Thoracic Surgery: Henry Ford Approach

Zane Hammoud, M.D.
Chief of General Thoracic Surgery
Henry Ford Hospital
“Standard” Thoracotomy
VATS Lobectomy

- Same operation
- Hilar dissection/individual vessel ligation
- Complete MLND
- Shorter LOS, quicker recovery, quicker time to adjuvant therapy
VATS: RUL
Robotic “Revolution”
Robotic Lobectomy
Robotic Lobectomy
RUL
2 Weeks s/p Robotic Lobectomy
Lung Cancer: the Future

Robotic lobectomy: ?advantages
- Visualization, visualization, visualization
- Better LN harvest?
- Avoidance of “utility” thoracotomy

Disadvantages
- start up cost
- lack of haptic feedback
- current size of platform
Anterior Mediastinal Mass

- Traditional approach is median sternotomy
- Minimally invasive approaches gaining acceptance
- Current approach is robotic
  - Three 1 cm incisions in right chest
  - Patients usually discharged from hospital on POD 1 or 2
  - Superior cosmesis/shorter recovery
Achalasia: port placement
Achalasia: short video
Minimally Invasive Ivor Lewis Esophagectomy (MIILE)
MIILE: Creation of Conduit
Robotic Ivor-Lewis
Docking: Robotic I-L
Robotic Ivor Lewis
Intrathoracic Anastomosis
Real Time Ischemic Assessment with “Firefly”
2 Weeks s/p Robotic IL
MIILE: Current Technique

- Laparoscopic gastric mobilization/LN dissection
- Pyloroplasty
- Laparoscopic jejunal cutting tube
- Robotic esophageal mobilization/MLND
- Intrathoracic anastomosis at/above level of azygous vein
MIILE: Current Technique

- Patients extubated in OR
- Jejunostomy feeds initiated at 24 hours
- BAS on POD 4 or 5
- Clear liquid diet/cycled TF if BAS OK
- D/C home on POD 6/7
- Gradual advance to solid diet/weaning of TF over 4-6 weeks
- J tube removed in office 4-6 weeks
Esophageal Cancer: the Future

Robotic approach: potential advantages?
- Visualization
- Precision of instruments
- 2-3 cm low anterior “thoracotomy”

Search for serum biomarkers/patterns