

Neuropsychologists--An Important Part of the Team

*by Al Martinez, Ph.D.,
Clinical Neuropsychologist
770-632-1088*

In the past, the diagnosis of Alzheimer's and other dementias was considered one of exclusion. Essentially, if a patient was forgetful and medical tests revealed no obvious cause for the memory loss, then by the process of exclusion it was assumed the patient had dementia. However, advances in research allow doctors nowadays to make the dementia diagnosis earlier and more accurately. A team approach that involves a neuropsychologist is key in making such a diagnosis. Neuropsychologists are uniquely qualified to provide dementia diagnosis and follow-up because they are specialists in memory and other cognitive functions. Since the earliest sign of dementia, and particularly Alzheimer's, is memory decline, who better to detect these changes than a memory specialist or neuropsychologist?

So who are the other members of the diagnosis team? Most patients with memory loss and suspected dementia are referred to neurologists and in some cases to psychiatrists or geriatricians. These physicians are an important part of the team, as they will order blood work, brain scans and possibly other medical tests to rule out certain causes of memory loss, including vitamin deficiencies and thyroid imbalances. Although sometimes these tests will explain why the patient is forgetful, more often the results are normal. This is especially true if the patient has been receiving regular medical care. The neurologist or other specialist physician also may conduct brief memory testing using mental status tests (e.g., the Mini-Mental Status Exam). Because mental status tests are brief and intended to serve only as screenings, patients showing early signs of Alzheimer's or other dementias may score in the normal range. It is when the results of the brain scan and other tests are normal that the neuropsychologist can have the greatest impact since the question remains: Why is the patient forgetful?

The neuropsychological exam consists of several parts. A detailed interview is conducted with the patient and someone who knows them well (usually the spouse or an adult child). During the first portion, the patient is asked questions about their background, medical history, work history, family, as well as their perception about the memory loss. This interview provides the neuropsychologist the first glimpse at the patient's memory. It is curious that many patients with memory loss either don't recognize their memory is failing, or they tend to minimize these problems. Next, the patient's spouse, family member, or friend is interviewed about what memory and other behavioral changes they have noticed in the patient. The final part involves testing the patient's memory, language, executive functions and other cognitive abilities. This is considered the central part of the exam, the part that makes this evaluation unique from all others.

Cognitive testing allows neuropsychologists to directly evaluate the patient's memory and other cognitive abilities. These tests have been performed on hundreds of people to

determine what is “normal” or “average” for individuals of different ages. This way, patients who are age 69 can be compared to other 69-year-olds and those who are age 85 can also be compared to their contemporaries. This is important since we know that there is a mild decline in memory with the normal aging process. Therefore, these tests help the neuropsychologist determine whether the patient is simply showing normal and mild cognitive inefficiencies associated with aging, or more serious cognitive decline associated with dementia. Cognitive testing usually takes between 2 and 3 hours for patients who may have very mild dementia, and it is shorter for those with more advanced dementia. This testing is inappropriate for patients with severely advanced dementia.

All this being said, possibly the most important reason to see a neuropsychologist when memory is a concern is for an early and accurate diagnosis. At the present time, the neuropsychological exam is one of the most sensitive indicators of Alzheimer’s and other dementias. Research suggests it is best to treat Alzheimer’s and other dementias early in their course, so early diagnosis is important.

There are other benefits of undergoing a neuropsychological examination. For instance, in the case of previously diagnosed patients, serial neuropsychological exams help to estimate how well they are responding to medications. The existing medications are helpful in slowing the rate of memory loss, and as more treatment options are becoming available, determining the patient’s response is increasingly important. Questions also may arise about the patient’s ability to manage finances, make legal decisions (such as changing a will) and make important medical decisions. Due to the sensitive nature of these types of decisions, family members often will be reluctant to take a more active role. The end result may be that the patient feels increasing confusion and anxiety about making these decisions without assistance and in some cases they may end up making costly mistakes due to decreased judgment.

Finally, the neuropsychologist considers the emotional well-being of the patient. In some cases, memory loss may be related to depression instead of dementia. In others, the patient may be suffering both depression and dementia. Estimates are that about 40% of patients with Alzheimer’s develop depression at some point during their illness. The neuropsychological exam is important in determining whether the patient’s memory loss is related to emotional factors or dementia, or if the patient is suffering from both. Psychotherapy or counseling may be appropriate for patients in the early stages of dementia, usually as an adjunct to treatment with an antidepressant.

In conclusion, the early and accurate diagnosis of dementia is best handled with a team approach and the neuropsychologist is a key member of that team.