

## WHAT IS A NEUROPSYCHOLOGICAL EVALUATION? By Dr. Shurak

When a concern is raised about a person's memory, it is common for that person to be referred to a neuropsychologist for an evaluation. For some, this is the first time they have ever heard of terms such as "neuropsychologist" or "neuropsychological evaluation" and consequently they might feel a little intimidated. This article will discuss the meaning of these terms including what to expect when you have a neuropsychological examination at Lee Memory Care and the advantages of undergoing it.

A clinical neuropsychologist is a doctor who specializes in evaluating/treating people's mental abilities (brain functioning). These mental abilities include memory, orientation, concentration, language abilities, problem solving, and visual-spatial skills. Neuropsychologists work with people of all ages and there are many different conditions (e.g., medical, psychiatric), which can affect mental abilities. Since the majority of people who we see at Lee Memory Care are in the geriatric population, I am going to primarily focus on this population here.

Typically a neuropsychologist will start the examination with an interview. Ideally the patient will be accompanied by someone who knows him/her well such as a spouse, family member or close long-time friend. There are two purposes of this interview. One is to obtain background information (including what problems have occurred in daily life) on the patient. The other, however, is that such questions function as an informal way of measuring memory. If a patient is struggling to answer personal questions (either because they do not know the answers or because their family member is telling me that their answers are incorrect) this already raises the possibility of memory problems. However, individuals with mild memory loss may do fine during this part of the examination, which is why there is a second part.

After the interview, the patient is administered a series of tests that measure memory and other mental abilities. At Lee Memory Care, this typically lasts between 1 ½ to 2 hours. The patient's performance on these tests is compared to others their same age and educational background. For example, a patient who is 85 would be compared to other people who are in their eighties. This is extremely important since we all know that there are changes in memory that occur as part of the normal aging process. By using these comparisons, the neuropsychologist can determine whether changes in

memory (or other areas of mental functioning such as concentration or problem solving) stem from normal aging or from some brain disorder such as Alzheimer's disease.

They also establish a baseline for future comparisons. This baseline has multiple advantages. First, patients who are diagnosed with Alzheimer's disease are typically started on medications. By having a re-examination in one year, the effectiveness of the medication can be measured by comparing your new scores on medication to your baseline scores (the patient is given the same tests both years). It is important to note that the medications for Alzheimer's can only slow down the disease not reverse it or dramatically improve memory. For this reason, a decline in scores a year later is expected, but there should be less decline in the test scores on the medication than off it. If there is significant decline, the patient can be tried on a different medication (currently there are four different medications for Alzheimer's disease). Another advantage to establishing a baseline is when a person's scores on initial examination are "normal" in relation to others their age, but a year later the patient or their family feel like there has continued to be a decline. Normal aging is a very slow process and so a person's test scores should be relatively the same (or perhaps better since there tends to be a practice effect for some people) a few years later. However, if test scores have declined from baseline, a progressive disorder such as Alzheimer's disease needs to be considered.

I often find that those who were anxious about coming to see me for a neuropsychological evaluation are relieved once they have completed this process since it was the fear of the unknown that created this anxiety to begin with. My hope is that this article will reduce any anxiety that individuals may have about getting their memory evaluated. This is important because if this is a concern about memory loss you should be examined to see if you actually do have a problem (sometimes people are worried but their memory is fine – we refer to these individuals as "worried well.") and if so what is the cause(s) and treatments for this condition(s).