CT Screening for Lung Cancer – Smoking Cessation Options

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The Necessity of Cessation

• LD CT reduces lung cancer mortality by only 20%.
• Screening criteria for LDCT identify a group at high-risk for all smoking-caused diseases.
• Potential for unrealistic expectation of benefits or screening for those screened.
• The screening process offers multiple opportunities for mandated smoking cessation interventions.

The Benefits of Cessation

• Risk of stroke reduced to that of never smoker 5-10 years after cessation.
• Risks for cancers of mouth, throat, and esophagus halved 5 years after cessation.
• Risk for coronary heart disease halved 1 year after cessation, and nearly the same as never smoker 15 years after cessation.
• Risk for lung cancer reduced by as much as half 10 years after cessation.
• Reduced risk for many other types of cancer after cessation.
• Reduced respiratory symptoms, such as coughing, wheezing, and shortness of breath. The rate of decline in lung function is slower among people who quit smoking than among those who continue to smoke.
• Reduced risk of developing COPD. Risk of death from COPD reduced after cessation.
• Reduced risk for infertility in women of reproductive age. Risk of low birth weight drops to normal with cessation before pregnancy or during first trimester.

Approaches to Cessation

• “The “5-A” behavioral counseling framework provides a useful strategy for engaging patients in smoking cessation discussions: 1) Ask about tobacco use; 2) Advise to quit through clear personalized messages; 3) Assess willingness to quit; 4) Assist to quit; and 5) Arrange follow-up and support.”
• Use of biochemical testing to enhance cessation
• Use of pharmacological therapy: NRT, bupropion, and varenicline.
• Need for systems approaches.
Does CT Screening promote cessation?

- Does CT screening affect smoking (systematic review findings, Slatore et al. 2014)
  - Screening itself does not influence smoking.
  - Presence of findings suggesting lung cancer increases abstinence from smoking.
- In NLST, findings associated with cessation (Tammemägi et al. 2014)

Resources