Mild Cognitive Impairment

Mild Cognitive Impairment (MCI) is a condition that means there is clear evidence of cognitive problems, most often involving short term memory. However, normal day to day functioning such as the ability to manage household, medication, and financial matters is typically preserved or shows only minor changes. Most people with MCI recognize their memory is not as good as it was at one time. As a result, they often express concern they may have Alzheimer’s Disease (AD) and want to take preventive steps to preserve their memory.

The diagnosis of “mild cognitive impairment” means that an individual meets the following criteria:

• Short term memory problems and/or problems involving other cognitive areas such as language and reasoning
• Abnormal cognitive loss for age and education
• Normal function in all other areas of daily living

What is the difference between MCI and AD? People with AD generally have:

• More severe problems with memory and other cognitive abilities
• Decline in daily functioning at home or work

How do I find out if I have MCI? People who are concerned about their memory loss or changes in other cognitive abilities should seek an evaluation. Because MCI is still a relatively new concept, a comprehensive evaluation at a specialty clinic may yield the most conclusive results.

What does an evaluation for MCI include? Depending on what other tests have already been performed, the following are typically included in an evaluation:

• Complete medical history
• Neurological exam
• Laboratory tests
• Neuropsychological testing (paper and pencil tests of cognitive functioning)
• Brain scans (CT or MRI)
• Information from close family members

The goal of an evaluation is to identify treatable problems (such as B-12 deficiency, thyroid problems, depression, etc.) that could be causing the cognitive problems and to prevent further decline. A person with cognitive problems should be monitored at least annually for any changes.

Is MCI the early stage of AD? Researchers are trying to answer this question. Some studies show that 44% of the people with MCI progress to AD within three years. Yet that leaves over 50% of the people with MCI who do not develop AD. One important area of research is learning to distinguish between the people with MCI who will develop AD and those who will not. Secondly researchers want to look for ways to stop the progression on to AD.

Is there treatment for MCI? Ronald Petersen, M.D., Ph.D. of the Mayo Clinic, Allan Levey, M.D., Ph.D. Emory University School of Medicine, and other Alzheimer’s Disease Center investigators reported in the June 9, 2005 issue of the New England Journal of Medicine findings from the Memory Impairment Study. Study participants
with mild cognitive impairment who took donepezil (Aricept) were at reduced risk of progressing to Alzheimer’s disease (AD) during the first year of the study. Although the benefits for the overall group did not persist, there was a much more significant effect for the subgroup of subjects with a genetic predisposition to develop AD, which lasted for the entire 3-year study period. Vitamin E was also tested in this study and found to have no effect on preventing conversion from MCI to AD. This study is important since it is the first to report a delay in transition from MCI to AD, providing hope that future research may find even more effective ways to delay the onset of AD. Research that leads to delaying the onset of AD by even 5 years could reduce by 50% the number of people with AD by the year 2050.

Are research studies enrolling people with MCI?
The Emory Alzheimer’s Disease Research Center has a major research emphasis on learning more about normal age related memory loss, mild cognitive impairment and early Alzheimer’s disease. There are several studies, some nationwide, that are currently enrolling people who have MCI. If you are interested in learning about these studies call 404-728-6950. Additional information about studies is located under the research section of this website.