Lung Cancer Screening - Process and Potential Benefits

Jed Gorden, MD
Director
Interventional Pulmonology
Swedish Cancer Institute
Seattle, Washington

TRANSCRIPT & FIGURES
Lung cancer screening is a very exciting advance in the field of lung cancer which has come about in the last several years. This is where low-dose CT scans, or “CAT” scans, very high resolution images of the lungs, are used to identify nodules and identify early cancers. The critical thing to know is that this is an advancement that has come about in the last several years due to a tremendous amount of government-funded research looking at the safety and the efficacy of using low-dose CT scans to identify high-risk patients who have lung cancer.

Let’s talk about that for a second: high-risk patients. Patients that qualify for lung cancer screening need to understand certain things, and you’re going to have to participate in a shared decision-making conversation with your team and caregivers. So who qualifies, who is high-risk? The high-risk criteria for lung cancer screening and people who should undergo low-dose CT imaging are patients who are 55 to 80 years old, who smoked for at least 30 pack-years which is one pack of cigarettes a day for 30 years, and are actively smoking or quit within the last 15 years. This is the minimum population who is at risk for lung cancer and meets the criteria to undergo low-dose CT screening.

It’s really important to understand that embarking on lung cancer screening and low-dose CT is a journey and a partnership with your team of professionals in the lung cancer screening center. The reason that I say this is because, number one: no single scan will prove that any individual doesn’t have lung cancer. It is through a partnership and continued surveillance based on specific criteria, and discussions with your team over time that will help minimize any risk of lung cancer.
Why would anyone want to embark on this journey? The data that we have and the reason we’re so excited about lung cancer screening now is that the data suggests that through low-dose CT screening of high-risk individuals that the mortality associated with lung cancer is decreased by 20% and the overall all-cause mortality is decreased by almost 7%. But it’s important to understand that this is done in the confines of a multidisciplinary team with counseling and active participation of patients who continue throughout the program and follow the guidelines that are established through screening.

So let’s talk about each one of these components. We’ve talked about the high-risk, which is the patient that’s involved – let’s talk a little bit more about high-risk. So we know that even within this risk profile are those that are at minimal risk for lung cancer, there are those that are at increased risk. We have an identified population of high-risk patients for lung cancer that we described: 55 to 80 years old, actively smoking or quit within the last 15 years, and smoked for at least 30 pack-years. We know that’s the minimum risk and it’s important for people to understand that at the minimum risk level for lung cancer, it takes almost 5,300 people screened to identify one single cancer. As the risk goes up, age goes up, increasing pack years of smoking goes up, we know that the number of people to screen goes down to about 160 to 170 people in the highest risk groups. Therefore it’s important that we adhere to these rigorous guidelines of only those patients who are at the highest risk, who meet the criteria that was described, to undergo lung cancer screening.
Number two: partnership. No single scan allows people to move forward without being continued in the program. It is a continuum that people need to engage in and a partnership with your professional team.

Number three: smoking cessation. Smoking cessation for those that are still smoking is critical to minimizing the risk for lung cancer. This is a teachable moment. This is an opportunity to partner with your team to identify the ability to quit, potential medications for helping you quit, triggers and counseling. I urge people to take advantage of this and to inquire with their team on how best to approach this process as you engage and move forward in the lung cancer screening arena.

The final thing is counseling. It is important to understand that many people who embark on the journey of lung cancer screening, both those that are in the highest risk group and those that are in the minimum risk group to qualify for lung cancer screening will oftentimes be found with an abnormality or what’s called a pulmonary nodule. A pulmonary nodule is a small abnormality seen on a CT scan. It can be described as a dot or a nodule or an abnormality, all descriptors of the same thing, but the critical thing to understand is that the overwhelming majority of the time, these are not cancer. They are benign, but we only know that through continued surveillance and strict adherence to guidelines on when to follow patients up, when to move to additional testing, and when to move on to invasive testing.

The confidence that you build with your professional team will allow you to move forward through this process with education and without fear, and
allow you to move forward and minimize the risk of lung cancer in those patients who are high-risk.
Special Thanks To Our Sponsors

Presented by

GRACE.expert/GCVL

Visit the GRACE Cancer Video Library for more educational videos, or subscribe to GRACEcast on iTunes®