor is on. You may need to have someone at home to help you.
- You may also find that your sleep is disturbed as the cuff inflates during the night.
- Generally, your non-dominant arm is used for the test but please let us know on the day if you have ever had lymphoedema or any lymph nodes removed from the armpit or if you have a fistula for dialysis. This will determine which arm is used for the test.

Is there anything else I need to know?

Please make sure that the monitor does not get wet or damaged in any way. For this reason you will not be able to have a bath or shower during the test.

You may drive to and from the clinic.

Wearing a loose fitting top with short sleeves might make it easier for you to get dressed and undressed and may also be more comfortable for you while wearing the monitor.

If you have a job with light duties you will be able to follow a normal working day but you must avoid any heavy lifting.

Patient Information

The monitor is programmed to take a reading every 30 minutes during the day and less frequently at night. If the monitor has not successfully recorded a reading, it will try again after 4 minutes.

The monitor may struggle to get a reading if there is too much arm movement. We recommend that during a measurement you should keep your fingers still and your arm straight and steady.

If for any reason you wish to take an additional reading (for example if you have dizzy spells), press the start/stop button once. Record the time and reason for taking a reading in your diary. If you wish to stop a reading which had already started, press the start/stop button firmly once.

Please record the time, dose and name of any medication taken during the test along with any symptoms you experience.

How will I get the results?

The results of the test will be downloaded, printed and sent to the referring physician.

If your test has been requested by your GP you will need to make an appointment to see them a month after the test to get the results.

If the referring physician is working within the hospital, they will contact you regarding the results.

Contact information

If you have any concerns while the monitor is on, please contact the department where it was fitted.

Cheltenham General Hospital

Tel: 0300 422 2278

Monday to Friday, 9:00am to 5:00pm

Gloucestershire Royal Hospital

Tel: 0300 422 8281

Monday to Friday, 9:00am to 5:00pm

**Patient
Information**

Further information

British Heart Foundation

Heart Helpline: 0300 330 3311

Tel: 0300 330 3322

Website: www.bhf.org.uk

British and Irish Hypertension Society

Website: www.bihsoc.org

References

- 'Understanding High Blood Pressure'. Published by the British Hypertension Society (BHS). Suntech Medical Instruments Ltd, Oxon
- 'Blood Pressure'. Published by the British Heart Foundation as part of the Heart Information Series (Number 4)
- Novacor Diasys Integra 2 'Ambulatory Blood Pressure Monitor – Patient Guide'

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Acknowledgement

Thank you to Novacor UK for giving permission to use the image included in this leaflet.

Making a choice

Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation

* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>