Technological Changes in the Detection of Lung Cancer

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Malcolm M. DeCamp, MD
Chief of Thoracic Surgery
Northwestern Medicine

Andrew Schorr:
Hello and welcome to Patient Power sponsored by Northwestern Medicine. I'm Andrew Schorr.

If lung cancer can be spotted early, often a life can be saved, and now there have been real improvements in the screening for lung cancer. To help us understand those improvements, we're joined by Dr. Malcolm DeCamp. He is chief of thoracic surgery at Northwestern Medicine. Dr. DeCamp, help us understand these new screening developments and who should be screened.

Dr. DeCamp:
Great question. For decades now, we've been searching for an effective tool to detect lung cancer at an early treatable and more curable stage. About two-and-a-half years ago, we completed a large trial here in North America called the National Lung Screening Trial, enrolled more than 50,000 patients, looked for patients who we knew were at risk with a large smoking history, 20-, 30-pack years of exposure. That's a pack per day for years, one pack year or if you smoked two packs a day for a year that's two-pack years. So we were looking for those patients that were either actively smoking or formerly smoking to that degree. And we looked at an age group that you might guess would be reasonable, between the ages of 55 and 70.

And we studied those and randomly assigned them to get this low-dose spiral CT scan, a scan that takes about 20 seconds. It's a third the dose of a regular scan, and it's less radiation than you'd get flying from New York to California, and compared that to patients that just had a standard chest x-ray. And they got that once a year for the duration of the trial, which was three years. And then they were followed.

And in the group that had a CT screen once a year, there was a 20 percent reduction in death from lung cancer compared to the chest x-ray group, and a 7 percent reduction in all cause mortality, meaning that we found some other things on those scans that helped that patient live longer, aneurysms and other tumors and things that needed medical attention. So now we have a painless, quick, safe test for patients at risk.

Now, you asked a little bit about risk. This trial was done in that narrow window, 30-pack years, active or former, 55 to 70. The U.S. Preventive Services Task Force, which is part of the government that makes recommendations to CMS around coverage for these tests, has broadened that in their

recommendations a little bit, a little bit larger area of age, 50 to close to 80. That's just finished the public comment period, and we expect that to be recommended to CMS in the next few weeks. And hopefully in the next six months or so, you'll see at least our Medicare beneficiaries being able to access this test and expect reimbursement, and pretty much all the other major insurers will likely follow suit. So we're very excited about this opportunity to really impact the highest risk group of patients.

What other things might be considered? Certainly, it's more difficult to quantitate exposure to secondhand smoke or to industrial pollutants or to radon. These things are going to have to be sorted out over time and haggled out with various insurers. But if we look at what's happened with other common screening tests, mammography, for example, the guidelines have been adjusted over the years, changes in age, changes in risk profile as we begin to understand the genetics in breast cancer. I expect similar things will happen in lung cancer, but I'm very excited that we're finally getting started with a screening test for a cancer that kills more people than breast, colon and prostate added together every year.

Andrew Schorr:
Dr. Malcolm DeCamp, chief of thoracic surgery at Northwestern Medicine, thanks for being with us. Real improvements in screening for lung cancer that could save your life.

I'm Andrew Schorr. Thank you for joining us. Remember, knowledge can be the best medicine of all.