What are ENG and VNG testing?

The Electronystagmography (ENG) or Videonystagmography (VNG) examination is a test of certain components of the balance system. It is used primarily in the evaluation of balance problems, vertigo or dizziness. This is a relatively simple, painless series of tests that requires 1-2 hours to perform.

During VNG testing, the examiner stimulates the inner ear in controlled ways and measures the involuntary eye movements that result. Patients wear goggles with an infrared video camera connected to a computer for the recording of eye movements. One component of this test evaluates the movement of the eyes as they follow a moving target. Another involves lying stable in different positions and moving from sitting up to lying down. During the caloric test, warm and/or cold air is circulated in the ear canal. The temperature change stimulates the inner ear in order to test the eye-movement (nystagmus) response. This may cause dizziness or vertigo, but it will subside within a few minutes following testing. The examiner may ask the patient to perform some mental tasks during the test, such as counting backward or thinking of names. These activities keep the mind busy and alert so that valid test results are obtained.

Most patients feel about the same after testing as they did prior to testing, however some patients may experience an increase in their symptoms. As a result, you may not feel like driving. Please make arrangements for a driver to take you home following testing.

Why did my provider order the VNG test?

The results from the VNG test will help determine if certain components of your balance system are contributing to your symptoms. It may help indicate whether other tests are warranted. This will help determine which therapy(s) or treatment(s) will be beneficial to improve your symptoms.

How should I prepare for an ENG/VNG test?

You will be given specific instructions when you schedule the test. Again, we recommend that you bring someone who can drive you home, as a small percentage of patients will feel increased symptoms after the test.

In order to obtain valid results from this test it is necessary to avoid certain medications or beverages prior to testing. **DO NOT TAKE any of the following for TWO DAYS (48 HOURS) prior to the time of your VNG appointment. This list is not all-inclusive, so if you have a question regarding a particular medication, please call and ask.**

1. **Sleeping pills**- Zolpidem (Ambien), zaleplon (Sonata), eszopiclone (Lunesta), flurazepam (Dalmarie), acetaminophen/diphenhydramine (Tylenol PM),
diphenhydramine (Benadryl), doxylamine (Unasom), pentobarbital (Nembutal), triazolam (Halcion), temazepam (Restoril), etc.

2. **Sedatives/tranquilizers/anti-anxiety/antidepressants** - chlordiazepoxide (Librium), lorazepam (Ativan), diazepam (Valium), alprazolam (Xanax), clonazepam (Klonopin), oxazepam (Serax), buspirone (BuSpar), fluoxetine (Prozac, Serafem), citalopram (Celexa), escitalopram (Lexapro), fluvoxamine (Luvox), sertraline (Zoloft), meprobamate (Miltown), amitriptyline (Elavil), nortriptyline (Pamelor), duloxetine (Cymbalta), venlafaxine (Effexor), burpotion (Wellbutrin), mirtazapine (Remeron), trazodone (Desyrel), etc.

3. **Antihistamines/allergy medications** - fexofenadine (Allegra), ceterizine (Zyrtec), desloratadine (Carinex), loratadine (Claritin), levocitrizine (Xyzal), pseudoephedrine (Sudafed), brompheniramine/phenylephrine (Dimetapp), chlorpheniramine (Chlor-Trimeton), etc. **You may continue to use nasal steroid sprays such as:** fluticasone (Flonase), mometasone (Nasonex), triamcinolone (Nasacort AQ), budesonide (Rhinocort), etc.

4. **Anti-dizzy medications** - meclizine (Antivert, Bonine), dimenhydrinate (Dramamine), promethazine (Phenergan), scopolamine (Transderm Scop), prochlorperazine (Compazine), droperidol (Inapsine), ondansetron (Zofran), dolastetor (Anzimet), etc.

5. **Barbituates** - Phenobarbital (Luminal), primidone (Mysoline)

6. **Muscle relaxants** - cyclobenzaprine (Flexeril), metaxalone (Skelaxin), carisoprodol (Soma), methocarbamol (Robaxin), orphenadrine (Norflex), baclofen (Lioresal, Gablofen)

7. **Alcoholic beverages**

8. **Herbal preparations/supplements** - valerian, melatonin, etc.

9. **Diet pills**

10. **Opioid pain medications** - morphine, morphine-long acting (Avinza, Dadian), hydromorphone (Dilaudid), oxycodone-long acting (oxycontin), hydrocodone (vicodin, lortab), fentanyl, methadone

MEDICATIONS FOR THYROID, SEIZURES, DIABETES, BLOOD THINNERS, HIGH BLOOD PRESSURE, IRREGULAR HEARTBEAT, POTASSIUM OR OTHER HEART MEDICATIONS, OR OTHER MEDICATIONS DEEMED BY THE PHYSICIAN WHO PRESCRIBED THE MEDICATION(S) TO BE NECESSARY MAY BE TAKEN. ALL MEDICATION(S) CAN BE RESUMED IMMEDIATELY FOLLOWING THE VNG PROCEDURE.

**Additional Instructions:**

**NO MAKE-UP INCLUDING EYE MAKE-UP PLEASE.**

**NO EATING (SOLID FOODS) FOUR (4) HOURS BEFORE YOUR TEST.** You may have liquids up to two (2) hours before.
NO COFFEE OR CAFFEINATED BEVERAGES AFTER MIDNIGHT ON THE DAY OF THE TESTING (PRIOR TO YOUR TESTING).

NO TOBACCO OR NICOTINE PRODUCTS OF ANY KIND (GUM, PATCHES, CHEWING TOBACCO, OR SMOKING) FOUR (4) HOURS PRIOR TO TESTING.