



Information for  
patients and  
carers

## Routine Vestibular Assessment

This leaflet gives you information about the vestibular assessment  
which you have been referred for

## What have I been referred for?

You have been referred for a vestibular assessment due to vertigo, dizziness and/or balance problems. A vestibular assessment may allow us to assess how well the various parts of your vestibular (balance) system are working.

An audiologist with specialist experience in the diagnosis and treatment of vestibular problems will take a detailed history to determine which test/s may be most appropriate to assist in your diagnosis. A routine assessment usually consists of a Video Nystagmography (VNG) test, a Positional/Positioning test and/or a Caloric test; see below for more information.

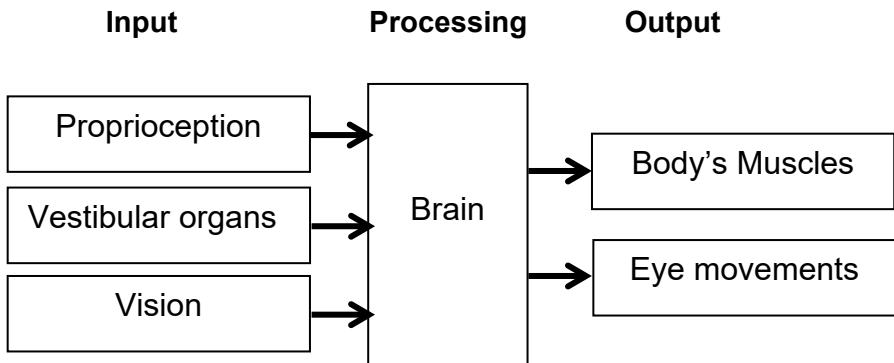
This leaflet gives an overview of the vestibular system and detail about the tests you may undergo as part of your routine vestibular assessment

# What is the vestibular system?

The vestibular system has three main groups of senses

<b>Vision</b> (your eyes)	To see where you are
<b>Proprioception / Somatosensory</b> (sensors in your skin, muscles and joints)	To feel where you are
<b>Vestibular organs</b> (your balance organs in your inner ear – you have one in each ear)	To sense when your head moves

The brain uses signals from these 3 senses to send signals to the muscles (e.g. leg and eye muscles) to maintain your balance and your gaze. This ensures that we can stand and move about without stumbling and that our eyes can remain focused on what we choose to look at.



If any of these three senses are not working properly people may experience vertigo (feeling that you or your surroundings are spinning) dizziness and/or unsteadiness.

## The Video Nystagmography (VNG) test

Eye movements are one of the main outputs from the vestibular system. This means we can tell a lot about how the vestibular system is working by looking at your eye movements. A skilled clinician can observe and analyse your eye movements, when a video camera is used to record the eye movements onto a computer, it is known as Video Nystagmography (VNG).

The clinician will look at the output of your eye movements under different test conditions, e.g. while you are following some lights projected onto a screen or while your eyes are in the dark. By looking at your eye movements, the clinician can assess how well your brain coordinates the main inputs from your eyes and ears.



Image: Video Nystagmography (VNG) headset to record eye movements

## Positional and positioning test

Some people experience their symptoms when they put their body or head into certain positions. Positional and positioning tests record your eyes' responses when you are in a specific position or while moving into a new position. Watching your eye movements while doing these tests can help the clinician diagnose the cause of your symptoms which can often lead to effective treatment.

## The Caloric test

The caloric test involves running warm and/or cool water into your ear canal while you lie down on a couch wearing the Video Nystagmography (VNG) headset. The test can also be done with air flowing into the ear canal. The temperature change stimulates your vestibular organs. This usually causes a slight spinning sensation lasting one to two minutes.

The clinician can analyse your eye movement output during this test to assess the function of your vestibular organ input. This gives information about each ear separately and whether your ears are working as a pair.

## How long will the appointment take?

The appointment time depends on which tests you require. This decision is made by the clinician based on the symptoms you describe at the start of your appointment.

A full balance assessment usually takes one and a half hours. This includes time for the clinician to explain the results, discuss your management plan and answer any questions.

## Important preparation for your appointment

### **Ensure that both of your ears are completely free of wax.**

We cannot carry out some of the tests if there is any wax in your ears. For this reason your referring clinician may have checked your ears prior to referring you.

### **Do not consume any alcohol, take recreational drugs or any of the following medications for at least 48 hours prior to your appointment:**

- Prochlorperazine (Stemetil or Buccastem)
- Cinnarazine (Stergeron or Stergeron)
- Cyclizine (Valoid)

Taking any of the above may significantly affect the reliability of the testing.

### **Do not wear eye make-up to your appointment**

Eye make-up can obscure the camera making it impossible to record of your eye movements.

### **We strongly recommend attending your appointment with a friend or relative.**

Some of the tests can provoke symptoms of dizziness, vertigo or unsteadiness and you will be in the dark for a considerable part of the assessment. We therefore strongly advise that you have a friend or relative bring you to and from your appointment. You may also like to have them present to support you during the assessment. You are advised not to drive immediately after the caloric test.

## What if I have a question about the assessment?

If you have any questions or concerns, please contact the Hearing & Balance department:

Audiology Department (Hearing & Balance Service)  
Royal Preston Hospital  
Sharoe Green Lane  
Fulwood  
Preston  
PR2 9HT

Tel: 01772 522751

Email: [hearing.balance@lthtr.nhs.uk](mailto:hearing.balance@lthtr.nhs.uk)

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.patient.co.uk](http://www.patient.co.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

Read more about the balance system on:

Ménière's Society's website: [www.menieres.org.uk](http://www.menieres.org.uk)

Free eBook by Professor Lucy Yardley

[www.menieres.org.uk/information-and-support/vertigo-and-dizziness-by-professor-lucy-yardley](http://www.menieres.org.uk/information-and-support/vertigo-and-dizziness-by-professor-lucy-yardley)

All our patient information leaflets are available on our website for patients to access and download:

[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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If you want to stop smoking you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

**Gujarati:**

આ માહિતીને સમજવામાં સહાયતા જોઈતી હોય તો કૃપા કરીને પૂછો. આ માહિતી મોટા છપાણ માં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

**Romanian:**

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi.”

**Polish:**

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

**Punjabi:**

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਲ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪ੍ਰਿੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਲ ਮੁਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

**Urdu:**

دوسری زبانوں اور ریڈی اگر آپ کو ہی معلومات سمجھنے کے لیے مدد کی ضرورت ہے تو  
یہی چھپا ہی میں ابی دست ہو یسکت ہے براے مہر یمان پوے چھہ ہی۔ معلومات

**Arabic:**

مطبوعة بأحرف كبيرة وبلغات إذا كنت تريد مساعدة في فهم هذه المعلومات يرجى أن تطلب  
أخرى يملفن تو فسير هذه المعلومات

**Department:** Audiology

**Division:** Surgery

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