Physiologic Assessment for Lung Cancer Surgery

Careful physiologic assessment is an important part of patient risk stratification and selection for lung cancer surgery. With increasing limitations and access to pulmonary function testing during the COVID-19 pandemic, the purpose of this document is to provide a quick reference guide to summarize all available evidence based testing techniques. We are aware many institutions have already stopped offering PFT testing, which is the most ideal manner to assess patients for lung resection. Deviation from common, well accepted testing practices cannot be recommended unless these services are not available for a sufficient period of time that places a patient’s health or chances of curative resection at risk. In regard to the decision for surgery, surgeons should discuss the consequences of delaying surgery in patients with cancer, where delay may be deleterious to the long-term survival of the patient. Shared decision-making with patients should discuss the potential for alternative, evidence-based treatment modalities.

- **Pulmonary Function Testing (PFT)**\(^1\)
  - FEV\(_1\) & DLCO > 60% predicted
  - ppoFEV\(_1\) & ppoDLCO > 40% predicted
- **Cardiopulmonary Exercise Testing (CPET)**\(^1\)
  - VO\(_2\)peak > 15-20 mL/kg/min
- **6 minute Walk Test (6MWT)**\(^2\)
  - ≥ 400 meters
  - DSP ≥ 350 m% (DSP = Distance Saturation Product)
- **Stair climb > 22 meters**\(^3\)
- **Peak Expiratory Flow**\(^4\)
  - > 300 L/min

*References:*


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