General Thoracic Controversies

“We Should Follow Our Patients Forever”

CON

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No Relevant Disclosures
Follow Everyone Forever ???

“One Size Does Not Fit All”
Scope

- Primary thoracic cancers
  - Lung
  - Esophagus
  - Thymoma
- Pulmonary metastases
- Benign esophageal disease
  - Barrett’s esophagus
- Benign lung disease
  - Transplant, LVRS
Rationale for Longterm Follow-up

• Recurrence *
• New primary cancer *
• Other threats *
• Survivorship
  – Support and counseling
• Academic
• Personal satisfaction
• Practice/programmatic marketing

* Effective only if early detection yields improved survival
Potential Benefits

↓ Physical harm
↓ Emotional harm
↑ Cost effectiveness (↓ expense)
↑ System effectiveness
Guidelines

ACCP
- CT q 6 months x 2 years
- Annual CT thereafter
- Strength of evidence
  1C
  Low/Very low quality
  Benefit outweighs risk

McCrory et al *Chest* 2007

NCCN
- CT q 6 months x 2 years
- Annual CT thereafter
- Strength of evidence
  2B
  Low-level evidence
  Non-uniform consensus

NCCN Practice Guidelines 3.2011
“Intensity of follow-up can only prolong survival from the index cancer if recurrence detected at a point when effective therapy is available.”

Local Recurrence

<table>
<thead>
<tr>
<th>Series</th>
<th>N</th>
<th>Loco-reg Recurrence</th>
<th>Resectable</th>
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<tbody>
<tr>
<td>9</td>
<td>5191</td>
<td>15 – 38.5 %</td>
<td>0.9 – 4.4 %</td>
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</table>

Mean DFI 14 – 20 months
80 % within 24 months

Risk diminishes with time

Mollberg and Ferguson Ann Thorac Surg 2013
Cost Effective ???

- 5191 stage I/II pts yields
- 228 resectable recurrences
- CT surveillance q6 months X 2 years
- 20,000 CT scans X $700/scan = $ 14 M
- 222,520 lung cancers in 2010
  - 85 % NSCLC and 25 % clinical Stage I
- 47,285 potential cases in 1 year

COST: $ 132 Million
Second Primary Lung Cancer

- 1-2 % pt/yr LCSG Thomas JTCVS 1993
- 3-6 % pt/yr MSK Lou et al JTCVS 2013
  - 93 % detected by surveillance CT
  - 92 % stage I
  - 62 % resected

“Risk did not diminish with time”
Economics

- wRVU-based compensation
- Private practice
  - Academic practice
  - Productivity metrics
    - % New Patients

Value added for F/U?
# Physician Extenders

<table>
<thead>
<tr>
<th>CPT</th>
<th>Service</th>
<th>wRVU</th>
<th>MD $</th>
<th>MLP $</th>
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<tbody>
<tr>
<td>99203</td>
<td>NewPt III</td>
<td>1.42</td>
<td>86.14</td>
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<tr>
<td>99204</td>
<td>NewPt IV</td>
<td>2.43</td>
<td>131.80</td>
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<tr>
<td>99205</td>
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<td>162.65</td>
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<tr>
<td>99212</td>
<td>EstPt II</td>
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<tr>
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<td>57.25</td>
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<tr>
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<td>84.02</td>
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<td>EstPt V</td>
<td>2.11</td>
<td>112.84</td>
<td>95.91</td>
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</table>
The Future

...could things get worse?
Stage Distribution - SEER 17

- Stage IV
- Stage I
- Stage II/III
Stage Distribution-NLST/CT

- Stage I
- Stage II/III
- Stage IV
Personalized Medicine of Follow-up Specialty Care

• **Diagnosis:** cancer v benign
  – Are there effective treatment options
  – Is there a multi-disciplinary team
    • Shared responsibility
    • Mid-level practitioners

• **Physiologic fitness**
  – Pulmonary reserve, still smoking ??
  – Advanced age and/or Co-morbidities
Follow Everyone Forever ???

NO

- Have a plan for everyone
- Tailor the plan to: the pt & the pathology
- Prioritize
- Practice collaboratively
- Communicate

“One Size Does Not Fit All”
Thank You
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