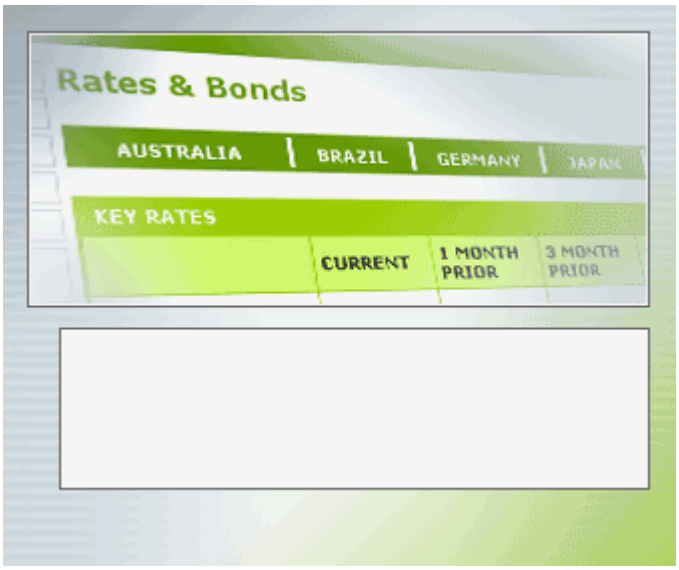
U.S.

Alzheimer's May Be Detected Early by Brain Scans, Studies Show



June 19 (Bloomberg) -- Brain scans can detect Alzheimer's disease in people who don't have symptoms, suggesting that early diagnosis may become more common for the elderly, according to studies presented at a medical conference today.

One study tested 53 elderly people using positron emission tomography scans two to three times over 10 to 24 years and showed that the brain imaging was useful in predicting which patients would experience mental decline. The trial is one of three that were scheduled to be presented today at a conference in Washington sponsored by the Alzheimer's Association.

The PET scan trial was the first to show that analyzing the brain's use of energy can forecast the development of the disease, said Lisa Mosconi, a research scientist at the New York University School of Medicine, who led the study. Many of the 4.5 million Americans with Alzheimer's aren't diagnosed until the disease is in an advanced stage, the association said.

``Detecting these signs early is beneficial because it includes the ability to plan for the future,'' said William Thies, the association's vice president for medical and scientific affairs, in an interview June 17. ``It gives the patient and the family time to understand the disease.''

Researchers injected people in the PET scan study with a substance that produced an image of the brain's use of glucose, which is ``a sensitive indicator of brain damage,'' according to a summary of the findings. Declines in glucose metabolism showed which subjects would eventually develop Alzheimer's disease with 83 percent accuracy. The measurement also predicted with 79 percent precision who would show mild cognitive impairment, the study found.

Other Studies

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``The early stage findings can be subtle,'' said the association's Thies. ``Some people with the symptoms don't have great insight, some of the patient families deny that there is something physically wrong.''

In a second study, researchers used magnetic resonance spectroscopy to measure the brain chemicals N-acetyl aspartate and myo-inositol. They found that levels of the chemicals were different in seven people with a gene mutation for early-onset of Alzheimer's disease compared with six who didn't have the genetic mutation.

``Using MRS, we may be able to detect brain biochemical changes in healthy people who will later develop'' Alzheimer's disease before symptoms appear, said Alison Godbolt, a researcher at the Institute of Neurology at the University College London.

The third study analyzed plasma for levels of the beta- amyloid protein, which is present in blood and spinal fluid. Researchers followed 563 elderly people with a median age of 78 for two to 12 years and found that measuring the levels of two forms of the protein helped predict which patients would experience cognitive decline.

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