What is a Neuropsychological Evaluation?

A neuropsychological evaluation involves tests that are sensitive to problems in brain functioning. Unlike CT or MRI scans, which show brain structure, neuropsychological testing examines how well the brain is working when it performs certain functions, such as remembering.

These functions or tasks form the necessary building blocks of successful living. CT and MRI scans may not detect brain abnormalities that can impair many of these functions. But neuropsychological assessment can reveal brain dysfunction when no structural abnormalities can be seen. When structural abnormalities have been found, neuropsychological assessment provides a way to determine what functions may be impaired and the degree of impairment.

What is the Purpose of a Neuropsychological Evaluation?

A neuropsychological evaluation provides comprehensive assessment of patients in whom impairments of cognitive or neuropsychiatric functioning are evident or suspected. Assessment involves a systematic evaluation of higher cognitive abilities to identify possible problems with brain functioning. This helps lead to a diagnosis, defines strengths and weaknesses, and helps suggest best treatment options. An evaluation can help guide decisions on:

- Prognosis and disposition planning
- Rehabilitation issues
- Ability to return to work
- Ability to function independently
- Tracking of changes in functioning over time
- Educational and vocational planning
Related Conditions

A wide range of conditions may affect neuropsychological functioning, such as:

- Traumatic brain injury
- Neurological conditions, including stroke, epilepsy, brain tumors, multiple sclerosis (MS), Alzheimer’s disease, Parkinson’s disease, etc.
- Medical conditions such as liver disease, Lupus, HIV infection, or cardiac disease
- Learning and developmental disorders
- Attention-Deficit disorders
- Various psychiatric conditions
- Suspected memory problems or dementia

What Tests Are Used?

The types of tests used depend upon the questions you and your doctor have. The tests may assess:

- Attention and memory
- Reasoning and problem solving
- Visual-spatial functions
- Language functions
- Sensory-perceptual functions
- Motor functions
- Academic skills
- Emotional functioning

The tests are not invasive; that is, they do not involve attaching you to machines or using X rays. Most of the tests involve answering questions, solving problems, drawing, or working with materials on a table. Some tests may use a computer, others may ask you to fill out forms and questionnaires.

Testing may be performed by a neuropsychologist or a trained staff member who will also talk with you and your family about your medical, personal, and school history. The time involved in your evaluation will depend upon the questions you and your doctor have. If you wear glasses or hearing aids, make sure to bring them with you. Also, if you have had previous testing, please bring any available records with you to the evaluation.

What Will Happen after the Evaluation?

The neuropsychologist may schedule an appointment to review results with you and/or may send you a written report. With your permission, the neuropsychologist may send the results to the doctor or healthcare provider who referred you. This doctor may talk to you about the results of testing on your next office visit. If asked, the neuropsychologist will give you specific recommendations to guide your treatment and help you in your daily life.

What to Expect When You Call

A trained clinic staff member will return your call and ask a series of questions to determine how best to plan your initial appointment. We recommend that you contact your insurer to verify coverage of services prior to your evaluation. Some individuals may qualify for sliding-scale fees.

Directions

The University of Illinois Medical Center is located just west of downtown Chicago. The Medical Center can be reached most easily from the Eisenhower Expressway (I-290) and the CTA Blue Line. Ample parking is available.