

New or enlarging hiatal hernias after thoracic surgery for early lung cancer

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Abstract

Objective

The study objective was to determine the relationship between lung resection and the development of postoperative hiatal hernia.

Methods

Preoperative and postoperative computed tomography imaging from 373 patients from the International Early Lung Cancer Action Program and the Initiative for Early Lung Cancer Research on Treatment were compared at a median of 31.1 months of follow-up after resection of clinical early-stage non-small cell lung cancer. Incidence of new hiatal hernia or changes to preexisting hernias were recorded and evaluated by patient demographics, surgical approach, extent of resection, and resection site.

Results

New hiatal hernias were seen in 9.6% of patients after lung resection (5.6% after wedge or segmentectomy and 12.4% after lobectomy; $P = .047$). The median size of new hernias was 21 mm, and the most commonly associated resection site was the left lower lobe (24.2%; $P = .04$). In patients with preexisting hernias, 53.5% demonstrated a small but significant increase in size from 21 to 22 mm ($P < .0001$). All hernias persisted through the latest postoperative computed tomography scan. When 110 surgical patients without preexisting hernia were matched by sex, age, and smoking to nonoperative controls, the incidence of new hernia at follow-up was significantly higher among those who underwent surgery (17.3% vs 2.7%, $P = .0003$).

Conclusions

Both open and minimally invasive lung resection for clinical early-stage lung cancer are associated with new or enlarging postoperative hiatal hernia, especially after resections involving the left lower lobe.

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Biography

Dr. Claudia Henschke is a professor and doctor at the College since 1983. She has been in the Division Chief of Chest Imaging in Radiology. Highly valuing the importance of continuing the development of various research projects which she is involved, she is a vocal proponent of CT-scans for early lung

cancer detection. She is the author of many research publications, including "Screening for Lung Cancer: Coping with Nihilistic recommendations."