Lung Cancer Screening Websites Tout Benefits, Often Don’t Mention Risks

Radiation exposure and overdiagnosis are among the potential harms of low-dose computed tomography to screen for lung cancer.

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For heavy smokers, past and present, lung cancer screening reduces the risk of dying of lung cancer. But like everything in medicine, screening also comes with risks.

Just don’t expect to hear a balanced view about risks versus benefits on websites that promote screenings.

While these sites nearly always highlight the benefits of the low-dose computed tomography (CT) used for screening, many say little or nothing about the potential risks of such screening, reports MedPage Today.

Stephen Clark, MD, of the University of North Carolina at Chapel Hill, and colleagues examined the lung cancer screening program websites of more than 150 academic and community groups.

As the researchers described in JAMA Internal Medicine, 98% of the sites called attention to the potential benefits of lung cancer screening, but only 48% described potential harms related to screening.

Ninety-nine percent of academic programs and 98% of community programs described screening-related benefits on their websites. But even for academic medical centers, only 57% mentioned any harm, 43% mentioned radiation exposure and 14% called attention to overdiagnosis.

Overdiagnosis refers to the diagnosis of tumors that will not go on to cause significant health problems.

For community centers, only 40% represented any risk at all, 25% mentioned radiation and none mentioned overdiagnosis.

According to the National Cancer Institute, for people who qualify for screening, the evidence is clear that overall, the benefits outweigh the risks. But individuals should be aware of these risks and discuss them with their doctors. These include the low risk that low-dose CT radiation
exposure may lead to future cancers; false negatives, in which lung cancer is missed and so doesn’t get treated; and false positives, which mean the individual may undergo further testing and a biopsy and experience unnecessary anxiety.

The websites also represent benefits in ways that may exaggerate them. Fifty-four percent of the academic centers and 32% of the community groups defined the relative or absolute benefits of lung cancer screening as reported by the investigators behind the National Lung Screening Trial. Overall, 41% of the centers’ websites stated that lung cancer screening is associated with a 20% reduction in the risk of lung cancer–related death. (Another recent study has found even greater benefits.) But these numbers are less impressive when represented as absolute numbers. For every 1,000 people who receive such screening, three would avoid dying of lung cancer. Just 1% of the centers used absolute numbers.

Among all the websites, the most commonly mentioned harm related to screening, included in 44% of the sites, was a false positive scan. Detailed on just 7% of sites, overdiagnosis was the potential harm mentioned the least often.

Only 26% of the sites, including 35% of those from academic centers and 19% of those from community groups, explicitly recommended that individuals consider the possible harms versus benefits of screening.

“Information on public-facing websites of U.S. lung cancer screening programs appears to lack balance with respect to portrayal of potential benefits and harms of screening,” the study authors concluded. “Important harms, such as overdiagnosis, were commonly ignored in the sites evaluated, and most of the centers did not explicitly guide individuals toward a guideline-recommended, shared decision-making discussion of harms and benefits.”

To read the MedPage Today article, click here.

To read the study abstract, click here.

To read more on lung cancer, click here.