

Autonomic Reflex Laboratory

What is the autonomic nervous system?

The autonomic nervous system controls:

- Blood pressure
- Blood flow
- Sweating
- Bowel and bladder function
- Sexual function

What are the common signs and symptoms of damage to the autonomic nerves?

The signs and symptoms of autonomic nerve damage depend on which parts of your autonomic system are affected. They include:

- A drop in blood pressure when you stand. This is called orthostatic hypotension. This can cause dizziness and fainting.
- Trouble urinating. This includes decreased feeling, urine leaking from a full bladder and not able to empty your bladder completely. This can cause urinary tract infections.
- Erectile dysfunction
- Vaginal dryness
- Problems with arousal and orgasm in women
- Slow digestion of food resulting in:
 - Diarrhea
 - Constipation
 - Abdominal bloating
 - Nausea
 - Vomiting
 - Heartburn
 - Feeling full after eating small amounts of food
 - Loss of appetite
- Heart problems, like a heart rate that is too fast or too slow.
- During exercise your heart rate may remain the same instead of increasing or decreasing due to your activity level.
- Over-heating, especially during exercise.
- Decreased sweating
- Eyes are slow to react to changes in light
- Lack of the usual warning signs of low blood sugar (hypoglycemia), including shakiness, sweating and palpitations.

What can I expect during the tests?

There are four tests: sweat test, deep breathing test, Valsalva test and the table test. All the tests can be done during the same visit. The tests are safe and not invasive. They are usually completed in less than 90 minutes.

Sweat Test

For this test, small plastic capsules are attached to your arms and legs. A machine stimulates the sweat glands and measures how much sweat is produced. You may feel a slight burning during this test.

Deep Breathing Test

This test measures your heart rate during deep breathing.

Valsalva Test

During this test you blow into a plastic tube for 15 seconds. This test measures your blood pressure and heart rate.

The Table Test

After lying on a table for the first part of the test, the table will be raised to a nearly upright position. You will be secured to the table so you cannot fall. The test will measure your blood pressure and pulse.

How will my doctor use this information?

These tests will tell your doctor if your autonomic nervous system is working normally. The results will help to make a diagnosis. The tests show how you will respond to certain treatments. The type of treatment will depend on the diagnosis and your signs and symptoms.

Are there medicines I should avoid before testing?

There are a number of medicines that could cause the tests to be wrong. They include medicine for:

- The common cold
- Depression
- Hypertension
- Parkinson's disease
- Pain

When your tests are scheduled, you will be asked to call the Autonomic Laboratory to review your medicines before the tests at 269-341-6107.

Always talk with your doctor before stopping any medicines.

Are there other special preparations?

- You may have a light meal up to 2 hours before your test.
- No alcohol, caffeine or nicotine for 12 hours before the tests.
- No intense exercise for 24 hours.
- No evidence of other illness for 48 hours.
- Avoid clothing that may restrict blood flow, including stockings and corsets. Remove elastic stockings.
- Try to avoid circumstances that would cause stress. Your tests will be more successful if you are rested and relaxed.
- Arrive 30 minutes before your scheduled test.

Are there medical conditions where autonomic testing should not be done or would not be correct?

You should not have testing done if you have:

- Atrial fibrillation
- Heart failure
- COPD (chronic obstructive pulmonary disease)
- SICCA syndrome (combination of dry eyes and mouth plus diseases such as rheumatoid arthritis or scleroderma)

Who orders the test?

These tests are usually ordered by a neurologist, but may be ordered by a patient's primary care provider. Your provider can contact Bronson Scheduling at (269) 341-8700.

Are the tests covered by insurance?

Patients should check with their insurance company to verify coverage for autonomic testing before scheduling the appointment.

Bronson Neuroscience Center

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