New Lung Cancer Screening Guidelines

The American Cancer Society has published new guidelines that recommend doctors discuss lung cancer screening with people who meet certain criteria that put them at high risk for developing the disease. These high risk patients must be aged 55 to 74 years and in fairly good health, have a smoking history equivalent to a pack a day for 30 years, and currently smoke or have quit within the past 15 years. If people decide to be screened, the recommendation specifies that testing should be done with a low dose computed tomography (CT) scan and take place at a facility with experience in lung cancer screening. And it emphasises that screening is not a substitute for quitting smoking.

The guidelines were published early online January 11, 2013 in CA: A Cancer Journal for Clinicians. The recommendations are based on a review of several studies that looked at low-dose CT screening. The most significant was the National Lung Screening Trial (NLST). This study included more than 50,000 people aged 55 to 74 who were current or former smokers with at least a 30 pack-year history of smoking (equal to smoking a pack a day for 30 years, or 2 packs a day for 15 years). The NLST found that people who got low-dose CT had a 20% lower chance of dying from lung cancer than those who got chest x-rays. However, other trials found no benefit from screening.

The screening in the NLST was done at large teaching hospitals with access to a lot of medical specialists and comprehensive follow-up care. Most were National Cancer Institute cancer centers.

None of the studies included people who never smoked. Although non-smokers can develop lung cancer, there is not enough evidence to know whether screening them would be helpful or harmful. Likewise, it is not known if screening would help people who were lighter smokers than those in the studies, or those of different ages.

One drawback of a low-dose CT scan is that it finds a lot of abnormalities that turn out not to be cancer but that still need to be assessed to be sure. (About 1 out of 4 people in the NLST had such a finding.) This may lead to additional scans or even more-invasive tests such as needle biopsies or even surgery to remove a portion of lung in some people. A small number of people who do not have cancer or have very early stage cancer have died from these tests. There is also a risk that comes with increased exposure to radiation.

Because of these risks, CT scanning is not recommended for people who are less heavy smokers, or who are younger than 55 or older than 74. It is not recommended for people who have other serious diseases that limit their life expectancy. The guidelines say doctors need to discuss all the potential risks, benefits, and limitations of screening with patients who meet the criteria and help them make an informed decision about whether they should get screened. If people do decide to get screened, they should get screened every year through age 74, as long as they are still healthy.
