

What is a Balance and Dizziness Assessment?

VIDEONYSTAGMOGRAPHY (VNG)

Videonystagmography (VNG) is a series of eye-movement tests that look for signs of vestibular dysfunction or neurological problems by measuring nystagmus (a type of involuntary eye movement). VNG tests are the most common ones administered to people with dizziness, vertigo, and/or balance disorders.

During a VNG the patient wears goggles in which infrared video cameras are mounted. The first part of the test involves doing simple eye movement tasks. The second part requires the patient to be lying down. Air is then flushed into the ears. The flushing of the air may cause dizziness or spinning sensations and sometimes nausea. These are normal sensations to have during the test and generally pass quickly.

This test is most often done in conjunction with a basic hearing evaluation and usually takes 2,5 - 3 hours. The assessment may leave you feeling slightly dizzy or off balance and as such it is recommended that you have someone else available to drive you home.

COMPUTERIZED DYNAMIC POSTUROGRAPHY (CDP)

Computerized dynamic posturography (CDP) is an established test of postural stability. While VNG assesses visual-vestibular interactions, CDP provides information about balance function under varying environmental conditions. The ability to maintain balance depends not only on vision and the vestibular system, but also on information that the brain receives from the muscles and joints which provide clues such as the direction of head turn and the texture and slope of the

walking surface.

Posturography gives information about how well balance is maintained during challenging situations. It tells us where the breakdown between the three major systems is occurring and helps us plan your personalized rehabilitation program

VESTIBULAR EVOKED MYOGENIC POTENTIAL (VEMP)

Vestibular evoked myogenic potential (VEMP) testing is used to evaluate whether the saccule, utricle and the vestibular nerve are intact and functioning normally. During VEMP testing, earphones are placed in the ears and small electrodes are attached with an adhesive to the skin over the neck and eye muscles. When sound is transmitted through the earphones, the electrodes record the response of the muscle.

VIDEO HEAD IMPULSE TESTING (vHIT)

The video head impulse test (vHIT) is an ear-specific test that detects disorders of the vestibulo-ocular reflex (the reflex connecting your eyes to your balance system) and identifies which ear and specifically which semi-circular canals have been affected by a balance disorder. During the vHIT test, the patient wears lightweight goggles with an infrared video camera and the audiologist stimulated the semi-circular canals with small quick head movements.