

PREVENTIVE MEDICINE

Targeting Preventive Care to Older Women

Experts have provided a number of recommendations for targeting preventive health care to older women. Mammography and colon cancer screening should be provided to women with at least five years of life expectancy, they say, while Papanicolaou testing is not encouraged for women aged 65 years or older. And all women aged 65 years or older should receive pneumococcal and influenza vaccinations and exercise counseling.

But how often health care providers follow these recommendations is not known, according to investigators from Beth Israel Deaconess Medical Center, Boston, MA. To find out, they examined self-reports by 4,683 women aged 65 years or older that were included in the 2005 National Health Interview Survey. The researchers categorized the women into four age groups (65 to 69 years, 70 to 74 years, 80 to 84 years, and 85 years or older) and three health status groups (above-average, average, or below-average health). Then they looked at the women's reports on their receipt of cancer screenings, immunizations, and exercise counseling.

The data indicated that many women did not receive cancer screening from which they were likely to benefit while many others did receive cancer screening from which they were unlikely to benefit. Of the women aged 65 to 79 years in above-average health, 49% did not report receiving colon cancer screening and 19% did not report receiving mammography. In addition, 49% of women aged 80 years and older in below-average

health did report receiving mammography. Similarly, 68% of women aged 65 to 79 years and 46% of women aged 80 years and older reported receiving Papanicolaou tests.

The researchers also found problems with regard to immunizations and exercise counseling. Of all the women, only 43% reported receiving pneumococcal vaccinations and only 40% reported receiving influenza vaccinations. Receipt of exercise counseling was reported by only 34% of all the women and only 18% of the women aged 80 or older.

Finally, the researchers found that certain groups of women very rarely reported appropriate care with regard to all the measures examined. Only 0.4% of women aged 70 to 79 years who had above-average health received all of the measures except Papanicolaou tests, while only 2.4% of women aged 80 years and older who had below-average health received none of the measures except immunizations and exercise counseling.

The researchers conclude that interventions are needed to improve how health care providers target preventive care to older women. To help eliminate unnecessary cancer screening, they say, physicians should let their patients know that women older than 80 with multiple comorbidities are unlikely to benefit from such screening but that exercise and immunizations can achieve benefits in a short time. The researchers note that "physician education seminars, preventive health check lists, computer reminders, and support from nonphysician staff" all have been suggested as ways to increase necessary cancer screening among older women. Finally, they suggest that because "so few older women receive all preventive health

measures appropriately," interventions designed to improve preventive care "may need to be comprehensive rather than focused on a specific service."

Source: *Am J Med.* 2008;121(11):974-981.
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CARDIOVASCULAR DISEASE

Periodontal Disease and Cardiovascular Risk

Past research has indicated an association between periodontal disease and cardiovascular disease (CVD). But is periodontal disease independently associated with inflammatory markers for CVD risk, which would suggest that inflammation is a common pathophysiology for the two diseases? And is periodontal disease present in many individuals who do not have traditional CVD risk factors, which would suggest that oral health screening can help to identify CVD risk?

To find out, researchers from Columbia University in New York, NY examined data on 421 participants who were asked about their oral health status, diet, physical activity level, and smoking status. The participants underwent fasting blood draws so that the researchers could look for high-sensitivity C-reactive protein (hsCRP) and lipoprotein-associated phospholipase a2 (Lp-PLA2), which are novel inflammatory markers for CVD risk. Waist circumference, body mass index, systolic and diastolic blood pressure, and metabolic syndrome status also were assessed for each patient.

The results indicated an association between periodontal disease and Lp-PLA2—a finding that, to the researchers' knowledge, has never been reported before. Patients with

a history of periodontal disease were almost twice as likely as other patients to have Lp-PLA2 levels in the highest quartile. The link between periodontal disease and Lp-PLA2 remained statistically significant with multiple logistic modeling that controlled for age, gender, race, smoking, low-density lipoprotein (LDL) cholesterol levels, and dietary intake of saturated fat.

In addition, the researchers found that periodontal disease diagnoses were present in 23% to 29% of the cases in which other, traditionally measured CVD risk factors were absent. And of the participants who had periodontal disease but did not have any of the three traditional CVD risk factors (elevated LDL cholesterol levels, overweight, or obesity), 37% had elevated hsCRP or Lp-PLA2 levels.

The researchers conclude that “inflammation may be a factor in the relation between oral health and CVD” and that “‘at-risk’ individuals who may otherwise not be identified by traditional CVD risk screening might be identified through oral health screening.” They add, however, that further research into a possible causal link between oral health and CVD is needed.

Source: *Am J Cardiol.* 2008;102(11):1509–1513.
doi: 10.1016/j.amjcard.2008.07.047.

DIABETES MANAGEMENT

Cognitive Decline in Older Patients with Diabetes

Cognitive decline is a common experience of older individuals with diabetes, and several risk factors for this decline have been identified. The risk factors often are interrelated, however, and “few studies have comprehensively examined all potential explanatory or confounding variables,” note researchers from the University of Western Australia, Perth

and Fremantle Hospital, Fremantle, both in Australia.

To increase understanding of this population’s cognitive risks, the researchers analyzed data on 205 patients, drawn from a cohort study, who were aged 70 years or older and had type 2 diabetes but not dementia. The study participants provided sociodemographic and clinical information (including data on diabetes, cardiovascular risk factors, and complications) upon entry into the cohort study. They provided this information again and received an initial cognitive assessment about 7.6 years after their entry, and they received a second cognitive assessment a median of 18 months after the first assessment.

At the first assessment, the participants’ mean age was 75 years. This assessment indicated that 164 participants had normal cognition and 41 had cognitive impairment without dementia. The second assessment indicated that 33 participants (16%) had experienced cognitive decline, with 29 having newly developed cognitive impairment without dementia and four having newly developed dementia.

A regression model indicated that, of the variables obtained at study entry, only a lack of education beyond the primary level was independently associated with later cognitive decline. Of the variables obtained at the first cognitive assessment, the univariate predictors of later cognitive decline included older age, lower education level, higher urinary albumin/creatinine ratio (ACR), clinical albuminuria, and lack of treatment with angiotensin converting enzyme inhibitors (ACEIs) or angiotensin receptor blockers (ARBs). Multiple logistic regression that controlled for age and education indicated that natural logarithm ACR and lack of treatment with ACEIs or ARBs at the first cognitive assessment predicted later cognitive decline.

The researchers note that urinary albumin excretion, a “potentially modifiable risk factor,” was more strongly associated with cognitive decline than was the presence of categorical microalbuminuria or albuminuria. They say that the independent inverse association between ACEI or ARB use and cognitive decline “suggests that these drug classes act through mechanisms distinct from those which act to reduce urinary protein excretion.” Some of the drugs’ protection against cognitive decline may involve reducing inflammation in patients who have diabetes and microalbuminuria, they say.

Source: *Diabetes Care.* 2008;31(11):2103–2107.
doi:10.2337/dc08-0562.

RESPIRATORY DISEASE

A Dangerous Season for PE

Spring may bring an increased incidence of pulmonary embolism (PE), according to researchers from Karadeniz Technical University School of Medicine in Trabzon, Turkey. They retrospectively analyzed the cases of 206 patients with a PE diagnosis between June 1, 2001 and May 31, 2006 to investigate the influence of meteorologic parameters and seasonal variations on the disease.

Spring was the most dangerous season for PE, with 72 cases—29 in May alone. The researchers found a statistically significant positive correlation between case incidence and atmospheric pressure and humidity. ●

Source: *Am J Emer Med.* 2008;26(9):1035–1041.
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