Can we avert the need for pneumonectomy by screening for lung cancer? 2

Frederic W. Grannis Jr. *  
Department of General and Oncologic Surgery,  
City of Hope National Medical Center,  
1500 East Duarte Road,  
Duarte, CA 91010, USA

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In the April issue of the European journal of Cardio-thoracic Surgery, Pierre Antoine Fuentes has provided a scholarly review on the adverse effects of pneumonectomy [1]. His very complete summary of the many bad things that can happen to the patient after this benighted operation explains why experienced thoracic surgeons fear this operation and regret clinical situations that mandate its performance.

Recent information from lung cancer screening trials suggests that there may be some good news for patients and thoracic surgeons in this area. At the Eighth International Conference on Screening for Lung Cancer, held in Pamplona, Spain, April 25–27 2003, Hanaoka and his colleagues at Shinsu University in Nagano, Japan, presented their experience with surgical treatment of 60 patients with lung cancer detected by computerized tomographic screening. None of their patients required a pneumonectomy. This is quite unusual, since in most published series of surgical treatment of lung cancer, pneumonectomy is performed in 20–30% of cases. Two American screening programs show similar results. In the Early Lung Cancer Action Project experience, Henschke and coworkers have described their experience with baseline and first-annual repeat screening. Of 29 total cases treated surgically, there were 28 lobectomies and one pneumonectomy (in an interim, symptom-detected central endobronchial cancer) [2,3]. Crestanello and his colleagues at the Mayo Clinic reported to the Western Thoracic Surgical Association meeting in Carlsbad, California, June 19, 2003 on 53 lung resections for CT screen-detected lung cancers. No case required a pneumonectomy.

These reports provide early, suggestive evidence that lung cancer screening with low-dose, non-contrast computerized tomography may have an important collateral clinical benefit. Screening may help preserve pulmonary function in patients with lung cancer by averting pneumonectomy.

References