
Understanding Electronystagmography-Videonystagmography (ENG-VNG)

Electronystagmography (ENG) and videonystagmography (VNG) are a series of tests that evaluate the inner ear by tracking and recording eye movements. During ENG, small sticky patches (electrodes) are put on the skin near your eyes. During VNG, you wear a pair of goggles that are attached to a video camera. Your eye movement is tracked while you are asked to move your eyes, head, and body. Your inner ear is also stimulated to test your balance.

Why ENG-VNG is done

These tests are done to find the cause of problems such as dizziness, vertigo, or trouble with balance.

How to get ready for the ENG-VNG test

Talk with your healthcare provider about how to get ready for these tests. You will have to clean both ear canals beforehand. Your healthcare provider can show you how.

Tell your healthcare provider about all the medicines you take. This includes all prescription, over-the-counter medicines such as ibuprofen, vitamins, herbs, and other supplements. You may need to stop taking some medicines up to 48 hours before the procedure. Talk with your healthcare provider about when to stop taking medicines.

This includes medicines that make you sleepy or less alert, such as those for:

- Sleep
- Allergies
- Pain
- Anxiety
- Depression
- Muscle spasms

To get the best test results, follow these guidelines. Your healthcare provider can tell you exactly when to stop doing these activities before the test:

- Don't eat or drink.
- Don't have caffeine.
- Don't smoke.
- Don't have alcohol.
- Don't wear contact lenses. Wear your eye glasses instead.
- Don't wear eye makeup.

Tell your healthcare provider if you:

- Have had any recent changes in your health, such as an infection or fever
- Are pregnant or think you may be pregnant

How the ENG-VNG test is done

ENG-VNG takes about 1 to 2 hours. The tests are often done in a room that is dark or has low light. If you have ENG, small sticky patches (electrodes) will be put on the skin near your eyes. These can track your eye movements. If you have VNG, you will wear goggles attached to a video camera. These also track your eye movements.

During the tests, you will be asked to:

- Watch fast-moving lights or dots with your eyes
- Walk and stand
- Move your head up and down and side to side
- Sit in a moving chair
- Sit up, lie on your back, lie on your side

The last part of the test is called caloric testing. During this, cool and then warm air or water is gently put into each ear canal. This tests your inner ear balance system.

During any of these parts of the test, you may feel dizzy or lose your balance.

After the procedure, you can go home. You may need to rest if you are feeling dizzy from the testing. Plan to have someone there to drive you home.

Risks of ENG-VNG

All procedures have risks. The risks of ENG-VNG include feeling dizzy or losing your balance during the test. You may also feel dizzy for a time after the test.