



Coventry and Warwickshire Cardiovascular Network

Tilt table tests

This leaflet explains why you need a tilt table test and what to expect when you attend for your test.

The tilt table test

You've been asked to have a tilt table test at the hospital.

You'll receive a letter in the next few weeks telling you the time of your appointment and where to go when you arrive.

This leaflet gives you more information about:

- · what to do before coming for your test
- what to bring with you
- what'll happen during the test
- what to do when you're ready to go home.

Why do I need a tilt table test?

Your consultant has put you forward for this test because you've been experiencing episodes of collapse (syncope). This is the medical term for fainting or blackouts (loss of consciousness). You may also suffer from frequent dizziness and extreme light-headedness.



Syncope happens when there is not enough blood flow to the brain. This starves it of essential oxygen and nutrients for a short time. Often, a sudden drop in your blood pressure and heart rate causes syncope.

Episodes of syncope tend to happen irregularly and usually with no one present. This means your doctor has little information for a firm diagnosis. In this situation, it's often helpful to do a tilt table test. Here we try to bring on your symptoms while monitoring you in the hospital setting.

The staff supervising the test will monitor your heart rate and blood pressure continuously. They can end the test quickly if you feel unwell.

What is a tilt table test?

We use the tilt table test to determine the cause of your fainting or blackouts. It's a painless test which takes about one hour as an outpatient appointment. The test is done as one in a series of tests.

We do the test in a room equipped with a range of heart and blood pressure monitors and the tilt table itself. The tilt table is an electronically-controlled trolley bed. It allows you to lay flat on your back or be raised and supported into the almost upright position (70-80 degrees from flat).

A comfortable strap or straps will be placed around your body to keep you secure as the table is tilted. There is a footplate at the end of the bed to rest your feet on and stop you from slipping off the bottom.

During the test, we monitor your heart rate and blood pressure while lying flat and standing in an almost upright position. This change in position stresses your body's control mechanisms keeping your heart rate and blood pressure at an even level. Monitoring this system may give us clues on the cause of your symptoms.

If we detect no abnormal changes 20 minutes after being tilted, we'll give you a spray under your tongue. This may provoke an episode.

If you experience a fainting episode during the test, the staff will make this as short as possible.

If this test proves negative and you do not faint during the test, you'll probably need other tests to establish the reason for your fainting attacks.

Until we find the reason for your fainting, offering informed advice or appropriate treatment is not always possible.

What are the risks?

The tilt table test is generally very safe. You'll be closely monitored and safely and comfortably secured onto the table throughout the test. You'll usually have two members of staff in attendance experienced with tilt table tests.

If you faint during the test, you'll most likely recover once the table is lowered and you're lying flat on your back. Very occasionally, you may need some medication by injection to help you recover. This will help by increasing your heart rate and blood pressure.

You're also likely to experience the same feelings of tiredness as after one of your fainting episodes.

Preparing to come for your test

- Do not eat a heavy meal before you come for your test. This could increase your chances of feeling nauseous during the test.
- It's also advisable not to drink coffee, tea, or any other stimulant drinks such as coca cola or alcohol before your test.
- Take your usual medication on the day unless you've been told not to.
- Please bring in a list of the medicines you are on in case the staff need to see them.
- You should not drive for the rest of the day after your test. You'll need someone to bring you into the hospital and take you home again. Your companion can wait for you while you have the test.

- If you do not have someone to bring you for your test and take you home afterwards, please let us know as soon as you receive your letter. Phone your consultant's secretary during office hours on 024 7696 5669.
- Wear loose-fitting clothing that's easily removed, like a top and trousers or a top and skirt. This will make it easier when you're asked to put on a hospital gown before you go for your test.
- Please bring in a change of clothing in case you need one. On rare occasions, if the test is positive, you may lose bladder control.

For female patients:

- We'll try to make your appointment at a time when you're not having a period.
- Let your consultant's secretary know if you think you could be pregnant before you come in. This allows us to decide whether you should have the test.

What happens when I arrive at the hospital?

The letter you receive with your appointment date and time will have instructions on where to go for your test.

- Please arrive 15 minutes before your appointment time. Be prepared to stay for at least an hour.
- You'll be met by the staff looking after you during your test.
- They'll escort you to the test room and discuss the procedure with you. If you have any concerns or questions, please ask them now. The test room is a pleasantly warm, darkened room to help you relax.
- You'll be asked to put on the hospital gown.
- Please make sure you go to the toilet just before you go for your test.

The tilt table test

The staff will attach several electrodes to stick-on patches that they'll
put onto your chest. They'll place a blood pressure cuff on your arm and
a small monitor on your finger.

The electrodes will monitor your heartbeat throughout the test. The arm and finger cuffs monitor your blood pressure.

As the test progresses, you'll feel the blood pressure cuff on your arm inflate and feel tight at regular intervals.

One of the finger monitors will also feel tight. It'll be measuring your blood pressure throughout the test.

- You'll get on to the tilt table, with help if needed. You'll be made comfortable lying down before you're strapped in to keep you safe when the table tilts. Your feet will rest against the footplate at the end of the table bed.
- You're told when the test begins; from then, it's timed until finished.
- Try to relax as much as possible during the test.
- Please do not talk during the test.
- The first part of the test will last between 5 and 15 minutes. You'll be resting quietly whilst we monitor your heart and blood pressure.
- At the end of this time, we'll put the table gently into the almost upright position. You'll remain here for 20 minutes. Please try to keep as still as possible during this time.
- You may experience a warm, heavy feeling in your legs during the time you are standing. This is nothing to worry about and will disappear once you're lying down again.
- This period may pass uneventfully. Or it may cause you to faint or have other significant symptoms such as dizziness/light-headedness, feelings of nausea, or you may feel clammy.
- Please let us know if you begin to feel unwell. We'll make observations and may halt the test.
- If you continue to feel well without your usual symptoms, the staff may give you a couple of sprays of GTN (glyceryl trinitrate) into your mouth. This can give you a headache.
 - We give GTN to see if it brings on a faint by reducing your blood pressure and heart rate.

Occasionally, you may have the artery in your neck massaged to check
if this brings on an abnormal response. The massage is generally
painless. The staff will explain this in more detail before they start.
 You'll remain in the standing position during this time. If these
techniques do not cause your symptoms to develop, we'll return the

table to the flat position. We'll then monitor you for a few more minutes.

- After the test, you'll be helped off the table. You can then get dressed before returning to your companion in the waiting area.
- If you've had a fainting attack, we may take you back to the waiting area in a wheelchair. Or you'll return to the waiting area on foot and be advised to have a drink before going home.

The test results

You should get the results of your test when it's finished.

The test is positive if it causes you to have an episode of fainting. We'll keep a record of your heart and blood pressure monitoring to help the doctors decide on treatment options.

If the test is positive, you'll usually be advised to

- drink more fluids
- possibly increase your salt intake
- possibly start some 'Tilt' training exercises. These involve strengthening the body's control mechanisms by progressive periods of standing.

You may be given leaflets about these measures and information about tilt training exercises.

The test is **negative** if you remain symptom-free on the tilt table and there are no abnormal changes in your heart rate or blood pressure. You may need more investigations to find the cause of your fainting episodes. You'll need a further outpatient clinic appointment.

Any further appointments are usually sent to you by post.

When you return home, it's recommended you rest after your test. This is especially important if you have a positive result. You'll most likely feel tired like you do after one of your fainting episodes.

Please **contact your GP** if you have any other concerns after you have returned home.

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Useful Information

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Have your say. Scan the QR code or visit: www.uhcw.nhs.uk/feedback

Document History

Department Cardiac services

Contact: 24794 Updated: August 2023 Review: August 2025

Version 8

Reference: HIC/LFT/886/09

Tilt training exercises

If you have been found to have an abnormal tilt test, you may be advised to start some simple exercises which can be highly effective at preventing syncopal episodes (blackouts).

You will need to do them daily.

They are so simple that many people dismiss the idea that they can work. Some people have syncope (blackouts/fainting) due to an abnormality of the 'autonomic nervous system'. This is the part of the nervous system that controls the body without us having to think about it.

Examples of this are temperature control/sweating, control of our heart rate and blood pressure.

The autonomic nervous system is made up of two balancing systems:

- The sympathetic nervous system
- The Parasympathetic nervous system

Usually, these two mechanisms are able to maintain the blood pressure at a fairly stable level by relaxing and constricting blood vessels throughout the body. This is why we don't collapse every time we stand up.

In some people, the autonomic system becomes unbalanced from time to time. This can result in a fairly sudden fall in blood pressure, heart rate or both. If this is severe enough, it will result in loss of consciousness.

Like any system that is not working efficiently, it can be improved by training exercises. For the autonomic system, this involves actually stressing the autonomic system – normal exercise will not help.

The best way to stress the autonomic system is to stand still in an upright position. By gradually increasing the period of standing, you can improve the function of the autonomic nervous system. This often results in a very significant reduction in symptoms.

It is important to realise that this doesn't happen quickly.

You will need to continue with standing exercises for a few weeks before you're likely to notice an improvement.

When you start tilt training, find a safe place where you will not hurt yourself if you fall. Avoid anything close by with sharp edges or stone floors. It's best to have a chair at your side so that you can sit down quickly if you feel unwell.

If possible, do these sessions when there is someone else around in case you need help for at least for a week.

If you start to feel your symptoms, then sit or lie down immediately.

Below is a suggested training regime. But this can be varied according to how you feel while doing the training. If you begin to feel lightheaded before the end of the selected time, then just sit down.

The next day, stand for the same length of time and only extend the time if you no longer feel lightheaded.

Stand with your back to the wall with your feet together. (A little away from the wall, so that you are not touching it)

Day 1 and 2 10 minutes
Day 3 and 4 20 minutes
Day 5 and 6 30 minutes
Day 7 onwards 40 minutes

(Or two 20 minute sessions)