

## ***Patient Instructions for Appointments***

### **AUTONOMIC TESTING – GENERAL INFORMATION**

Pertinent information about the patient's health, including a brief history, current diagnosis, treatment regimen, and a list of medications should be forwarded on the consult form prior to autonomic testing.

Testing can be done on an outpatient basis and completed within 90 minutes.

### **MEDICATIONS**

Some medications can interfere with test results. You will receive instructions regarding this.

*Note: Patients have to consult their physician before discontinuing any medications!!*

### **FOOD, DRINK, AND TOBACCO**

Patients should consume only easily digestible foods on the day of testing and avoid all food three hours prior to testing. Avoid products, which contain caffeine (coffee, tea, and some sodas), tobacco (both smoked and chewed), or alcohol for at least eight hours prior to testing.

### **CLOTHING**

In order to be most comfortable, patients should wear soft, non-restrictive clothing. Avoid clothing that may restrict blood flow, including stockings and corsets.

### **ILLNESS**

The referring physician should advise the patient who has a cold, flu, or other active illness, whether tests should be performed or re-scheduled to another time. Diabetic patients should have no evidence of hypoglycemia for 12 hours prior to testing. Ideally, patients should not be in pain, should be well rested and relaxed for testing.

### **INSURANCE**

Almost all major insurance providers cover the costs of these diagnostic tests. However, it is recommended that patients check with insurance provider prior to testing.

### **AUTONOMIC TESTING**

Typically, a battery of specific tests is selected to meet the objectives defined by the referring physician. This battery is defined by autonomic functions that can be either cardiovagal, adrenergic, or sudomotor, peripheral or cerebral blood flow evaluation. Testing is safe and presents only minimal discomfort for the patient, while at the same time providing valuable information for the clinician.

### **DEEP BREATHING**

This is one of the most reliable cardiovascular heart rate tests for evaluating autonomic functions and measures heart rate responses to deep slow breathing.

Patient's respiratory rate is paced, typically with inspiration and expiration of duration 10 seconds each for one minute.

### **VALSALVA MANEUVER**

This test mimics everyday activities which require heavy lifting or straining, that may result in lightheadedness or even loss of consciousness. During the Valsalva maneuver, the patient is asked to exhale steadily into a bugle for 15 seconds while keeping the expiratory pressure at 40 mmHg while in the supine position.

### **TILT TABLE TEST**

Tilt test is used to identify individuals with pre-syncope, syncope, and orthostatic hypotension. Tilt table testing evaluates beat-to-beat heart rate and blood pressure, respiration and carbon dioxide responses to passive standing.

### **SKIN BIOPSY**

Skin biopsy may be performed to evaluate the presence of small autonomic fibers in the skin. Typically one to two small skin biopsies (size 3-4 mm) from the leg are obtained. It is done after local anesthesia with lidocain, one stitch may be used to suture the skin. Stitches should be removed in 7-10 days.

### **ELECTROENCEPHALOGRAPHIC MONITORING (EEG)**

Simultaneous EEG (brain activity) and cardiovascular monitoring can be ordered for differentiation of seizures vs syncope.

### **TRANSCRANIAL DOPPLER MONITORING (TCD)**

TCD enables noninvasive monitoring of cerebral blood flow from intracranial vessels for evaluation of vasospasm, stroke and migraine headache.

### **24-HOUR AMBULATORY BLOOD PRESSURE MONITORING**

Ambulatory blood pressure monitoring is used for evaluation of the 24 hour profile of the blood pressure. It helps to evaluate if the blood pressure instability are temporary or associated with a particular phase of the day or food intake.