Minimally Invasive Lung Cancer Surgery

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Objectives:
• Identify minimally invasive surgical options for lung cancer
• Discuss the role of surgery in a comprehensive suite of treatment options
BEYOND THORACOTOMY: Minimally Invasive Surgical Options for Patients with Lung Cancer

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Disclosures

• None
Utah Lung Cancer Incidence

2012 = 638 cases

Lung Cancer

• Multidisciplinary Evaluation and Treatment
  – Radiation Oncology
  – Medical Oncology
  – Radiology
  – Pathology
  – Interventional Pulmonary
  – Thoracic Surgery

• High quality Clinical and Pathologic Staging
Multidisciplinary Treatment

• Surgery is a cornerstone of therapy for patients with early stage (I/II)NSCLC who are medically fit for an operation
  – About 1/3 of patients

• Role of surgery for patients with Stage IIIA disease is more complex and thus controversial
Surgical Principles

• Anatomic Resection
  – Negative Margins

• Complete Hilar Nodal Dissection

• Mediastinal Staging
  – Sampling versus dissection
Video Assisted Thoracic Surgery (VATS)

- Essentially every pulmonary resection may be performed VATS
  - Wedge Resections
  - Segmentectomy
  - Lobectomy
  - Bilobectomy
  - Sleeve Lobectomy

- Nodal Staging where necessary
VATS

- 4 cm ‘utility’ incision
- 12 mm ports x 2
- Dissection is Anterior to Posterior
Benefits of VATS

• Equal Oncologic Outcomes
• Less Pain
• Shorter Length of Stay
• Earlier Return to Normal Function
  – If necessary
• Cost Effective

Contraindications

- Tumors >6 cm
- Bulky Central Tumors
• **STABLEMATES**
  - Cooperative Group Trial
  - Sublobar versus SBRT for High risk Patients
  - Enrolling later 2016
Conclusions

- Minimally invasive Lung cancer surgery is
  - Safe
  - Less Morbid
  - Cost Effective
  - Oncologically Sound
  - Well suited for treatment of early stage lesions