



CALIFORNIA EAR INSTITUTE

Palo Alto • San Ramon • San Jose

AUDITORY BRAINSTEM RESPONSE TESTING PATIENT INFORMATION

You have been scheduled for an Auditory Brainstem Response (ABR) test. This test is an objective measure of the integrity of a portion of the auditory system. The test provides diagnostic information that is used to determine the cause of many auditory problems such as hearing loss, tinnitus, fullness, dizziness etc. During the ABR, we analyze the electrical activity in the inner ear (cochlea), auditory nerve and as it travels to the brainstem area.

The electrical activity from the inner ear and auditory nerve is picked up by electrodes and later analyzed on the computer. When analyzing the response, we look for specific patterns that indicate normal transduction of sounds into electrical activity. Different auditory disorders (inner, middle or retrocochlear disorders) alter the ability of the inner ear to transmit sound waves into neural information or to allow the electrical pulse to travel to the brain.

During testing, electrodes are placed on your forehead, top of your head and ears and are connected to a computer. A series of loud clicks are delivered to your ears through earphones. You will not need to respond. The best results are obtained if you are relaxed. You may even take a nap during the test. Reading is not permitted. The entire procedure takes approximately one hour. The results are analyzed by the audiologist and discussed with the doctor. You should schedule a follow up appointment to obtain these and any other test results from your doctor.

Should you have any further questions about the ABR testing, please do not hesitate to ask one of the audiologists.