

ELECTROCARDIOGRAPHIC CHANGES AFTER PNEUMONECTOMIAM

Summary: Simple lobectomies show minimal or no radiographic shift in the cardiac position and usually do not result postoperative electrocardiographic (ECG) changes. In contrast, pneumonectomy is often associated with radiographic shift of the heart position. Electrocardiographic changes after pneumonectomy have not been well-defined.

We reviewed the postpneumonectomy ECGs of 26 patients to better define the ECG changes and their frequency.

All postpneumonectomy ECGs showed higher heart rate. Transient ischemic ECG changes were documented in one patient (3,8%). Two patients (7%) had ECG changes of acute cor pulmonale. Atrial tachycardias occurred in 7 (27%) patients, atrial fibrillation was preponderant, followed by supraventricular tachycardia and atrial flutter. A leftward shift on the QRS axis occurred after left pneumonectomy in 4 of 11 patients. We did not find change in QRS axis after right pneumonectomy and we concluded that the characteristic shifts of the QRS axis are depending on the side of the pneumonectomy.

Because some of the ECG changes after pneumonectomy can mimic acute cardiopulmonary events, it is important to be familiar with these postpneumonectomy ECG findings.