Memory Care Monthly

Supporting Healthcare Professionals in Caring for the Aging January / February 2008

Revised MCC Website Goes Live on March 1, 2008

Medical Care Corporation will launch a revised website on **March 1, 2008.** The revisions are designed to improve navigation and to provide more comprehensive information to our customers. Please take note of one especially important change that will affect your login procedure:

New Login Mechanism
At the new site, you will log into your account by clicking the new LOGIN graphic outlined in pink [see figure].

Clicking the new graphic will take you to a dedicated login page where you can enter your login name and password as you have done in the past. **Please note that our login name and password will remain the same.** If you have any questions about this change, please contact us at:

1-888-565-5535 or
customerservice@mccare.com

Alcohol, Caffeine and Mortality

In the early 1980s, a health survey was mailed to residents of Leisure World, a retirement community in Southern California. The 13,978 people who completed the survey became members of the Leisure World Cohort Study. Since then, these participants have been followed by periodic re-survey.

Recently available longitudinal studies of these participants analyzed the relationships between mortality and the consumption of caffeine, alcohol and other non-alcoholic drinks.

Paganini-Hill et al. from the University of Southern California and UC Irvine examined the effect of alcohol intake on all-causes of mortality in the cohort over the period of 23 years. They found that both men and women who drank alcohol had decreased mortality compared with non-drinkers. Those who consumed two or more drinks per day had a 15% reduced risk of death, and the reduced risk was not limited to one type of alcohol. They also examined the effect of

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non-alcoholic beverage and caffeine consumption including coffee, tea, mild, soft drinks, and chocolate. Caffeine consumption exhibited a U-shaped mortality curve. Moderate caffeine consumers had a significantly reduced risk of death. Persons who drank more than 1 can/week of an artificially sweetened, but not sugar-sweetened soft drink (cola and other) had an 8 % increased risk. Neither milk nor tea had a significant effect on mortality after multivariable adjustment.

Pagnini-Hill A. et al. Preventive Medicine. 2007; 44: 305-10.
Paganini-Hill A. et al. Age and Ageing. 2007; 36: 203-9.

Research Updates

Diabetes Increases Risk for Alzheimer's Disease

Glycemic dysregulation has been found to cause damage to vessels as well as neuronal and non-neuronal pathways in the brain. Hyperglycemia may lead to degeneration of hypothalamic and hippocampal neurons. Researchers have examined data from the Cardiovascular Health Study (CHS) Cognition Study (1992-2000) to identify a joint effect of having type 2 diabetes and ApoE4 on the risk of AD, AD with vascular dementia (mixed AD), and vascular dementia without AD.

Compared with those who had neither type 2 diabetes nor ApoE4, those with both factors had a significantly higher risk of AD (hazard ratio, 4.58; 95% confidence interval, 2.18-9.65) and mixed AD (hazard ratio, 3.89; 95% confidence interval, 1.46-10.40). These data suggest that having both diabetes and ApoE4 increases the risk of dementia, especially for AD and mixed AD.

Irie F. at al. Archives of Neurology. 2008; 65(1): 89-93.

Joint Effect of Stroke and ApoE4 on Dementia Risk

Researchers studied the combined contributions of stroke and ApoE4, which are both independent risk factors for dementia, to dementia risk. Some studies have been conducted to observe the interaction between stroke and ApoE4, but the results have not been consistent.

Sampling from both community-dwellings and institutions, it was concluded that the greatest incidence and prevalence of dementia occurred among people who had both stroke and ApoE4. In contrast, the lowest incidence and prevalence of dementia were among those without either characteristic. Having either or both stroke and ApoE4 increased the risk of dementia. There was no interaction between stroke and ApoE4, which suggests that there the risk factors may lead to dementia through different mechanisms.

Jin YP. et al. Neurology. 2008; 70(1): 9-16.

MRI Patterns of Atrophy and Progression to AD in aMCI

Researchers from Mayo Clinic found that the regions of cortical tissue loss in subjects with amnestic mild cognitive impairment (aMCI) who progressed to Alzheimer's disease (AD) within 18 months of the first MRI scan with aMCI diagnosis were the ones typically seen AD patients.

Researchers identified 397 patients from the Mayo Clinic Alzheimer's Disease Research Center and Alzheimer's Disease Patient Registry database, all of whom had a diagnosis of aMCI and had competed an MRI scan. Of these patients, 42 patients who progressed to AD (aMCI-P) and

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21 patients who remained stable for at least 3 years (aMCI-S) were compared based on their MRI scans. The aMCI-P group showed bilateral loss affecting the medical and inferior temporal lobe, temporoparietal association neocortex, and frontal lobes, compared to the age-matched control group. The aMCI-S group showed no regions of gray matter loss when compared to controls. When aMCI-P and aMCI-S were compared, the aMCI-P group had greater loss in the medical and inferior temporal lobes, the temporoparietal neocortex, posterior cingulated, precuneus, anterior cingulated, and frontal lobes than the aMCI-S group.

Whitwell JL. Et al. Neurology. 2008; 70(7): 512-20.

Brain Imaging Links Between Cholesterol Levels in Midlife and Alzheimer's Disease Risk

Brain imaging studies suggests that cholesterol may contribute to both the genetic and nongenetic risk for Alzheimer's disease (AD). This study was presented at the 37th Annual Meeting of the Society for Neuroscience by Dr. Reiman and his colleagues from the Banner Alzheimer's Institute.

The study included 117 people in their 50s and 60s with normal cognition, and they were classified into three levels of ApoE genetic risk for AD – 24 E4 homozygotes, 37 E4 heterozygotes, and 56 E4 non-carriers. The homozygotes group had modestly higher total cholesterol levels (210 mg/dL) compared to the other 2 groups. The homozygotes group also had modestly higher LDL cholesterol levels (131 vs 115 mg/dL). The researchers found that higher cholesterol levels were significantly correlated with lower cerebral metabolic rate for glucose in the precuneus, parietotemporal, and prefrontal regions which are know to be vulnerable to AD. The homozygotes group had stronger correlation in temporal regions.

The finding suggests that starting statin therapy before age 70 could potentially reduce the risk for AD.

Reiman E. et al. The 37th Annual Meeting of the Society for Neuroscience.

Free Patient Brochure

Make sure your patients know that you now offer memory assessment services. We can send you complimentary copies of our educational patient brochure, "About Memory Loss", in English and Spanish. To request copies, please email us at: customerservice@mccare.com and include the address to where you would like the brochures mailed.

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