

Lung Cancer Screening Now Recommended for Certain High-Risk Patients

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Compelling evidence of the benefits of lung cancer screening for high-risk patients has led to the development of national recommendations for low-dose computed tomography (LDCT) to screen and follow-up high risk patients who meet eligibility criteria. As one of the original sites of the National Lung Screening Trial (NLST), one of two randomized trials upon which lung cancer mortality reductions with LDCT have been shown, UCLA has offered screening since the early 2000s, and the UCLA Lung Cancer Screening Program continues to be a leader in evaluating, counseling, screening and treating appropriate patients.

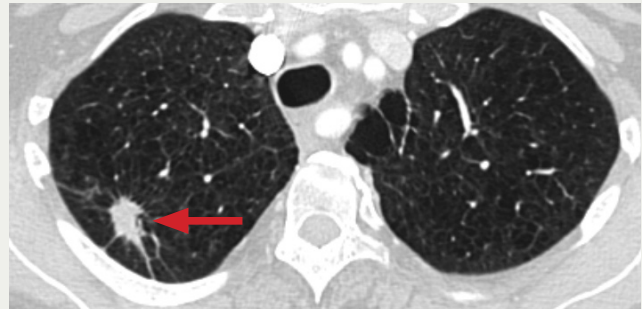
Both the NLST and the Dutch-Belgian Randomized Lung Cancer Screening Trial (which goes by the Dutch acronym NELSON) have found that LDCT screening of high-risk patients is effective both at finding early cancers and reducing the number of late-stage cancers. “This is the first time that not just one, but two large trials have shown that screening reduces lung cancer mortality,” says Denise R. Aberle, MD, UCLA professor of radiology and bioengineering, and co-director of the UCLA Lung Cancer Screening Program.

Without screening, Dr. Aberle notes, most lung cancers are found either incidentally, or in patients who develop symptoms, by which time they are likely to have advanced disease. Lung cancer continues to be the leading cause of cancer death in the U.S. for both men and women.

The NLST results, published in 2011, resulted in similar recommendations by both the U.S. Preventive Services Task Force (USPSTF) and Centers for Medicare & Medicaid Services (CMS). Screening is a covered benefit in asymptomatic individuals 55 to 80 years (USPSTF) or 55 to 77 years (Medicare). Individuals may be current or former smokers with a minimum 30 pack-year cigarette smoking history (pack-years are the product of packs of cigarettes smoked per day multiplied by total years smoked) and former smokers must have quit within the preceding 15 years. The guidelines stress that screening should occur at a multidisciplinary center that can provide follow-up care, such as UCLA.

Patients who fall within these guidelines can be referred to the UCLA Lung Cancer Screening Program, where they participate in a shared decision making visit (a requirement for reimbursement) that includes counseling on both the benefits and potential risks of screening. Potential risks include false-positive results that may precipitate unnecessary additional testing, expense, anxiety, and potential complications, as well as overdiagnosis and radiation exposure.

Documented shared decision making adds to the burden of referring patients for screening, and many clinicians don't have time or are unaware that this must be fully documented in the electronic medical record as a requirement for screen reimbursement. For this reason, the first screening exam now



Older, asymptomatic former heavy smoker who was referred for lung cancer screening. There is a solid, spiculated nodule in the right upper lobe. This proved to be an early stage primary lung adenocarcinoma. Following resection, the patient is without evidence of recurrence or metastatic disease.

mandates a referral to the UCLA Lung Cancer Screening Program. This referral will ensure shared decision making, protect patients from denial of screen reimbursement, and save providers considerable time.

Regarding risks, Dr. Aberle notes that false positives have been substantially reduced since the threshold for a positive screen was increased. “The majority of nodules we see are small and require no immediate follow-up,” she says, “and in cases of larger nodules, the recommendation is most often simply a short-term follow-up to make sure the nodule hasn't changed.” Patients are informed of the potential for overdiagnosis — the discovery of cancers that either wouldn't be lethal or would unlikely be the cause of death due to other significant comorbidities. The potential risks of radiation are discussed, though among high-risk patients the radiation exposure with contemporary LDCT is small relative to the benefits of early lung cancer detection.

Independent of screening, smoking cessation counseling is an essential part of shared decision-making. “We spend at least half of decision making on that,” says Brett Schussel, NP, who is nurse practitioner and co-director of the program. “It's an opportunity to help patients consider the effects of smoking on their overall health, and to encourage a path to quitting. We provide nicotine replacement, other pharmacotherapy, and follow-up counseling to help patients quit smoking. If we achieve only higher smoking cessation rates, the program has already provided patients a huge service.” 