



QEEG (Brain Map)

Electroencephalography (EEG) is the measurement of electrical patterns at the surface of the scalp which reflect cortical activity and are commonly referred to as “brainwaves.” Quantitative EEG (QEEG) is the analysis of the digitized EEG, also known as, “Brain Mapping.”

The QEEG is obtained by placing electrodes on the scalp and recording the electrical activity of the brain in 19 different brain areas. This test can take anywhere from one to two hours and is painless.

What to expect:

1. A snug cap, like a swim cap, that is fitted with sensors will be worn for up to two hours. Clip-on sensors, similar to clip-on earrings, will be placed on the earlobes. A chinstrap will be used to ensure your cap remains in place throughout the recording of your brain waves.
2. 20-30 minutes of data will be recorded. During the recording, you will be asked to sit still with your eyes open and with your eyes closed. You may also be asked to perform a simple task, such as reading to yourself silently. When you remain still, the testing can be completed more quickly.

In order to obtain the most accurate results we suggest you:

1. Have two good nights of sleep prior to the test.
2. Eat a meal high in protein and low in carbohydrates (sugar) one hour before the test. Avoid milk, turkey, juice and bananas.
3. Wait to take your daily vitamins until after your test.
4. If possible, avoid any over the counter medication or caffeine for two days prior to your test
5. Bring a moderately difficult book with few pictures to read during your test.
6. Double wash your hair and scalp (including your earlobes) with a clarifying shampoo such as Neutrogena or a baby shampoo. Do not use conditioner on or near the scalp.
7. Make sure your hair is dry and free of any styling product when you come for your test.
8. **Follow any instructions about taking your prescription medications before your test.** If you have any questions or concerns regarding your medication, please do not hesitate to call.



CCAS Testing (Adults 18+)

The Critical Care Assessment exam is a simple 20 minute, non-invasive, fully automated, computer based screening tool that collects data regarding your heart rate variability, blood pressure, and nervous system. You and your healthcare provider will review this data and its impact on your overall health. CCAS is designed to give your provider insight into symptoms associated with a number of conditions including:

- Cardiac Autonomic Neuropathy
- Heart Attack
- Calcium Imbalance
- Diabetes
- Liver Disease
- Vitamin Deficiency
- Hypertension
- Diabetic Autonomic Neuropathy
- Thyroid Disease
- Anemia
- Manic – Depression (Bipolar Disorder)
- Kidney Malfunction
- Hormone Deficiency

This 20 minute diagnostic test is performed in our office and will give us, not only more insight to your physiological conditions and health of your heart, but will also help us control and monitor the effects of different treatment methods directed toward your specific health conditions as well as your general health. Please note, due to some heart conditions (heart murmurs or cardiac arrhythmias) you may not be a good candidate for this test. You may not take the test if you have an implanted pacemaker or defibrillator. If you do have an implantable device, please be sure to notify your physician prior to taking the test.

Please inform the scheduling staff if you have any of the following conditions:

- Erratic, accelerated or mechanically controlled irregular heart rhythms
- Insufficient peripheral circulation, acute cases of low blood pressure or low temperature
- A-fib/flutter
- Atrio-ventricular block
- Pregnancy or anticipated pregnancy
- A pacemaker
- Systolic blood pressure over 160mmHg or higher
- Metal inside the body
- Undergone proliferative retinopathy procedures or have had laser-eye treatment done within the last 3 months.

Please refrain from the following 2 hours prior to testing:

- Caffeine Exercise—Ex. weight lifting, walking, running, etc.
- Anti-anxiety medications (not including anti-depressants for anxiety)
- Medications to treat nerve conditions
- Any stimulant medications – Ex. ADD/ADHD medications or any over the counter medications
- Diuretics – Ex. hydrochlorothiazide (HCTZ)
- Over the counter decongestants/antihistamines/cough syrup
- Diet medications



Neurocognitive Testing

When you come in for your neurocognitive testing appointment, the technician will administer a variety of paper self-evaluative forms and computer-based tests. These tests can be done in any order and measure many different aspects of mental health, including:

- Visual/Auditory Processing
- Working Memory
- Cognitive Flexibility
- Sustained Attention
- Verbal Memory
- Processing Speed
- Reaction Time
- Complex Attention
- Composite Memory
- Executive Function

The technician will stay close by in ABC to answer any questions you may have with the tests, and provide any guidance necessary, though you must answer all of the questions yourself based on your own experiences and opinions. Minors are required to complete tests on their own. In addition, separate questionnaires may be administered to a parent or legal guardian for comparison purposes.

The neurocognitive testing can take up to two hours. You will be allowed to take breaks whenever you need them, and feel free to bring drinks and snacks with you. All patients under the age of eighteen are required to have at least one parent or legal guardian with them during the appointment, unless a signed consent is on file. However, we recommend a parent or legal guardian be present for best results. Remember to bring any corrective lenses you may have (i.e. glasses or contacts), and refrain from taking any attention/focus stimulants you may take on a normal basis (i.e. prescribed medications, over the counter vitamins)

Review & Report

The Acuity Brain Center team will review your Neurocognitive Testing results and QEEG results and prepare a report for your records. This process usually takes two to three weeks after your final testing date. During this time period, the ABC provider team will meet to discuss your test results and develop a comprehensive plan catered to your brain's specific strengths and needs. You will receive a call to schedule a review with PA-C Kelly Gonzales, during which she will discuss with you your results and the next steps on your Brain Training for a Life Changing process.