

Autonomic Testing

Autonomic testing checks to see if your autonomic nervous system is working as it should. Your autonomic nervous system regulates body functions like blood pressure, heart rate and body temperature (sweating). Standard autonomic testing includes the following 4 tests:

- QSART – quantitative sudomotor axon reflex test (sweat test)
- Deep breathing exercise
- Valsalva maneuver
- Upright tilt table

*Please contact
your physician
for your test
results.*

Before your tests

- Plan to be here for 2 hours.
- Drink plenty of water the 2 days leading up to the test.
- Do not eat or drink after midnight the night before the test.
- Do not take blood pressure medications, antihistamines or antidepressants the day of the test. But bring them with you to take right after the tests, if needed.
- Wear loose fitting clothing.
- Do not use body lotions, creams and oils on the day of the test.
- Bring the following with you:
 - Photo ID
 - Medical insurance/Medicare card
 - List of all medications you are currently taking

Day of testing

Come to the Neurological Testing Center (NTC) located on the 7th floor at Galter Pavilion on 675 North Saint Clair Street. Parking is available at 222 East Huron Street. For a discounted rate, you can validate your ticket at the NTC.

Testing

Autonomic testing includes 4 separate procedures that take about 1 1/2 hours in total. You will do all the procedures in an exam room on a specialized exam table.

1st test: QSART (sweat test)

The technologist (tech) will put small, round sensors on your forearm, shin, ankle and foot. The sensors will contain a cold liquid. The tech stimulates the sensors for 5 minutes with a low current of electricity. You may feel a slight tingling or uncomfortable sensation during the stimulation. The sensors are attached to a machine that analyzes the amount of sweat your body produces from the stimulation.

2nd test: Deep breathing exercise

The tech will put a belt around your chest to measure your breathing and a blood pressure cuff on your finger. They will place 3 ECG leads on your chest to record your heart rate. The tech will ask you take a series of deep breaths. The test starts with a rest period that gives you time to relax. You will then need to inhale for 5 seconds, and exhale for 5 seconds. You will repeat this 10-second cycle 8 times.

3rd test: Valsalva maneuver test

The tech will then instruct you to breathe normally for about 1 minute. Then you will need to blow into a single-use mouthpiece for 15 seconds. You will do the deep breathing exercise and the Valsalva maneuver test 2 times.

4th test: Tilt table test

You will be in a lying position on the exam table with a safety strap in place. The table tilts to a standing position for 10 minutes. Throughout the exam the computer will analyze changes to your blood pressure and heart rate.

After your tests

When you finish your tests, the tech will remove all sensors and belts and you can go home. There are no restrictions on activities. Please make sure to take your medication following the exam, if needed. The physician who ordered the testing will have results within 5 business days.

If you have any questions about the tests, please ask your care team.