Study: Heavy social drinkers show brain damage

WASHINGTON (Reuters) -- Heavy social drinkers show the same pattern of brain damage as hospitalized alcoholics -- enough to impair day-to-day functioning, U.S. researchers said Wednesday.

Brain scans show clear damage, and tests of reading, balance and other function show people who drink more than 100 drinks a month have some problems, the researchers said.

"Socially functioning heavy drinkers often do not recognize that their level of drinking constitutes a problem that warrants treatment," the researchers, at Vanderbilt University in Tennessee and the University of California San Francisco, wrote in their report.

"The enrollment criterion for heavy drinkers was the consumption of more than an average of 100 alcoholic drinks per month for men over 3 years before the study (80 drinks for women)," they wrote in the report, published in the journal Alcoholism: Clinical & Experimental Research.

One drink is usually defined as a serving of spirits, a glass of wine or a can or bottle of beer.

Dieter Meyerhoff of UCSF and Dr. Peter Martin of Vanderbilt examined 46 chronic, heavy drinkers and 52 light drinkers recruited using newspaper ads and flyers.

They used magnetic resonance imaging to look at physical brain structures and also measured various brain chemicals associated with healthy brain function.

Standard tests of verbal intelligence, processing speed, balance, working memory, spatial function, executive function, and learning and memory were given to the volunteers.

"Our heavy drinkers sample was significantly impaired on measures of working memory, processing speed, attention, executive function, and balance," the researchers wrote.

Measures of brain chemicals and structures showed some of the same damage seen in alcoholics who are in the hospital or treatment centers, they said.

The study is unusual in that most studies of brain damage from alcohol are done in people who have undergone treatment.
"What our findings indicate is that brain damage is detectable in heavy drinkers who are not in treatment and function relatively well in the community," Meyerhoff said in a statement.

Martin and Meyerhoff said the study showed evidence of brain impairment, even if the drinkers cannot see it themselves.

"Our message is: Drink in moderation. Heavy drinking damages your brain ever so slightly, reducing your cognitive functioning in ways that may not be readily noticeable. To be safe, don't overdo it."

Meyerhoff said that for most adults, moderate alcohol use translates to up to two drinks per day for younger men, and one drink per day for women and older people.