Lung Cancer CT Study Underscores New Era for Preventive Programs

Research Spotlight

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The death of the standard chest X-ray in lung cancer screening could be just what the proverbial doctor ordered for the radiology industry. The buzz among radiologists and others in the imaging industry revolves around the impact of using low-dose spiral CT screenings to reduce the mortality of lung cancer in heavy smokers. In my years as a radiologist, I can’t recall a more positive news platform for high-risk smokers.

The results of the 8-year national lung screening trial found that annual spiral CT scans for past and current smokers reduced lung cancer mortality by approximately 20 percent. Of the 53,000 current and former heavy smokers in the study, 354 died who received a spiral CT compared with 442 deaths among those who received a standard chest X-ray. The news of this study generated significant national media attention and raised public awareness.
With more than 200,000 new cases of lung cancer diagnosed each year and more than 150,000 reported deaths, even a small reduction percentage is notable. Lung cancer is typically diagnosed at advanced stages, and long-term survival is less than 15 percent.

So what can we do with this information? Clearly, the lung screening study is a positive first move, and one that needs to be expanded and repeated. In addition, it holds great promise as a viable screening tool for high-risk lung cancer patients.

But the radiologic field needs to balance the potential value of a lung cancer screening CT scan verses the risk of additional radiation exposure. Certainly, clinicians cannot encourage everyone to run out and ask for this test. The conundrum is determining who will benefit most from this screening. The study did not reveal any data as to the screening’s effectiveness to help light smokers or younger ones.

However, it did highlight the risks of the screenings, with false positive readings that can cause unnecessary treatments and further tests. Future studies and new protocols may examine the best use of this low-dose technology. For healthcare partners in hospitals, imaging centers, and community health venues, this screening potential has high merit.

A handful of hospitals around the country have implemented low-cost spiral CT scans as part of a community benefit outreach program to help reduce lung cancer mortality in their community. These hospitals have recognized the value of such a screening tool and have used it as a viable outreach effort, either as a stand-alone service or as part of a smoking cessation program.

Anecdotally, these hospitals have reported tremendous outcomes and value to their communities. Low-cost screening programs can be established that run through referral services or geared directly to consumers. Non-profit hospitals can look to regional or national sources, or even anti-tobacco groups, for grants or gifts to help fund such efforts.

Presently, many patients must pay an out-of-pocket expense around $300 for a CT lung screening, since Medicare and insurers may not pay for the scan unless an illness is suspected. In the future, if Medicare decides to cover the screening tool, other health plans will follow the lead.

When detected early, lung cancer is a treatable disease with increased long-term survivorship. Using CT scans for early detection and prevention has the potential to save lives. Outreach and education of screening programs can create a direct impact. Clinicians cannot be passive in the approach to this benchmark study. Instead, use it as fodder for a stronger role to leverage imaging as a screening and preventive protocol.

Come forward to lead discussions and meetings with pulmonary and oncology colleagues to establish guidelines and provide the steps to achieve a successful screening model. For high-risk smokers, their lives may depend on it.

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