

# Vestibular-evoked Myogenic Potential (VEMP) test

# **Balance clinic**

This leaflet is for patients with dizziness who have had the initial balance test battery and are now to have further testing with VEMP testing. It is one of the tests we can use to evaluate the function of your balance organs individually.

# The VEMP test

#### Purpose of the test

Some types of dizziness and balance problems can originate in the inner ear (vestibular system) and/or the nerves attached to inner ear. Each of our tests we carry out explores this system in a different way.

Part of the vestibular system are 2 organs called the Otolith organs which sense gravity and acceleration. The VEMP measures the function of these compartments. There are two versions of the VEMP test, called the ocular VEMP (oVEMP) and the cervical VEMP (cVEMP). Your clinician may use either test. It may not tell us the exact cause of your dizziness but the test can help locate if your dizziness is coming from these structures. This can help narrow down the possible causes for your symptoms.

#### What to expect during the test

If you have been given this document we may consider using this test at your appointment. In line with our infection control procedures, we aim to limit the time taken for testing. These instructions aim to explain the procedure to help reduce the time it takes to perform and to answer more common questions, in advance of your appointment.

The test measures your otolith function in response to a loud clicking sound (the sound is presented into each ear via a spongy insert) using some wires (leads) that we attach to your skin with sticky pads. It will be conducted while you are seated.

### Appointment

#### **Pre-appointment information**

- Please **don't** wear any neck jewellery, or make-up as it can interfere with how well these sticky pads connect with your body and may prevent us from measuring response accurately
- Please do wear loose fitting clothing, especially around the neck area
- We will prepare your skin by using a grainy paste on it beforehand
- We may repeat the test two or more times on each ear (a 'run') and each lasts around 60 seconds
- oVEMP only for the oVEMP the sticky pads will be placed on your forehead and under your eyes (see below left). During each test run, you will be asked to look up at the ceiling
- cVEMP only for the cVEMP the sticky pads will be placed on your forehead and on a muscle in your neck (see below right). During each test run, you will be asked to look over your shoulder

#### **Appointment duration**

The appointment will be booked for an hour, but the actual test (one preparation has occurred) will typically take 30 minutes to an hour.

#### What you may experience

The sound used to conduct the test is loud but short-lived. However, it is unusual to have any dizzy symptoms with this test. You may experience neck discomfort (cVEMPs only) as we require you to contract the muscles on the side of your neck. If this occurs, please let us know, as this may require us to stop the test.

#### Are there precautions or potential risks for performing the VEMP test?

There are few restrictions for performing the VEMP test. It may not be suitable to perform cVEMPs in some patients where there are restrictions to neck, neck pain or blood circulation in the neck. This will be checked prior to booking you in for a VEMP appointment.

In addition, it may not be suitable to perform VEMPs in some patients with tinnitus or those with a sensitivity to loud sounds. It is uncommon but in patients with tinnitus there a risk that VEMPs can make your tinnitus worse (particularly if your tinnitus is made worse by loud sounds). Again this will be checked prior to booking.

#### Can I decline to have the VEMP procedure performed?

If you do not wish to go ahead with the test or have any questions, contact your clinician to discuss them before you attend the clinic, so we are able to use the time effectively in clinic to perform testing on other patients.

## **Contact us**

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