ASSESSMENT CRITERIA FOR LUNG RESECTION

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Introduction
After determining the anatomic resectability of lung disease you have to answer this question. As incidences of complications and mortality vary according to the extent of the planned resection, the pulmonary reserve of the patient, and the presence of comorbid factors.

Can the patient withstand the planned procedure and survive the loss of the resected lung?

An Overview of Pulmonary Function Tests
To determine the severity of the pulmonary disease, the percentage reduction from the normal values is the most popular method used.

Preoperative Evaluation of Patients
All patients undergoing lung resection surgery, irrespective of age or extent of the lesion

Initial evaluation studies
Pulmonary specific evaluation Aims at assessing
1. the patient’s physiologic pulmonary reserve
2. the extent of resection that can be tolerated.
3. Predicting complications.

Pulmonary Specific Evaluation: Three stages
Stage I: Spirometry, Diffusion Capacity and Arterial Blood Gas
Stage II: Quantitative Ventilation-Perfusion Scan
Stage III: Exercise testing

Conclusions:
A low predicted postoperative FEV1 appears to be the best indicator of patients at high risk for complications, and it was the only significant correlate of complications when the effect of other potential risk factors was controlled for in a multivariate analysis.
Pulmonary resection should not be denied on the basis of traditionally cited preoperative pulmonary variables, prediction of postoperative pulmonary function by a technique of simple calculation may be useful to identify patients at increased risk for medical complications