Clinical Digest

ONLINE EDITION

Respiratory Disease

Lung Cancer Screening After Pneumonia: Is It Necessary?

Should patients receive follow-up chest imaging to screen for unrecognized lung cancer after being diagnosed with pneumonia? This practice is recommended by many physicians but there is little evidence behind it. To fill this knowledge gap, researchers from the Veterans Evidence Based Research Dissemination and Implementation Center (VERDICT) program, San Antonio, TX and the VA Pittsburgh Healthcare System, Pittsburgh, PA conducted a retrospective review of data from VHA administrative databases to assess the frequency with which pulmonary malignancy (either primary lung cancer or pulmonary metastasis) was diagnosed following hospitalization for pneumonia in patients aged 65 years or older.

They found that a "small, but clinically important," proportion of these patients were diagnosed with pulmonary malignancy following pneumonia hospitalization. Of the 40,744 patients aged 65 years or older who were hospitalized for pneumonia during fiscal years 2002 to 2007 (without a prior pneumonia hospitalization in the previous 12 months), 3,760 (9%) were subsequently diagnosed with pulmonary malignancy. Only 27% of those patients were diagnosed within 90 days of admission; the median time to malignancy diagnosis was 297 days.

Factors associated with an increased risk of pulmonary malignancy diagnosis included younger age, white race, marital status of married, prior history of malignancy or metastatic tumor, current tobacco use, and history of chronic obstructive pulmonary disease. Other factors—such as stroke, renal disease, dementia, and history of congestive heart failure—were associated with a lower incidence of diagnosis. Researchers hypothesize that the "protective" effect of the latter factors might be related to the increased mortality associated with these conditions, which could result in many of these patients dying before developing pulmonary malignancies.

The researchers acknowledge that theirs was not a prospective cohort study and, as such, they could not identify when these malignancies could be first identified. They say their results support the practice of follow-up chest imaging for elderly patients with pneumonia—although further research is necessary to clarify the appropriate timing and mode of follow-up testing.

Source: *Am J Med.* 2010;123(1):66–71. doi:10.1016/j.amjmed.2009.08.009.

Substance Abuse

Curbing Binge Drinking

Binge drinking is responsible for more than half of the 79,000 excessive drinking deaths that occur annually in the United States. Studies have shown a strong link between the intensity of binge drinking and adverse outcomes, such as violence, unintended pregnancy, and unintentional injuries. To this body of research, two recent studies have added important information about the prevalence of binge drinking and its treatment.

The first study marks the first U.S. population-based analysis that characterizes binge episodes in terms of number of drinks consumed and identifies associated independent risk factors. In this study, CDC researchers analyzed data from 14,143 adults defined as binge drinkers based on their responses to a survey conducted through the CDC's Behavioral Risk Factor Surveillance System. This state-based telephone survey is conducted monthly throughout the United States and contains questions on various behaviors that pose a health risk, including alcohol consumption. In 2003 and 2004, the CDC offered states the option of including a six-question module for respondents who reported at least one binge drinking episode in the past 30 days. This module asked questions about the respondent's most recent binge drinking episode. Data analyzed for this study were from the 18 states that chose to use the binge drinking module.

The respondents were nearly all men (75%), and more than half (59%) were aged 34 years or younger. During their most recent binge drinking episode, 70% consumed six or more drinks, 38% consumed eight or more, and 17% consumed 11 or more. Of the men aged 18 to 34 years, 51% reported consuming eight or more drinks, compared with 31% of women in the same age group. Similar results were observed for adults over the age of 55 years: 58% of men and 38% of women reported consuming six or more drinks during their most recent binge episode.

The researchers note that, during the study period, binge drinking was defined for both men and women as consuming five or more alcoholic drinks during one drinking episode. Since then, the definition has been modified to five or more drinks for men and four or more drinks for

women. Using those thresholds, they point out, more women likely would have been included in the study population. They also acknowledge that information on drinking was limited to self-reports, which may have understated the problem.

In the second study, the first to target binge drinkers at regularly scheduled primary care visits, researchers from Complutense University of Madrid, Madrid, Spain evaluated the effectiveness of intervention designed to reduce binge drinking. This study involved 752 adults identified as binge drinkers (according to the more recent, gender-specific definition) through the Alcohol Use Disorders Identification Test (AUDIT). Study participants were assigned randomly to an intervention or a control group.

All participants received a booklet on general care issues and underwent follow-up interviews with study staff at six and 12 months. Those in the control group were instructed at the initial visit to "address any health concerns in their usual manner." Participants in the intervention group were scheduled for two 10- to 15-minute counseling sessions with their own primary care physicians four weeks apart. The physicians were trained in delivering the counseling sessions, which used a scripted workbook. A nurse conducted telephone follow-up with the intervention group participants at two and eight weeks to reinforce the face-to-face sessions.

At 12 months, 48% of the participants in the intervention group had stopped binge drinking, compared with 33% of those in the control group ($P < .001$). The intervention participants also reduced weekly drinking by a mean of three drinks more per week, compared with the controls ($P < .001$). The effects of the intervention appeared to be more pronounced for women than men: By study's end, 58% of men in the intervention group had reduced their binging and 42% had stopped altogether, compared with 70% and 58%, respectively, of women in the same group.

The researchers say these findings demonstrate that counseling can help reduce binge drinking episodes, particularly over the long term. They note, however, that the substantial proportion of drinkers whose behavior remained unchanged suggests that "additional interventions focused specifically on subgroups"—such as those with a family history of alcoholism, smokers, young adults, or heavy bingers—"are warranted."

Sources: *Am J Prev Med.* 2010;38(2):201–207. doi:10.1016/j.amepre.2009.09.039.

Am J Med. 2010;123(1):72–78. doi:10.1016/j.amjmed.2009.08.012.