ASSESSMENT AND EVALUATION: PHYSICIAN TREATMENT ACCORDING TO NATIONAL GUIDELINES

Rachel L. Medbery, MD
Thoracic Surgery Fellow

WINSHIP CANCER INSTITUTE/ EMORY HEALTHCARE INTEGRATED NETWORK CANCER PROGRAM
BACKGROUND

- The CoC recommends ≥10 regional LNs be removed and pathologically examined for AJCC stage IA, IB, IIA, and IIB resected NSCLC
  - Surveillance measures are intended for use by programs to identify current performance as well as track patterns of cancer care
  - Review of surveillance measures can, among other things, guide decision-making and resource allocation
  - While surveillance measures (for example, 10RLN) have clinical evidence/data support, there is not enough to turn them into an Accountability or Quality Improvement measure.

- We do have data that indicates a difference in survival relative to the number of nodes removed and pathologically examined for resected non-small cell lung cancer patients
Postoperative Survival and the Number of Lymph Nodes Sampled During Resection of Node-Negative Non-Small Cell Lung Cancer

Michelle S. Ludwig MD, MPH; Michael Goodman, MD, MPH; Daniel L. Miller, MD; and Peter A. S. Johnstone, MD, MA

(CHEST 2005; 128:1545–1550)

- All stage I NSCLC cases in SEER database 1990-2000
  - 16,800 patients
  - Highest mean survival in pts with 10-11LN examined
BACKGROUND

Figure 1. Kaplan-Meier survival curves by number of LNs evaluated.

Figure 2. Median postoperative survival by number of lymph nodes evaluated.
THE PROBLEM

- Last year committee noticed low percentage of ≥10 regional LN removed and pathologically examined for AJCC stage 1A, 1B, IIA, and IIB resected NSCLC cases for CY 2012-2015
  - Study implemented to further exam the root cause and to evaluate if physicians are treating patients according to the standard guidelines

- Goal for 2017 is to remove as many (preferably at least 10 regional lymph nodes per CP3R requirement) and then pathologically examine for AJCC Stage IA, IB, IIA, and IIB resected NSCLC with the intention of increasing the percentage of our cases meeting the criteria set by NCDB
METHODS

• Review the breakdown of lymph nodes removed for all surgeries that fall in the above AJCC stage category
• See how we compare to previous years
• Compare Emory data to Georgia and National data
Surveillance Measure
At least 10 RLNs are Removed and Pathologically Examined for Stage 1A, 1B, 2A, 2B Resected Non-Small Cell Lung Cancer
ANALYSIS

- We range anywhere from 32% (2014) – 62% (2015) compliant with $\geq 10 LN$
- In 2014, we underperformed relative to other GA facilities and all CoC programs
- In all other years, we were at least on-par, if not better than, other GA and CoC programs
- Comparison data for 2016-2017 not available
GOAL/AREAS FOR IMPROVEMENT

- Surgeon education
- Pathologist education
- Increase awareness by having discussions
- Local QI project?
Nodal Upstaging Is More Common with Thoracotomy than with VATS During Lobectomy for Early-Stage Lung Cancer: An Analysis from the National Cancer Data Base

Rachel L. Medbery, MD, a Theresa W. Gillespie, PhD, MA, b Yuan Liu, PhD, MS, c,d Dana C. Nickleach, MA, d Joseph Lipscomb, PhD, b,e Manu S. Sancheti, MD, a Allan Pickens, MD, a Seth D. Force, MD, a Felix G. Fernandez, MD, MSc a,*

Journal of Thoracic Oncology Vol. 11 No. 2
ADDITIONAL DATA

• Just because we were curious....
First Course of Treatment
Non-Small Cell Carcinoma Diagnosed in 2015
Emory Healthcare
vs
CoC- All Other Hospitals
Class of Case 00-22

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>My Facility</th>
<th>CoC- All Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery Only</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>No Treatment</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>Rad/Chemo</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Radiation Only</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>Chemo only</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Surgery/Chemo</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Sur/Rad/Chemo</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Sur/Rad</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Chemo/BRM</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Other Combination Therapy</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Percent
**First Course of Treatment**

Non-Small Cell Carcinoma by Stage at Diagnosis

**2015**

<table>
<thead>
<tr>
<th>Stage 1A - 1B</th>
<th>Surgery Only</th>
<th>Radiation Only</th>
<th>No Tx</th>
<th>Surg/Chemo</th>
<th>Chemo</th>
<th>Surg/RadChem</th>
<th>Rad/Chemo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>117</td>
<td>48</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
First Course of Treatment
Non-Small Cell Carcinoma by Stage at Diagnosis
2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>9</td>
<td>8</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
First Course of Treatment
Non-Small Cell Carcinoma by Stage at Diagnosis
2015

<table>
<thead>
<tr>
<th>Stage3-3B</th>
<th>Rad/Chemo</th>
<th>Surgery Only</th>
<th>No Tx</th>
<th>Surg/Chemo</th>
<th>Radiation Only</th>
<th>Chemo only</th>
<th>Surg/RadChemo</th>
<th>Surg/Rad</th>
<th>Other Combined Tx</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>14</td>
<td>13</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

EMORY DATA
First Course of Treatment
Non-Small Cell Carcinoma by Stage at Diagnosis
2015

<table>
<thead>
<tr>
<th>Stage 4</th>
<th>Rad/Chemo</th>
<th>No Tx</th>
<th>Chemo only</th>
<th>Radiation Only</th>
<th>Other Combined Tx</th>
<th>Chemo/BRM</th>
<th>Surg/Chemo</th>
<th>Surg/RadChemo</th>
<th>Surgery Only</th>
<th>Surg/Rad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57</td>
<td>44</td>
<td>36</td>
<td>18</td>
<td>15</td>
<td>14</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

57 44 36 18 15 14 6 4 3 1