

## MIDWEST EAR, NOSE & THROAT SPECIALISTS, P.C.

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### MIDWEST HEARING SPECIALISTS

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### EXPLANATION OF AUDIOLOGICAL TESTS AND PROCEDURES

Hearing tests render a service similar to that of clinical laboratory tests in general medicine. In combination with the patient's history and physical examination, hearing tests help locate the site where the auditory pathway has broken down or is impaired.

This localization of damage is the basis for classification of hearing loss and is essential for selecting the best available treatment and providing a prognosis.

The following briefly describes the most common "specialized" tests available to us in order to further investigate the nature of the patient's complaints.

1. **ENG or Electronystagmogram** is a test specifically designed to evaluate the vestibular or balance system located in the inner ear. The ENG evaluation may differentiate between a peripheral or central problem with the balance system.

ENG evaluation procedures involve placing electrodes on the outside corner of the eyes and in the middle of the forehead. Responses are recorded throughout a series of visual and positional tasks. In addition, each ear is stimulated with both cool and warm water and this will create a spinning sensation, which lasts for about one minute. The entire procedure lasts for one to two hours.

2. **ABR or Auditory Brainstem Response** is a test to provide information about how the ear functions and how the brain responds to sound. The ABR evaluation can help detect and locate disorders of the inner ear, auditory nerve and central nervous system.

An ABR may also be used to identify hearing loss in infants and children who cannot respond to the standard behavioral hearing tests.

It is recommended to be somewhat drowsy or relaxed throughout this evaluation. Electrodes are placed behind each ear and in the middle of the forehead. The patient will then hear a series of loud clicks. This procedure will last for about 20-30 minutes.